HEARING ON CHINA'S MILITARY POWER PROJECTION AND U.S. NATIONAL INTERESTS

HEARING

BEFORE THE

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

ONE HUNDRED SIXTEENTH CONGRESS SECOND SESSION

THURSDAY, FEBRUARY 20, 2020

Printed for use of the
United States-China Economic and Security Review Commission
Available via the World Wide Web: www.uscc.gov



UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

WASHINGTON: 2020

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

ROBIN CLEVELAND, CHAIRMAN CAROLYN BARTHOLOMEW, VICE CHAIRMAN

Commissioners:

ANDREAS A. BORGEAS BOB BOROCHOFF JEFFREY L. FIEDLER HON. CARTE P. GOODWIN ROY D. KAMPHAUSEN THEA MEI LEE KENNETH LEWIS HON. JAMES M. TALENT MICHAEL R. WESSEL LARRY M. WORTZEL

The Commission was created on October 30, 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 § 1238, Public Law No. 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. § 7002 (2001), as amended by the Treasury and General Government Appropriations Act for 2002 § 645 (regarding employment status of staff) & § 648 (regarding changing annual report due date from March to June), Public Law No. 107-67, 115 STAT. 514 (Nov. 12, 2001); as amended by Division P of the "Consolidated Appropriations Resolution, 2003," Pub L. No. 108-7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of the Commission); as amended by Public Law No. 109-108 (H.R. 2862) (Nov. 22, 2005) (regarding responsibilities of Commission and applicability of FACA); as amended by Division J of the "Consolidated Appropriations Act, 2008," Public Law Nol. 110-161 (December 26, 2007) (regarding responsibilities of the Commission, and changing the Annual Report due date from June to December); as amended by the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, P.L. 113-291 (December 19, 2014) (regarding responsibilities of the Commission).

The Commission's full charter is available at www.uscc.gov.

CONTENTS

THURSDAY, FEBRUARY 20, 2020

CHINA'S MILITARY POWER PROJECTION AND U.S. NATIONAL INTERESTS

Opening Statement of Commissioner Larry Wortzel	
(Hearing Co-Chair)	5
Prepared Statement	
Opening Statement of Commissioner Jeffrey Fiedler	
(Hearing Co-Chair)	8
Prepared Statement	
Administration Perspective	
Tummovavion 1015pecu (0	
Administration Panel Introduction by Commissioner Larry Wortzel	
(Hearing Co-Chair)	10
Statement of Chad Sbragia	
Deputy Assistant Secretary of Defense for China, U.S. Department of Defense	11
Prepared Statement	14
Panel I: Question and Answer	21
Panel I: Rationales for China's Power Projection	
Donal I Introduction by Commission on Loffrey Fiedlan	
Panel I Introduction by Commissioner Jeffrey Fiedler (Hearing Co-Chair)	25
Statement of Admiral Dennis Blair	33
Distinguished Senior Fellow (Non-Resident), Sasakawa Peace Foundation USA	36
Prepared Statement	
Statement of Kristen Gunness	50
Chief Executive Officer, Vantage Point Asia, LLC; Adjunct Senior International I	Policy
Analyst, RAND Corporation	
Prepared Statement	
Panel I: Question and Answer	
Panel II: Building an Expeditionary Force: Hardware, Logistics, and B	ases
Panel II Introduction by Commissioner Larry Wortzel	
(Hearing Co-Chair)	80
Statement of Chad Peltier	
Senior Analyst, Consulting, Jane's	81
Prepared Statement	
Statement of Kevin McCauley	
Independent Analyst	97
Prepared Statement	99
Statement of Isaac Kardon, Ph.D.	

Assistant Professor, Strategic and Operational Research Department, U.S. I	
College	
Prepared Statement	
Panel II: Question and Answer	152
Panel III: China's Power Projection in Asia, Africa, and Latin	America
Panel III Introduction by Commissioner Jeffrey Fiedler	
(Hearing Co-Chair)	166
Statement of Greg Poling	
Director, Asia Maritime Transparency Initiative, Center for Strategic and In	nternational
Studies	
Prepared Statement	170
Statement of Paul Nantulya	
Research Associate, Africa Center for Strategic Studies, National Defense	•
Prepared Statement	
Statement of Cynthia Watson, Ph.D.	
Dean of Faculty and Academic Affairs, National War College, National De	efense
University	
Prepared Statement	
Panel III: Question and Answer	
ANSWERS TO QUESTIONS SUBMITTED FOR THE RECORD)
Statement of Chad Sbragia	
Deputy Assistant Secretary of Defense for China, U.S. Department of Defense	nse215
Statement of Isaac Kardon, Ph.D.	
Assistant Professor, Strategic and Operational Research Department, U.S. I	Naval War
College	216

CHINA'S MILITARY POWER PROJECTION AND U.S. NATIONAL INTERESTS

THURSDAY, FEBRUARY 20, 2020

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

Washington, DC

The Commission met in Room 2172 of Rayburn House Office Building, Washington, DC at 9:00 a.m., Commissioner Jeffrey Fiedler and Commissioner Larry Wortzel (Hearing Co-Chairs) presiding.

OPENING STATEMENT OF COMMISSIONER LARRY WORTZEL HEARING CO-CHAIR

CO-CHAIR WORTZEL: Good morning, ladies and gentlemen. Welcome to the second hearing of the U.S.-China Economic and Security Review Commission's 2020 annual report cycle.

And thank you for joining us, especially to our witnesses for the time and effort that they put into the testimonies. You're going to be treated to some really, really good thinking here today.

We'd also like to thank the House Foreign Affairs Committee for securing this room for our use today.

Today's hearing examines China's ability to project military power and influence beyond its shores. And the implications of these growing capabilities for U.S. interests.

In January 2016, after Chinese Communist Party General Secretary and Central Military Commission Chairman Xi Jinping reorganized the People's Liberation Army (PLA), this Commission explored the push toward making the PLA a force more capable of conducting global operations. And I think Commissioner Fiedler was the Co-Chair for that one too.

Four years later, we're examining what progress the PLA has made in fulfilling Chairman Xi's admonition to the military, to be able to protect China's international interests.

Now, as part of the Commission's contracted research, Jane's is preparing a report on China's logistics capabilities for expeditionary operations. And that should be published in about a month, we hope.

This afternoon you're going to hear from Chad Peltier, who is the lead author of the Jane's report. And he's going to discuss some of its main findings. That's Panel Two this afternoon, I think at one o'clock.

But, let me just stop a minute and say, first of all, the sky is not falling. This is not a kind of a Chicken Little exercise here.

And the People's Liberation Army is not on the cusp of ruling the high seas or the airspace above them.

But, there have been pretty significant improvements in equipment, manpower, and refined strategies that enable the PLA to project force, and potentially have basing or resupply

points for its expeditionary force in various parts of the world.

So, today our distinguished witnesses will address these issues. And with that, I turn to Commissioner Fiedler, my colleague and co-chair.

PREPARED STATEMENT OF COMMISSIONER LARRY WORTZEL HEARING CO-CHAIR

Good morning, and welcome to the second hearing of the U.S.-China Economic and Security Review Commission's 2020 Annual Report cycle. Thank you all for joining us, especially to our witnesses for the time and effort they have put into their testimonies. I would also like to thank the House Foreign Affairs Committee for securing this room for our use today. Our hearing today will examine China's ability to project military power and influence beyond its shores and the implications of these growing capabilities for U.S. interests.

In January 2016, after Communist Party General Secretary and Central Military Commission Chairman Xi Jinping reorganized the Chinese People's Liberation Army, this commission explored the push toward making the PLA a force more capable of conducting global operations. Four years later we are examining what progress the PLA has made in fulfilling Chairman Xi's admonition to the PLA to be able to protect China's international interests.

As part of the Commission's contracted research program Jane's is preparing a report on China's logistics capabilities for expeditionary operations, which should be published in about a month. This afternoon, we will hear from Chad Peltier, the lead author of this report, who will discuss some of its main findings.

The sky is not falling and the People's Republic of China is not on the cusp of ruling the high seas or the airspace above them.

However, there have been improvements in equipment, manpower, and refined strategies that enable the PLA to project force and potentially have basing or resupply points for its expeditionary force in various parts of the world. Today these distinguished witnesses will address these issues.

With that, I turn to my colleague and co-chair, Commissioner Fiedler.

OPENING STATEMENT OF COMMISSIONER JEFFREY FIEDLER HEARING CO-CHAIR

CO-CHAIR FIEDLER: Thank you, Dr. Wortzel. And good morning everyone. To our witnesses, I want to thank you for being here to share your insights on China's power projection and expeditionary capabilities.

The recent history of China's military modernization is replete with underestimation, just as its march toward democracy is replete with exaggeration.

The rise of all great powers requires them to develop the ability to project military power. There's little question that China and the rest of the world perceive China as a rising power.

Through the centuries, developing naval power was a necessity for all rising powers. Today the exercise of military power is vastly more complicated and uncertain.

There is little question that China's ability to marshal significant military strength in its own neighborhood is significant. Today our hearing will seek to better understand how China views its future expeditionary capabilities.

This will, of course, involve a discussion of military hardware, but perhaps more importantly, our witnesses will also discuss the diplomatic, economic, and political circumstances China seeks to create to build the foundation for a reliable power projection capability.

We will also explore in this hearing, and in others to follow, how China's strategy to be a world military power impinges upon U.S. national interest.

Thinking realistically about this now is critical to developing national security policies in this and in future decades.

Before we begin, I'd like to let everyone know that today's testimonies and transcript will be posted on our website, www.uscc.gov.

Our next hearing, A China Model: Beijing's Promotion of Alternative Global Norms and Standards, will be on March 13. Thank you again for joining us today. And we'll proceed with our first panel.

CHAIR WORTZEL: Actually, before we start with our first witness, our Chairman has a word to say.

CHAIRMAN CLEVELAND: Good morning. I just wanted to welcome our new Commissioner. Mr. Bob Borochoff from Houston, Texas, is our last and final appointed member.

We are delighted to have him onboard and look forward to his contribution.

PREPARED STATEMENT OF COMMISSIONER JEFFREY FIEDLER HEARING CO-CHAIR

Thank you, Dr. Wortzel, and good morning, everyone. To our witnesses, thank you for being here to share your insights on China's power projection and expeditionary capabilities.

The recent history of China's military modernization is replete with underestimation just as its march toward democracy is replete with exaggeration.

The rise of all great powers requires them to develop the ability to project military power. There is little question that China and the rest of the world perceive China as a rising power.

Through the centuries developing naval power was a necessity for all rising powers. Today the exercise of military power is vastly more complicated and uncertain. There is little question that China's ability to marshal significant military strength in its own neighborhood is significant.

Today, our hearing will seek to better understand how China views its future expeditionary capabilities. This will, of course, involve a discussion of military hardware. But, perhaps, more importantly, our witnesses will also discuss the diplomatic, economic and political circumstances China seeks to create to a build the foundation for a reliable power projection ability.

We will also explore, in this hearing and in others to follow, how China's strategy to be a world military power impinges upon U.S. national interests. Thinking realistically about this now is critical to developing national security policies in this and future decades.

Before we begin, I wanted to let everyone know that today's testimonies and transcript will be posted on our website, www.uscc.gov. Our next hearing, A China Model? Beijing's Promotion of Alternative Global Norms and Standards, will be on March 13th.

Thank you, again, for joining us today. With that, we will proceed with our first panel.

ADMINISTRATION PANEL INTRODUCTION BY COMMISSIONER LARRY WORTZEL

CO-CHAIR WORTZEL: Our first witness today is going to discuss how the Department of Defense views the People's Liberation Army's growing power projection and expeditionary capabilities, and the implications for U.S. interests and global military operations.

Chad Sbragia is Deputy Assistant Secretary for China at the Department of Defense. And he's responsible for advising the senior leadership within the Department on all policy matters related to the development and implementation of defense strategies, plans, policies, and bilateral security relations for China.

He is the first official to sit in this position following its creation in June 2019. Previously he served as the Director of the China Research Group for the U.S. Marine Corps and he was a principal advisor on China to the Deputy Commandant of the Marine Corps for Information and Director of Intelligence.

He served as the Deputy Director of the China Strategic Focus Group at the U.S. Indo-Pacific Command -- but then it was the Pacific Command.

And he served in Beijing as a military attache and Naval attache. And I think you operated the hotline there, didn't you?

So, thank you very much. We're going to try to hold you to about ten minutes, to leave room for questions and answers.

OPENING STATEMENT OF CHAD SBRAGIA, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR CHINA, U.S. DEPARTMENT OF DEFENSE

ASST. SEC. SBRAGIA: Commissioner Wortzel, Commissioner Fiedler, distinguished members of the Commission, thank you for the opportunity to meet with you today.

My testimony will focus on the policy implications of China's military power projection, and what this challenge means to the Department of Defense as it reorients to strategic competition with China.

The bottom line is China represents the most formidable contemporary long-term security challenge for the Department of Defense and the United States government as a whole, and that the People's Liberation Army's development of global expeditionary capabilities is a critical feature of the challenge.

To meet this challenge, the Department has adopted long-term holistic strategies and policies to compete in peacetime, and if necessary, prevail in crisis or conflict.

Before I address the implications for the United States and what the Department is doing to compete, we first must outline how China's military power projection fits into the Communist Party of China's overall national strategy.

The Communist Party of China adopts a whole-of-nation strategy that fuses political, economic, and governance systems which all drive China's military modernization. It is important to point out that China construes its military strategy as subordinate to China's overall national development and security systems and strategies, which are designed to attain the CPC goal of achieving the great rejuvenation of the Chinese nation.

As China's latest defense white paper asserts, building a fortified national defense and a strong military commensurate with China's international standing and its interest is indeed, and in fact, a strategic task of China's socialist modernization.

Safeguarding China's interests, sovereignty, security, and development is the fundamental goal of China's national defense in the new era, which includes nine specific national defense aims, or what we would perhaps call missions.

Further, China's military strategic guidelines for a new era continue to adhere to an active defense military strategy and established goal, strategic goals for the development of China's national defense and military in what they call the new era.

First, to generally achieve mechanization by the year 2020, with significantly enhanced informationization and greatly improved strategic capabilities.

Second, to comprehensively advance the modernization of military theory, organizational structure of military personnel, and weaponry and equipment in step with the modernization of the country itself, and basically complete the modernization which they would characterize as an informationized force of the national defense by 2035.

Last, to fully transform the People's Armed Forces into world class capabilities by the mid-21st century.

In light of this very rudimentary outline of China's defense and military, I will draw attention to a few key areas or elements that inform China's pursuit of a global expeditionary capability.

First is the emphasis of the PLA military strategy to support China's increasingly global development and security aspirations across the entirety of the spectrum of conflict. So steady-state through crisis into conflict scenarios.

Second is, as China contends in its own defense white paper, the global significance of

China's national defense in its new era is its service in building the so-called community with a shared future for mankind, which is China's overall foreign policy goal and critical in China's efforts to revise the international system for its own national end-state.

Last is the role of technology that China contends is a defining feature of future war, and thus essential to setting global conditions and preparing advanced warfighting mechanisms or forms like informationized and intelligentized warfare.

The sum of these strategic trends and implications of China's national agenda, and the PLA's global expeditionary capabilities, are highlighted by four points. Many more, but I'll highlight four.

First is this, the CPC's aspiration to restore China as a leading power by every metric. Maritime, space, cyber, diplomacy, cultural, science and technology, and even think-tank great power status.

And the PLA's framework to compete across the spectrum of conflict implied that the United States and its allies and partners should prepare for China to set all domains and all global theaters against the United States and allied intervention in steady-state crisis and conflict.

Second, as China seeks to perfect and secure its national sociopolitical system at home through myriad initiatives and abroad through imprinting its vision for global governance on others, it is fusing all elements of state power into whole-of-nation strategies and projects.

As China marshals every organ of power, seams and gaps and imbalances within our own joint forces, across the U.S. interagency and among our allies, alliances, and partnerships will be intensified, and exposure of PRC weaknesses harder to depict.

Third, as China competes to revise the international order, especially security orders and regimes, and as it promotes its own model of development and security, U.S. interests, shared principles, and current security arrangements will be contested.

Our allies and partners will face mounting pressures to balance between the two powers, if we allow that to be drawn in that light, while U.S. influence, access, and maneuver space in all domains will face erosion unless we animate our response.

Fourth, as China seeks to safeguard its mounting global sovereignty, security and developmental interest, not least of which is China's aim to resolve its territorial integrity claims by force if necessary, the United States and our allies and partners will face increasing tests of resolve, increasing calls to accommodate China's preferences for the international and regional security orders, and increasing taxes on joint forces and U.S. alliance strategic resiliency.

An example that crystallizes China's ambitions is the significant expansion of China's expeditionary maritime forces, its Navy and its supporting element, its Marine Corps, which will progressively compete across the spectrum of conflict, and serve all the functions mentioned before.

This capability, to quote some Chinese theorists, is becoming a, quote, shining business card for the People's Army. In this context the first time the United States cannot answer an ally's or a partner's call, and China does, or if we aren't postured to break China's military coercion if necessary, we will suffer a loss.

The PLA's aim is clear here, and it's best exemplified by China's new Marine Commandant, who a year or so ago reportedly -- and who is reportedly tasked to develop global expeditionary forces to serve as a, quote, strategic dagger that Chairman Xi trusts and can rely upon, first to act in steady-state as another arm of Chinese influence, and second to defeat, if needed, U.S. intervention.

The Department of Defense, however, has a concentrated long-term approach to meet the

challenge from China. This approach is codified in the 2018 National Defense Strategy, and centers around three lines of effort.

First, we are building and deploying a more lethal resilient joint force. This includes renewed efforts to man, train, and equip military services and their components by leveraging existing capabilities while fielding new platforms and technologies to prevail in the future fight if necessary.

Second, we are strengthening alliances and partnerships to bolster key asymmetric advantages vis-a-vis China, which is to maintain a free and open Indo-Pacific and international system with the support of like-minded partners.

And third, by reforming the Department for greater performance and affordability. The National Defense Strategy makes clear that competition with China does not mean confrontation, nor must it lead to conflict.

A key component of the National Defense Strategy is to maintain a constructive, stable, and results-oriented defense relationship with China that promotes open channels of communication to prevent and manage crisis, reduce risk of miscalculation and escalation, and cooperate where interests align.

The implications of China's global expeditionary capacity and military modernization, however, may be profound. This is a long-term challenge that will require sustained funding and strategic planning to address.

It will require an increase in regional and global investments, as well as redoubling interagency and ally and partner efforts to maximize efficiencies and to unify. The bottom line is there is no zero cost solution to competition, global competition with China.

The challenge from China is not a replica of that posed by the Soviet Union during the Cold War. It warrants approaches defined by the unique features of the contemporary conditions and not necessarily just legacy rivalry.

It is, however, equally as consequential, and therefore merits the same concentration of effort as put forth in the past.

The Department of Defense is posturing to meet this challenge by putting in place strategies and policies to compete in peacetime and prevail in any conflict scenario involving China.

Thank you for your time. And I look forward to answering any questions you may have.

PREPARED STATEMENT OF CHAD SBRAGIA, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR CHINA, U.S. DEPARTMENT OF DEFENSE

"China's Military Power Projection and U.S. National Interests"

Testimony before the U.S.-China Economic and Security Review Commission

Office of the Secretary of Defense

Office of the Assistant Secretary of Defense for Indo-Pacific Security Affairs

Deputy Assistant Secretary of Defense for China

Chad Sbragia

February 20, 2020

Commissioner Wortzel, Commissioner Fiedler, distinguished members of the Commission, thank you for the opportunity to meet with you today to discuss how the Department of Defense views China's power-projection ambitions and the policy implications for the Department. My testimony today will briefly outline the scope of China's military power projection capabilities and aims before laying out, in clear terms, what this challenge means for reorienting the Department to strategic competition with China.

In a few short decades, the People's Liberation Army (PLA) has undertaken one of the most ambitious military modernization efforts in recent history. Although this immense effort has undoubtedly accelerated under Communist Party of China (CPC) General Secretary and Chairman of the Central Military Commission, Xi Jinping, the foundation of modernization was put in place well before his tenure. In fact, its roots can be traced to the founder of the People's Republic of China (PRC), Mao Zedong, whose work *On Protracted War* called for a "People's War" centered on mass mobilization during World War II. It is the marriage of resources and strategic aims in recent years that has allowed China's military modernization ambitions to bear fruit.

Facts alone speak to the impressive growth of China's military. China now has approximately two million military personnel.¹ China's official defense budget has soared from roughly \$28 billion in 1999 to \$177 billion in 2019 – the second largest in the world behind the United States.² The PLA Navy is, by some estimates, now the world's largest in terms of total assets. And China's military is fielding an increasingly formidable array of ballistic and cruise missiles, modern fighter aircraft, autonomous systems, and a suite of cyber and space capabilities, postured to deny the U.S. military access to the Indo-Pacific Theater if called upon.

But the story of China's military power-projection goes beyond numbers and capabilities. The PRC adopts a long-term, whole-of-nation approach to military modernization nested in broader national development and security goals. China construes its military strategy as subordinate to overall PRC national development and security, which are tied to Xi Jinping's social-political goal of achieving the "great rejuvenation of the Chinese nation." China's five-year plans related to science, technology, and education are themselves subservient components of China's national security and military goals. Indigenous innovation and scientific development in China not only serves civilian purposes, they also feed and enrich China's military ambitions through a sophisticated network of military-civil fusion.

¹ China's official number of military personnel does not include China's Paramilitary Force, the People's Armed Police, or the Coast Guard, nor does it include the Reserve forces.

² China's published military budget omits several major categories of expenditure such as research and development. Therefore, actual PLA spending is most likely higher than its official reported budget.

Beijing's ultimate goal in governance terms is to perfect its Marxist-Leninist governance "system" to secure China's position as a respected, great power by 2049 – the 100th anniversary of the founding of the PRC. The CPC views its governance system as a strategic asset, not liability, of its overall national power, and devoted much of the Fourth Plenary Session of the 19th CPC Central Committee in 2019 campaigning to strengthen the CPC's socialist governance system and capabilities.

In geopolitical terms, by 2049, the CPC leadership seeks final resolution of outstanding sovereignty and territorial disputes, to include, most prominently, the unification of Taiwan with the Chinese Mainland. And in military terms, China seeks to attain "world class" military status by 2049 – at least on par with other great powers such as the United States. The military's interim 2035 goal includes achieving an "informationized" force with modernized command and control systems and a well-integrated, joint fighting force able to fuse all services and service sub-components together operationally to meet Xi's guidance to "fight and win wars."

China's global economic footprint is setting conditions for the PLA to establish a presence far from its immediate periphery. China's 2019 Defense White Paper makes this linkage increasingly clear, for example, stating that a key task of the PLA is to "safeguard China's overseas interests," including "addressing deficiencies in overseas operations and support by developing offshore forces, building overseas logistical facilities, and enhancing capabilities in accomplishing diversified military tasks." The Defense White Paper also highlights the PLA's role in upholding international security requirements, which it frames as "contributing to building a community of common destiny for mankind." In pushing out further, CPC strategists have created the narrative that the PLA is simply "fulfilling international obligations" by enhancing its overseas posture to secure the global commons.

China's military power projection is increasingly linked to China's overseas policy alignment and lending vehicles, such as One Belt One Road Belt (OBOR), which may serve as potential logistical platforms for a military presence. China's capability to convert OBOR-financed projects, such as ports, into strategic platforms for military access, is of increasing concern to the Department. PLA strategists have argued in open-source publications for the need to secure access points overseas for logistics and refueling hubs. In addition to the establishment of its first overseas base in Djibouti, press reports indicate that China is seeking to expand its military basing and access in the Middle East, Africa, Southeast Asia, and the western Pacific. Chinese civilian research organizations have been much more active in the Arctic as well, which may provide an opening for an eventual military presence there. In other words, it is not a matter of whether the PLA intends to establish another military base overseas, but when and how they plan to do it.

These trends, and China's military aims, will continue apace as long as China can maintain a stable and peaceful periphery conducive to economic growth. If the global environment remains stable, China will undoubtedly seek to use its growing economic and military power to shape the regional environment in ways advantageous to its interests. These trends will also create conditions for a globally-postured PLA, increasing interactions with U.S. and allied forces in new theaters and mutli-lateral events.

The United States is not isolated in this perspective. Nearly a year ago, the European Union framed China as a systemic rival promoting alternative models of governance. NATO has recently started to analyze the long-term implications of China's rise for the Alliance. The Department will work with all allies and partners to build a shared understanding of the nature of systemic rivalry with China. The choices that the Department makes now, in partnership with allies and partners, will directly impact the trajectory of the rules-based international order.

Many of the above-mentioned trends and motivations of the CPC and the PLA do not align with U.S. national security interests. China's views of sovereignty, especially as they relate to unification of Taiwan by force and excessive, now militarized, maritime claims in the South China Sea, run counter to the interests of the United States and its allies and partners. China has increasingly employed coercive tactics and measures in the South China Sea to deny claimants the legitimate regulation, exploitation, and use of maritime natural resources in their exclusive economic zones (EEZs). China has dredged and reclaimed thousands of acres of land on PRC-claimed features in the South China Sea, which now host military facilities for forward-deployed military operations. The PRC views the U.S. network of alliances and the military posture in the Indo-Pacific as a strategic threat. In order to serve the CPC's domestic and international narrative, PRC propaganda organs paint the Department of Defense's presence in the region as seeking to contain China's rise.

At the geostrategic level, the Department's 2018 *National Defense Strategy* (NDS) summarizes, in clear terms, the broader challenge the United States and its allies now face from China in the Indo-Pacific and globally. It reads, "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."

In most of the potential flashpoints in the Indo-Pacific region – the Taiwan Strait, the South China Sea, the Senkaku Islands, or the Korean Peninsula – the United States may find itself in a military crisis with China. Chinese leaders are keenly aware of this fact and are modernizing

their military forces for the explicit purpose of denying, degrading, and neutralizing U.S. power projection capabilities. The PLA will look to offset qualitative U.S. military advantages in theater by employing asymmetric counter-measures, such as degrading U.S. command and control linkages and exploiting seams in the Joint Force. The United States can expect all domains of operations to be targeted by Chinese counter-intervention activities.

The stakes of the challenge of conflict with China, in other words, are formidable, and will require fundamental adjustments within the Department to prepare itself to deter, and if necessary, prevail in a conflict with China.

The Department of Defense, and Secretary Esper, have a focused, concerted approach to reorient the Department to meet the challenge posed by China. This approach is reflected in the 2018 NDS and centers around three lines of effort.

The first effort is to *build and deploy a more lethal, resilient joint force*. This includes renewed efforts to man, train, equip Military Services and their components by leveraging existing capabilities while fielding new platforms and technologies. The Department aims to advance the development of emerging technologies, such as hypersonic weapons, directed energy, artificial intelligence, and autonomous platforms, to stay ahead of the innovation curve in future warfare concepts. The Department also seeks further development of the Joint Warfighting Concept to keep the U.S. military agile, lethal, and adaptable.

The second line of effort is to *strengthen alliances*, *deepen interoperability*, *and attract new partners*. Our treaty allies remain a key asymmetric advantage vis-à-vis China in the Indo-Pacific region. They are integral to upholding the free and open order through diplomatic activities and combined training, exercises, and operations. At the same time, the NDS directs the Department to redouble its efforts to build new partnerships in the region through capacity-building and new exercises and training programs.

The third line of effort is to reform the Department for greater performance and affordability. This includes efforts to promote innovation, including leveraging our rich civilian innovation base; protecting U.S. technological advantages by fortifying the national security innovation base; promoting whole-of-government solutions across different agencies within the U.S. government; and dynamic employment of the force to build readiness while increasing global activities.

The NDS also makes clear that competition with China does not mean confrontation, nor must it lead to conflict. A key component of the NDS is to maintain a constructive, stable, and results-oriented defense relationship with China that promotes open channels of communication to

prevent and manage crisis and reduce risk of miscalculation that could escalate into conflict. Although our two nations may not always agree, we recognize it serves both our people's interests to cooperate where our interests align, which includes maintaining productive defense engagement and dialogue with the PLA.

Secretary Esper is deeply committed in both word and deed to achieving the goals laid out in the NDS. The NDS has truly become the guidepost for strategic planning throughout the Department and drives decision-making at all levels within the defense enterprise.

Finally, it is important to point out that Congress has an indispensable role to play in competition with China. Effectively resourcing and implementing the NDS through sustained, consistent funding for the Department is crucial to meeting the challenge posed by a rising China. The National Defense Authorization Act (NDAA) for Fiscal Year 2020 – with its provisions for reports and briefings on the economic and security implications of China's rise – is a key component in promoting greater understanding of the various security dimensions of China's development. Continued bipartisan support in Congress to meet the China challenge will be integral going forward, as is advocacy and dialogue with legislative counterparts of our allies and partners.

The implications of China's military modernization are profound. This is a long-term challenge that will require sustained funding and strategic planning to address. It will require an increase and reallocation of regional and global investments as well as redoubling interagency efforts to maximize efficiencies. There is no zero cost solution to global competition with China.

The challenge from China is not a replica of that posed by the Soviet Union during the Cold War. The competition with China warrants approaches defined by the unique features of contemporary conditions and not legacy rivalries. It is, however, equally as consequential and therefore merits the same concentration of effort as put forth in the past. The Department of Defense will continue to assess the military implications of China's expanding global posture and access in support of these actions, and ensure the Department provides combat-credible military forces needed to fight a war and win, should deterrence fail.

ADMINISTRATION PANEL QUESTION AND ANSWER

CO-CHAIR WORTZEL: Thank you very much. Chairman Cleveland has the first question.

CHAIRMAN CLEVELAND: Thank you for your testimony. It was extremely helpful. I'm not sure agreeing to answer any questions is in your interest. But, we'll see.

I have a fairly narrow question. You mentioned that logistics enable the Chinese to compete across a spectrum from steady-state to full conflict, and I think -- I view logistics as essential to any rising power. You have to have a backbone.

But logistics are anchored at home. And I was interested -- I think Commissioner Wortzel pointed out about two weeks ago that Wuhan, which is the epicenter of this virus, also hosts Logistics Support Command Headquarters.

So I'm curious how the logistics backbone in China is being deployed or used to support or address the internal problem when it comes to the spread of coronavirus?

Is it they can't do it at home? I'm curious how they'd be able to deploy abroad.

ASST. SEC. SBRAGIA: It's very clear -- ma'am, thank you. That's a great question.

I believe that we still do not have a complete picture yet about exactly how the Chinese are approaching its response to what's now called COVID-19 and the implications on China.

It's ongoing. It's dynamic. It's changing. And we don't have all the details yet. But it is fascinating to watch, I think, initial outcomes of what they've done.

One of which is what we've noted, was actually a very early injection of the PLA as a national mobilization response to this condition, probably earlier than, I think it's safe to say, earlier than past practices had been, particularly at the national level.

So, as national mobilization systems have started to energize and build out, very early on was the PLA. You saw them arriving on the scene and you continue to do so, particularly from that.

With respect to the Logistics Support Force and its headquarters or hubs in Wuhan, I suspect that that is certainly an aspect that the Chinese PLA and the CMC leadership have leveraged in response here. It's no doubt that they were critically involved.

The ramifications of COVID-19 across the force is important. I don't know if we have the full depths of that yet.

But certainly that ability to marshal its own mobilization and emergency response systems is -- bears greater scrutiny and further detail, I think.

CHAIRMAN CLEVELAND: I think the other aspect of this that I'm interested in, and again, Commissioner Wortzel's expertise can speak to it, is that you have a PAP command academy in Wuhan.

You have a number of really important training and headquarters based in Wuhan. And I'm curious about whether those services are getting privileged treatment in terms of -- but not a question for today.

So, you're basically saying, as I'm hearing it, that they have mobilized the PLA. And that logistics is a part of that. We just don't have a clear sense of what part of that. Is that --

ASST. SEC. SBRAGIA: I think that's fair. There are certain aspects I'm sure we can't talk about here in this forum, but it -- just even in watching the open source is a very active and concerted effort by how the PLA and other Chinese forces under the CMC are being brought in to bear on this problem early, often, and rigorous. It's a reflection of a lot of national aspirations that they have.

And to the degree that they do this well or poorly, at the end of the day, beyond the human sense of tragedy here, and the difficulty and challenge that the Chinese people are facing with this is -- at the end of the day, this will make the PLA better.

And --

CHAIRMAN CLEVELAND: Mm-hmm. Or not.

ASST. SEC. SBRAGIA: Or not.

CHAIRMAN CLEVELAND: Thank you.

CHAIR WORTZEL: Mr. Secretary, in your October 17, 2019 testimony on China's maritime Silk Road, with respect to partners and potential partners, you mentioned and discussed sharing our best practices for engaging with China with other countries as kind of a hand-wave. You don't really go into those best practices. So I wonder if you would tell us what those best practices are?

ASST. SEC. SBRAGIA: In terms of -- as I mentioned in my opening comments -- our outreach to China is multifaceted, and our interactions, our response to how we compete with them, but that includes defense relationship issues. So in taking stock, the entire Department leadership identified a set of principles by which we would reframe and reset how we approach China in terms of defense contacts and exchanges.

We have done so. And we have done initial negotiations with the PLA to find, as I mentioned, a constructive, stable, and results-oriented defense relationship.

Those practices, as we codified them through documents within the Defense Department, we have shared that with allies and partners across the globe as a means by saying -- we have to do better about how we think about China, how we interact with China, what we expect to see from them, because when we talk about marshaling all, and unifying our allies and partners together, this is one of the techniques to do so. And I think we've actually had very good success in doing that.

Outreach with allies and partners across the globe have been reflective. We've listened to their feedback. They helped inform the process.

And in a lot of cases we're seeing them advocate for the development of a like product even within their own ministries of defense.

CO-CHAIR WORTZEL: Commissioner Fiedler?

CO-CHAIR FIEDLER: Some years ago when we were first exploring Chinese military modernization and/or in our hearings on Taiwan, we were focused on asymmetric capabilities of the Chinese.

When we discuss expeditionary capabilities, we're talking more -- or perhaps talking more about conventional capabilities. And our concern with asymmetric capabilities, vis-a-vis Taiwan for instance, was that their ability to slow us down in response -- if we were to respond to any attack on Taiwan -- what does the Defense Department think about the expeditionary capabilities of asymmetric capability?

Am I -- that's my question first.

ASST. SEC. SBRAGIA: Well, that's a great question. I'll tell you it's -- even in open source, if you listen to the Chinese leadership, not just theorists or authors, but actual leaders of the Chinese, and I'll point to one in particular. The current leader of the Chinese Marine Corps equivalent is a Vice Admiral or Rear Admiral, Kong Jun.

And when he talks about this very specifically about the requirements, for him and his force and as a broader PLA effort, is that they have to go global. And they have to do this with expeditionary capabilities for exactly the same reason the United States has always valued those

same kind of capacities.

But he talks about it very clearly, definitively in terms of being an all-domain force. And so they will look at asymmetric advantages to the extent that they have.

But it's not a niche capacity. It is an all-domain capacity, particularly under the construct of where they want to be at, which is a fully informationized force.

In that light there is a very clear dynamic that is changing in terms of how the Chinese transition from a mechanized force, which is a force bent or oriented on annihilationist practice, to one of informationized capacity, which leverages high tech capabilities and integration, and it is defined by a systems confrontation rather than just pure annihilation. Is that changed now from moving from a continental capacity out to a force that can extend globally?

That really does change the dynamics. I don't think that the PLA have quite figured that out all yet.

But they certainly are pursuing that, because what that means then, I believe, is that will bring to bear new asymmetries that they have just not yet seen.

And I think certainly for us is, that should help inform our own force or the Department is that the new competition in the future is not the same asymmetries that we faced in the past.

CO-CHAIR FIEDLER: That's right.

ASST. SEC. SBRAGIA: But there will be asymmetries, perhaps of competition on a global scale, for global deployed power projection and expeditionary forces.

And I'll only add and kind of foot-stomp this point that I mentioned in the comments earlier, it's not just for conflict, it's in steady-state. It's steady-state competition that matters here because of what the PLA does for its overarching national objective sets.

So, you know, competition is not just being able to defeat the Chinese, or them us in a high-end conflict. That's part of it.

But it's also -- you have the influence to change regional and the security orders to lay infrastructure, to be the backbone in support of One Belt One Road projects, and other kind of issues like that.

CHAIR FIEDLER: What you're actually introducing too, beyond military asymmetry, is political asymmetry. Right?

The one thing that is clearly different, historically, is going to be the role of space in the ability to project power. Not just -- not even in an asymmetric sense, but in a fundamental sense.

Would you comment on the Defense Department's view of Chinese activity in space as it involves expeditionary capability?

ASST. SEC. SBRAGIA: Yes. In the previous testimony, we talked about -- the topic was about China's maritime Silk Road, and one of the aspects that we drew out of that was the linkages between the maritime Silk Road specifically and China's aspirations for a digital Silk Road.

So, this digital backbone, which is massively enabled by space capacity is -- certainly is a critical aspect. Their future warfighting approach is informationized or ultimately intelligentized warfare capacity is highly dependent upon that.

That's why China talks about very clearly of seizing the commanding heights of these kinds of capacities or technologies, because they see those as critical enablers.

I think it's informing us in a very important way, one of which is they have a choice like we do, which is you could find approaches which reduce or limit your dependency on that technology.

It's very complicated. It's very expensive. It can be vulnerable at times. But they chose

deliberately not to do that. They even chose to actually invest in that and to build out those capacities.

So in turn, we have to look at that as where we make investments and what challenges that presents to us. And we are.

CO-CHAIR FIEDLER: Thank you very much. I'll have another.

CO-CHAIR WORTZEL: Senator Talent?

COMMISSIONER TALENT: Thank you for being here. Your testimony is very interesting. I have two questions.

One of them is how in your opinion is the PLA reorganization proceeding? And how does it bear on this?

You mentioned the Joint Logistics Support Force. I think that the need to push through and finish that reorganization and understand its implications is a substantial constraint on PLA decision-making.

We haven't heard a lot about it, much less any real analysis of how well it's going. So if you have an opinion on that, I'd appreciate it.

And the second thing is -- if you can, and I know since you're here representing the government, you have to be careful about speculating.

But every witness who is going to testify today is going to say, and I think properly so, that they're shaping and sizing the PLA in part to support their interests and investments abroad. And that's a primary driver. You said the same thing. And I think that's correct.

Can you give us a flavor of what that is likely to look like in actual scenarios? What does that mean, if you don't mind speculating a little.

I mean, big investments in a third-world country? Corrupting the leadership and then there's unrest against the leadership. And are they going to send in the PLA and Marines to support the government?

And give an idea of what you think that might entail.

ASST. SEC. SBRAGIA: Senator, thank you. Both great questions.

As for PLA reforms and its reorganization, we had an opportunity -- we invited the PLA to come and brief us out on last year's published defense white paper. They did so.

It was a several day-long dialogue and discussion that we had with them. And I found some very interesting insights.

I think that they found our own questioning of them helpful, in fact, asked me to go around and share our own interpretation of what it is, so that they could better -- others could better understand that.

Glad to do so, and I told them that they probably would not necessarily like what we said, but that we would be glad to tell them, as truthfully as we could, our own understanding.

Their reorganization remains ongoing. As of the latest discussions I had with them, I was told by some of my PLA interlocutors that they will have reforms that will be complete by this summer.

I suspect that there will be additional ones that they will continue to pursue. They have not yet finished an update to their military strategy, but that is also on the horizon.

And I think it's important to reflect on what they did in their defense white paper from last year, which is -- it helped clarify for me in great detail -- the difference between the line and block chart of organizational reforms in China, and mistaking that for the entirety of what their reforms are. I think that in the Chinese way that they view their own logic system for organizing principles is beyond just organizational charts.

So as many analysts looked at organizational charts as a reflection of how Chinese PLA reforms are going, the fundamental aspect or the central update that they provided in their defense white paper was not the organizational changes, but it was actually what they called the policy system enactment, which is -- policy system in this case being a designation about how these organizations will now relate with each other, because that's how they think about it is systems.

And so for them to say that we've now made this leap from changing five principal or banner organizations, and now we have a policy system that describes how they all interact together, it's important for us to understand that this still seems absent in their own doctrine and strategy. And the layout is a very clear understanding of exactly how that organizational and policy system will direct and control forces beyond China's borders.

They don't seem to have that yet. But they're certainly working on it. And they understand the necessity to do so, and the task and mission responsibilities to get after that problem.

As for the second question, what does it look like in future scenarios? This is a very significant issue for the Department.

And it's really informed us, as I mentioned, about our approaches through the National Defense Strategy. As you'll know, one of them was our -- the interactions and collaboration with our allies and partners, and as I talked to our allies and partners across the globe, is we have to start talking about it in ways that just start to go past traditional military-only bounds. And in this case I'll highlight one that's certainly in the news very often, which is a lot of Chinese technology capacities and what they're trying to do.

Those traditionally would fall under economic or commercial lines of effort, but increasingly those have implications for security orders, for security processes for the United States to flow troops through areas, to share intelligence, to share information, to collaborate, to move things.

So if the Chinese have the ability to impart or install its own infrastructure capacities through any of these technologies, those have profound implications on our own strategic resiliency. Can we move? Can we share? Can we shape? Can we unify?

And so that by itself becomes something that is not necessarily directly a military issue, but indirectly does become a Defense Department issue. Can I move things globally? Can I react? Can I find allies and partners?

Do they now become under more coercive elements of Chinese approaches and policies? Do they become beholden to that?

That's important for us. And that's going to start -- it has informed the way that we outreach and talk about that.

And certainly you've seen, you've heard or listened to Secretary Esper and other leaders across the Defense Department talk about this on a routine basis.

CO-CHAIR WORTZEL: Commissioner Kamphausen?

COMMISSIONER KAMPHAUSEN: Deputy Sbragia, thanks very much for being here today. A comment and then a question.

First, I greatly appreciate the work that you and your team do, you personally and your team, to fully plumb the depths of Chinese literature, especially PLA literature.

You alluded to it a minute ago when you said you engaged directly with your PLA counterparts last fall, and questioned them on content that was in their white paper and other associated documents.

I think this serves a huge value in our interactions with them to, as you and I have discussed, convey that we're actually paying attention and that words mean things.

And that whereas in the past, idle statements could go unchallenged. They now are looking at a person who is dedicated full time to paying attention to what they say and challenging them on it. So, thank you.

My question is, you talked at some length about, and responded in questions to this steady-state competition that we're in. And using your own term, I'd like to foot-stomp this as well.

I think the challenge is a daily one. It's urgent. It's multidimensional. We face -- we must respond on an urgent and daily basis. And I think you spoke to this.

So in that regard, if you can, what are the steady-state challenges that you think are most pressing, that you think we ought to understand as we consider the challenges of Chinese power projection more broadly?

Thank you.

ASST. SEC. SBRAGIA: Well, thank you. That's a great question. We need a lot more work here is the bottom line.

And it's easy, I think -- at any time, you know, the Defense Department has a function to look at risk and to assess that and then be prepared and to prevail under any of those conditions.

And I think increasingly what we're seeing is that just preparing for a conflict with China or any nation in particular, that's just simply not enough. Because the competition with China is broader than that.

And so we have to kind of extend out how we think about competition from the Defense Department, to cover the entirety of -- the totality of the spectrum of conflict.

And the best gauge of that, frankly, is as we read the Chinese daily, is what Xi Jinping has told to his own PLA, which is we concentrate on preparations for war, which is steady-state, preparations rate, setting conditions, being prepared so that if the time comes, so that he can deploy them as needed.

And but that means that they have to be out and about. That they have to set conditions. They have to form partnerships. They have to establish overseas facilities.

And we have to think about it in competition too, which is -- that ultimately is if you're prepared there, you'll win and if you're not, you'll lose.

And so it's not about waiting or defining the best response in a conflict scenario. The conflict scenario is starting with preparations and steady-state.

And so this artificial bifurcation that we've obviously had in the past of steady-state is one campaign and effort and conflict separate. And I think that those lines are starting to be erased.

And you're starting to see, certainly on the Chinese side, and I think increasingly on the United States side is it's one seamless continuum of -- or spectrum of conflicts.

I think certainly the Secretary understands that very clearly. And it's about us marshaling that.

That opens up apertures, I think, about understanding what it means when we interact, when we partner, when we exercise, when we train. And when we have security cooperation with partners around the globe, that is part of competition. And that is part about setting conditions to prevail if necessary.

CO-CHAIR WORTZEL: Commissioner Lewis?

COMMISSIONER LEWIS: Thank you. Thank you very much for your testimony today

and for presenting the administration viewpoint.

Most of the people that have made presentations to us have expressed the view that in order to confront China diplomatically, politically, and every way, we need allies.

And it seems from, also, from our reading, that our five major allies in the Pacific, Japan, Korea, Australia, Thailand, and the Philippines, all have as their number one trading partner, China.

China obviously talks about Taiwan being a breakaway province. What is China doing to get those countries to switch allegiances from Taiwan or even have relations with Taiwan to China?

And secondly, the second question I have, is what is the U.S. doing? The second question is, were we surprised -- was the Defense Department surprised by what the Philippines recently did a couple of days ago in terms of our relationships, military relationships with the Philippines, and how are we doing to change their attitude towards us?

ASST. SEC. SBRAGIA: In terms of the first question about switching relationships, our treaty allies and the other allies and partners in the Indo-Pacific are very strong and robust.

And I think the overall characterization would be very healthy. I think we have a long standing, and in a lot of cases, increasing collaboration and interactions with them.

There certainly is a concern about changing recognition, which is a little bit different issue, and doesn't really involve our standing allies right now. But that's a challenge for us.

The thing I would -- what I can comment about on that, and to really go into the second question about the Philippines, which is it's a competition.

China is competing. They are trying to draw these out. I don't think that there's much risk necessarily, particularly for the military alliances that we have long term, because of the treaties that we have, but also we have to be very clear-eyed that these countries are becoming under increasing pressure from multiple different lanes. Diplomatic and economic pressure, political coercion.

And so that's a fundamental condition of the strategic environment we're in that defines this challenge for us, this competition in ways that we haven't faced in the past.

And so it's going to take innovative approaches of how do you talk about that. And I'll give you an example.

When we raised about talking to other nations about how absorption of Chinese technology can be a security risk, one of the issues we have to talk -- we have to find a compelling argument. I think we do, is to say is, you know, absorbing Chinese technology is a security risk.

So the bottom line in this case, for example, is Chinese technology, may be in terms of a cash register, cheaper than an alternative. But, you know, there's a compelling argument that we have to help make with them, is to say, listen, you have to look at the aggregate of all of the costs to include security costs.

What's the cost to access to political coercion? To having to better manage your systems so that they're not penetrated or abused?

I mean, there's really other costs here. And so I think understanding that competition as a whole-of-nation competition, and all the different facets and features by which that impacts U.S. DoD equities and interests, we're going to have to continue to build that out.

But, yeah, I certainly agree, it's a defining feature about what the contest is. Certainly the nations and appropriate to China.

ASST. SEC. SBRAGIA: As to the Philippines, I can't talk necessarily about the nature of

that discussion. That's really not in my area.

But how it is in my area is -- is that it's very clear recognition that China is putting pressure and using every tool within its disposal to try to draw those countries off, to provide incentives or disincentives to them to take actions that even in the worst case would be having them be more, you know, to sit on the fence. And not to be as collaborative.

So that's a condition we're taking head-on. That's very serious for us.

COMMISSIONER LEWIS: Can you comment at all on the Philippines aspect? Were we surprised by what they did?

And how will it affect our relations with them in the future?

ASST. SEC. SBRAGIA: Yes. I think it's probably better to let the DASDs that are responsible, or others that are responsible for that specific defense relationship, but in terms of our understanding of how China pursues this, is not a surprise. This is something we anticipate.

We know it's going to get hard in the future. As China's capacity builds out, you will see more of these efforts to do so.

Our job is to mitigate those, and ideally is to prevent them proactively.

CO-CHAIR WORTZEL: Senator Goodwin?

COMMISSIONER GOODWIN: Thank you, Mr. Chairman. And thank you, Mr. Secretary, for your time.

As a follow up to Senator Talent's question, and as we'll actually get into a little bit later today, we're going to examine some of the rationales and the motivations behind the development of these capabilities.

And I think as Senator Talent's question alluded to, a lot of the growth and the development of these capabilities are tied in no small part to protect Chinese investments, interests, and citizens overseas.

And I'm curious for your reaction. I think if you take that sentiment to its logical extreme, it could be characterized as just the inevitable outgrowth of their economic growth.

So, as their economy grows, they are increasingly involved in a global grade with other trading partners around the globe necessarily. They will want to have a force capable of protecting those interests, investments, and people overseas.

But as you suggest, just in your answer to Commissioner Lewis, it's broader than that. It's not simply an ancillary component of protecting these efforts, but rather, it's a whole-of-nation approach to the national security, economic development, stability at home, and the like. And indeed in your testimony last fall to Congress, you indicated the BRI itself is a strategic program with strategic objectives and strategic implications for the partner countries.

So I'd like your reaction to that, and also want to ask you how important is it for us to properly and thoroughly examine the motivations behind the development of these capabilities to properly assess their implications?

ASST. SEC. SBRAGIA: Well, that's a great question. And it really starts -- and I mentioned this in the comments, which is, first and foremost, is the development of this capacity to produce or to attain what China calls the world-class military, is the strategic task of socialist modernization.

So, it is a component. It's a requirement for them to attain -- their national end-state is a reflection of that.

For the second part of the question, I think that that's really valuable. And in fact, we're spending a lot of time and effort within the Department, and certainly within my team and our network of experts that we interact with, is -- I think it is absolutely essential that we accurately

characterize the motivations and drivers about why China is building this capacity.

So, we, you know, we understand at a national level that it's a component of how China defines its long-term goals. But there's other drivers, and if you -- I think that there's a great risk in being one-dimensional and saying that they're doing this because of this singular reason.

First of all, that's clearly not how the Chinese talk about it. It's multifaceted. And if you look at it in a very one-dimensional way such as they're only doing it to help safeguard their economic interest, or they're only doing this to help develop and impart a different or a revised international order, or if they're only doing it just for pure military reasons, to put themselves in a position for success in terms of conflict with, as they -- their euphemism is powerful enemy adversaries for the United States.

If you only look at it in one of those, what you end up doing is -- you can develop campaigns and plans, policies, and strategies that are insufficient and don't compete or -- with the comprehensive nature of what all of the -- what they're doing.

So I do think it is absolutely essential, and I agree with you, is that we take as big of stock of all the rationale for why they're doing it, because it is multifaceted.

First of all, that exposes weaknesses and challenges they will have. But it also makes sure that we don't overlook or have gaps in our own perceptions about where they're going or how they're doing it.

COMMISSIONER GOODWIN: Do you think our friends and allies around the globe and partners in BRI are taking that comprehensive view?

ASST. SEC. SBRAGIA: I can't say that there's any particular nation or entity that has mastered this perfectly in its entirety. I can tell you that we're working on it very hard.

I know that we learn often from our allies and partners in the discussions we have that they see unique features and aspects of it that we have, may have overlooked.

And we certainly are sharing everything that we can with everybody as broadly as possible in terms of how we perceive this. But this is a dynamic condition.

And in that case is, you know, China is not monolithic and static. Every time you get better, as you make a better pitch, as you get a better understanding, as you formulate a better campaign or response or policy, China's also reacting to that as well.

So, it's a -- it's wrong to think that there's a singular solution. And then once we kind of discover that formula we'll all be rich and successful and stability will reign.

This is a process. This is a long-term competition of which we have to be agile and smart and attentive and dynamic to it.

And that's really -- I think Secretary Esper's guidance is crystal clear, which is to understand the long-term competition and to be dynamic, and in his words, to focus the Department on China and to sustain that focus, to undergo and to deepen our understanding to attain organizational adaptation and systemic transformation of the Department in the manner in which it fundamentally and irreversibly contends with, or competes with China as needed.

COMMISSIONER GOODWIN: Thank you.

CO-CHAIR WORTZEL: I thought my wave was enough. Commissioner Bartholomew, Vice Chair Bartholomew?

VICE CHAIRMAN BARTHOLOMEW: Thanks very much. And thank you for appearing here today and also for your service. We all appreciate it.

I'm just interested as listening to you talk about the whole of government approach that the government of China has. I know you're in the DoD lane, but we have to make recommendations to Congress.

And I wondered if there's anything that you could suggest that Congress could or should be doing to facilitate a whole of government approach on the part of the U.S. government?

ASST. SEC. SBRAGIA: You know annual submissions, budgetary requirements and other support in those lines. I'll go past that because those should be self-evident. Those come from the Department, and I don't think I can add to them. It's not my specialty.

But I will provide some interesting insights -- and as we think about what the Commission can recommend. And it really comes from our increased capacity within my team now, we have a capacity -- we have a Director for Global Outreach whose fundamental mission is to expand and network into global partnerships, both governmental and non-governmental.

And as we start to expand those out, we've had some very interesting lessons learned. One of which came from a recent trip we made to the European Union -- or several nations in the European Union in Europe.

And one of them was in talking to their own legislative staff, and it was, essentially, it was a plea for help. It is, help us understand this problem.

How do we motivate? How do we socialize? How do we marshal attention to this problem within other nations' legislative bodies?

And so I think that that's an aspect of -- and maybe unique is to ask Congress to do something other than providing resources or money. But their function and rule is whole-of-nation as well of being somebody who can advocate for better and deepening understanding of China with its counterpart.

And I think that that's a critical role. As I was talking to Commissioner Wortzel about earlier is, you know, this body itself is an example of a whole of nation, trying to contend or compete with the challenges it faces.

Are there other bodies like this in other nations? And if not, why not? And if so, what's the collaboration like?

So, I think those are other kind of nontraditional and things outside the DoD lanes that would be very value-added here, is to help broaden and deepen that as a whole nation.

I do receive that quite often is, you know, from other countries that the people are just not there yet. That the legislatures are just not there yet.

So there's only so much we can do from a Defense Department side. There's other elements here that can help advocate for that.

VICE CHAIRMAN BARTHOLOMEW: Thank you.

CHAIR WORTZEL: I'm going to take a second, if I may, and follow up on this. What struck me is that I'm not sure whether you're reaching out as an office or a department.

I mean, mechanically, are they seeking help from the Department of Defense? Or are you working with State so it -- and the embassies in those countries to get these dialogues?

I mean, we wrestle sometimes with -- all right, we're the China Commission, what business do we have going to Europe or Latin America?

But it strikes me that these trips are valuable. And ultimately, even if your office is initiating these things, you're not doing that without working with State and an embassy.

ASST. SEC. SBRAGIA: You know, I can speak to the areas that I concentrate on and China. And my partnership with my counterparts at State and multiple areas, the national security staff, across other elements of the United States, is good and getting better.

So there's nothing that we do that's not in collaboration with that. And that includes internal to DoD is -- you know, my portfolio is not responsible -- for example, the nations in Europe.

I have to work with my counterpart to do that. But that -- it's that kind of unity, the effort of coming together.

So when we do these other trips, it's fully in concert with that. It's an orchestration. And it takes a lot of work.

It's things that we just haven't had to do in the past. So it takes more effort. It takes more resources, workforce employment.

There's a lot of extra investment of time and capabilities that we just haven't had in the past. So it's hard, but, almost to a person, everybody's very receptive to this and knows we have to get out of the problem. It's vital for us to do so though, because it's not just about, you know, sharing with others what our own perceptions are, but it's actually learning what their conditions are and understanding that. And I think that's been tremendously valuable to see, how are they perceiving this? And what are the impacts that they're seeing that we may not?

And so there's a deepening learning that we have going on with the Chinese themselves, the PLA and others, and their think tanks and actors, but also their allies and partners, to see how they're perceiving it.

That helps us better calibrate our own approaches. And frankly, they have -- some of their practices in other nations are very effective and good. And in some cases, more advanced than ours for a variety of reasons.

CO-CHAIR FIEDLER: I have a, actually a couple of questions. The Chinese military decision-making system, and the -- coupled with the lack of real combat experience among its leadership, what do you see in terms of problems for them in understanding expeditionary capabilities?

And it seems to me on one level we're talking military academic ideas is what they have. Watching us. Watching others. But they lack real experience.

And I would argue that piracy operations don't give them that experience and that decision-making dynamic. Because when the -- when it hits the fan, what's going to happen? Do we think they have capable leadership?

ASST. SEC. SBRAGIA: I'm not a personal fan of the Chinese system frankly. I prefer ours.

CHAIR FIEDLER: I don't think there's many people in this room.

ASST. SEC. SBRAGIA: Yeah. I don't think so either. So I don't have a lot of confidence writ large in a strategic sense.

Having said, with all the confidence we have in the current force in our own capacities, there's also some cautions, I think, you know, prudent cautions here.

One of which is, even to the degree that we have our own capacities and capabilities well-sharpened over the entirety of our experience, is the strategic caution of -- nobody's ever fought a great power competition in the contemporary era and what that looks like.

And so, I think it's always best to just say be careful about over extending what our own expectations are of ourselves is -- we have not fought a large scale or high intensity fight with a major power in the contemporary era.

So while China has not either, neither have we. Now, I think we'll get there and be sharper and better. At the same time coupled with that is, at least in the Chinese eyes about how they're thinking about the future of warfare, they're thinking about it, as they say, as a form or as a mechanism, as being a different type of warfare.

And so even to the degree that we're very good or adept at how we fight now, does that translate perfectly or 100 percent into forms of fighting future warfare based on high technology

or in their own characterization, in a systems confrontation or systems destruction style of warfighting?

In that light, we do not have great experience fighting somebody that is using that style of an approach. And so there's a lot more to learn here.

I think we have to be prepared. And essentially that's the whole purpose of the Defense Department, is to take stock, deep stock, and scrutinize exactly what any potential adversary is doing, and make sure that we're prepared to ideally deter that -- and if capable of doing so, is to prevail in conflict.

CHAIR FIEDLER: Let me just add one question while we have you. It seems to me that we have a long history of allied relationships.

We may at the moment have some hiccups in those relationships. They don't have a long history of allied relationships with, how do I say this without being belittling, meaningful countries.

And so the question becomes, even in, and especially in expeditionary capabilities, whether or not they can depend, I mean their allied relationship seems to be more driven by coercion and fear than by common interest.

And so it seems to me their expeditionary capabilities are fragile even when they have the hardware capability. And we should have a policy of increasingly keeping them as fragile as possible.

ASST. SEC. SBRAGIA: That's a great question. Yeah. The first thing is very clear, that the Chinese current foreign policy framework, the major power diplomacy with Chinese characteristics in the new era, and which is coupled with the party's IR theory, the new type of international relations theory, those two together work in conjunction and are extremely clear that they shed and reject alliance structures as a form of international system.

What they favor is strategic partnerships to form what they call a global partnership network, by which they hope that the international system operates.

Within that though, it does have implications potentially, which is one, is not having the obligatory or compelling requirement for defense, collective defense. But certainly it could put them, make them vulnerable to not having access in times where they need that.

I think there's certainly things that they're trying to do to mitigate that. One is establish, as their own defense white paper says, new mechanisms for security cooperation.

When I asked the Chinese what those new mechanisms were, the mechanisms in Chinese lexicon in this case has a specific meaning, jizhi, which means a thing. It's an actual process and interaction. And that concept is, they just haven't developed it. But they know that they need new ones.

But you'll also see different forms of security cooperation that they've learned from watching us, observing us. Shortfalls and benefits from having those.

So I think you'll see new patterns of security cooperation globally. But also in terms of just the application and the forces that they develop, it's very evident that the four-fold increase in their Marine Corps capacities have an added benefit of having less dependency than the land-based force that you would have to deploy overseas.

Certainly other long range tools, such as long range Air Forces and other kinds of ballistic missiles, and hypersonic missiles, and long range missile capacities. And then certainly cyber and space capacities, which are not dependent upon any sovereign issues at times.

So I think in all those fields that you will see them bring to bear new approaches and new capacities. Some probably that look very familiar, and others that look very innovative to try to

tackle that problem.

But it won't be based on trying to develop -- as they claim, it should not be based on the necessity to form alliance capacities.

CO-CHAIR WORTZEL: Commissioner Cleveland?

CHAIRMAN CLEVELAND: Thank you. I want to build off of Commissioner Fiedler's questions. You just mentioned a four-fold increase in the Marine capacity. I'm curious about, since this is about expeditionary and logistics forces, how you see investments, budget investments, resource investments, in expeditionary and logistics capacity relative to the rest of Chinese military priorities. That's the first question.

And then in terms of building relationships, I'm interested in the fact that the Chinese now represent 15 percent of the contribution to the UN PKO budget. I think around that.

I'm curious how the host governments feel about the deployment of Chinese forces. What's the nature of the relationship? And what value you see as the Chinese gaining in terms of military operational lessons learned from those peacekeeping operations?

So two very different questions.

ASST. SEC. SBRAGIA: Ma'am, can you repeat the first question for me? Just to make sure I get that clear.

CHAIRMAN CLEVELAND: It's -- sorry. So we're talking about expeditionary and logistic forces. And you mentioned this four-fold increase in the Marine capacity. I'm curious how expeditionary and logistics forces compare to say strategic rocket forces, or to other investments that the Chinese are making?

Is this a top priority in terms of budget and resources? Is it a medium priority? How does it fit in, in your assessment of what matters, which is where they're putting their money?

ASST. SEC. SBRAGIA: Yeah. It's very evident that -- I don't have the technical details to offer exactly what all their nuances are in their budget. That's just not my -- I wish I did. I'm not that smart. I don't have that capacity.

What is very clear -- very, very clear -- is that the requirement from the leadership is to develop a force that's capable, ultimately as I mentioned is a world class military force, and the yardstick by which they measure that is the United States.

And so at the end, and certainly ideally before that, is having the capacity to prevail in a conflict with the United States. That's their yardstick.

So everything else is supportive in help and ideal for them to maneuver and globally, and to do all the other requirements that they have for why they're developing this force.

But at the end of the day, is that's their facing issue, the United States. And I think there's -- and I raise that because there's a little bit of a risk that you can think, oh well, China is going to come out and about, but it's going to do just, as their own words say is these contributions to the global environment with HA/DR and other kind of seemingly or ostensibly helpful contributions.

Some of which may be. But by no means is that the priority. The priority is developing a force that's capable of prevailing with conflict with the United States.

As for PKOs and other activities it does globally, yes, that concerns me. I think ideally as we would all prefer a condition where the PLA stays all within China. That accepts that it doesn't have a major threat to it. That it provides contributions to the global environment consistent with the shared values of the current order and system and partners.

But that's just not the reality that we have. And so the truth is, is we have to contend with what China is trying to do. Identify those areas in which the interests do not align or their approaches are inimical to ours, and figure out what we're going to do about it.

But it is a contest across the global space, and with all of our allies and partners. But the Chinese are certainly getting significant advantage to that. It's difficult to characterize the degree, but I know it's not zero.

CHAIRMAN CLEVELAND: Do you see them as welcome in the countries where they're serving in peacekeeping, blue-helmeted capacities? I'm interested because we're going to have a hearing on China's role in Africa. And they seem to have taken up a number of leadership positions and operations in countries where they have economic investments.

So I'm just curious about the dynamic in terms of whether they are viewed as welcome neutral supporters of peacekeeping arrangements, or they are viewed as present for their own interest?

ASST. SEC. SBRAGIA: That's -- it would be hard to measure that. But certainly the characterization would be almost by incident or over a period of time.

The fact that they do, and they can sustain those, is certainly a reflection of China's own military diplomacy and overall diplomacy to make those conditions happen.

I would add to that is, there's actually an integrated approach that they use. The UN support of peacekeeping operations under UN authority is certainly important.

It legitimizes their own deployments. But the other deployments that are not under those auspices certainly have whole of government efforts there.

So there's commercial and diplomatic and economic and political and cultural activities that help support and advocate for the basing or stationing of PLA forces in those other countries.

CO-CHAIR WORTZEL: We close at 10:10, so fairly quickly. I want to thank you, Secretary Sbragia, for being here. And I guess is there anything you'd like to say that hasn't been asked and wasn't in your testimony? Did we stimulate something in this questioning that you'd like to say now?

ASST. SEC. SBRAGIA: Commissioner Wortzel, I just want to say thank you. I'll tell you, this topic is of particular interest to me. So I was very thankful for this. Of all the issues I have to work on in terms of competition with China, this is the one that actually concerns me.

It's higher on my priority list. Because I think too often we can get caught up in thinking about China, and we only envision China or we envision just on the periphery of China, when if we're doing what we're supposed to do, which is to think about long-term strategic competition with China, we have to understand where China is going to be in the long term, what its claimed aspirations are. And this is a topic that gets after that in great detail.

So I just want to add just thank you. And I think it's the right topic. It's what we're focused on. And not just the things that are right in front of our face. So I appreciate the opportunity to share our views.

CHAIR WORTZEL: Well thank you very much. And we thank Secretary Esper for having you here. It's always great to have somebody from the Administration able to set out policies. Thank you. We're going to adjourn until 10:20, and then we'll reconvene another panel. Thank you.

(Whereupon, the above-entitled matter went off the record at 10:10 a.m. and resumed at 10:21 a.m.)

PANEL I INTRODUCTION BY COMMISSIONER JEFFREY FIEDLER

CO-CHAIR FIEDLER: Okay. We will run the trains on time today. Our first panel today will examine why and how China's developing expeditionary capabilities with a focus on the Belt and Road Initiative as a vehicle for testing and justifying these capabilities.

We'll start this morning with Admiral Dennis Blair, Chairman of the Board and Distinguished Senior Fellow at Sasakawa Peace Foundation.

Admiral Blair serves as a member of the Energy Security Leadership Council, on the boards of Freedom House, the National Bureau of Asian Research, the National Committee on U.S.-China Relations, and the Atlantic Counsel. He previously served as Director of National Intelligence from January '09 to May of 2010. And prior to retiring from the Navy, in 2002 after 34 years, he was the Commander of U.S.-Pacific Command. Admiral Blair will provide testimony on the drivers of China's development of expeditionary capabilities.

After Admiral Blair, we will hear from Kristen Gunness, Chief Executive Officer of Vantage Point Asia, LLC, a consultancy that provides expertise on the Indo-Pacific Region with a focus on China's foreign policy and security issues.

She also holds the position of Adjunct Senior International Policy Analyst at RAND. Formerly Ms. Gunness served as Director of the Navy Asia Pacific Advisory Group at the Pentagon, and was a Senior Project Director for Chinese Military and Security Affairs at CNA. She has written extensively on Chinese foreign policy, security and military affairs. She will address how BRI furthers China's expeditionary capabilities as well.

Thank you very much for your testimony, and Admiral Blair will begin.

OPENING STATEMENT OF ADMIRAL DENNIS BLAIR, DISTINGUISHED SENIOR FELLOW (NON-RESIDENT), SASAKAWA PEACE FOUNDATION USA

ADMIRAL BLAIR: All right. Good morning, Commissioners, and thanks for inviting me here. I think it will probably be most valuable if I cut to the chase here. I think what you're concerned about is whether China -- which can currently assert the full range of power projection effects on its maritime frontiers, South China Sea, East China Sea, Yellow Sea --- whether it can or will expand that capability elsewhere in the world, and be able to bring the military dimension of coercive diplomacy to join economic and diplomatic activities, which it currently conducts.

And I think it's useful to start by reminding ourselves of what power projection is. We're all good Clausewitzians, and I would define power projection as asserting political influence at a distance through the use or the threat of use of military force.

So that's what we're talking about here. And so power projection has a range of levels from a single ship visiting a port. Now a ship visiting a port in a country is a little bit different from the Beijing Symphony Orchestra visiting that country. It has an implied edge of hey, we can show up with military force in small numbers.

We can have a visit ship, and we can give nice speeches. But there's a stiletto under the glove, all the way up through high end combinations of amphibious assault, air assault, global power, sea control, air control to do it.

Now China has a full range of power projection capability on their maritime frontiers. They have a plan, and they have the capability for a full invasion of Taiwan. They routinely use coercive diplomacy throughout the region. And can they and will they bring that out?

I think it's useful to think in terms of two zones in addition to their maritime frontiers that I think China thinks in these terms. One is the area from say the Middle East through Southeast Asia, the south Asia, and then there's the rest of the world beyond that.

So their maritime frontier is this South Asia area, and then the rest of the world. But do they have the ambitions or do they have the capability to expand this capability out there?

So let's talk about this, the area of South Asia, since it is an area of Chinese focus. Xi Jinping's signature foreign policy program, the Belt and Road Initiative, is centered upon that region. They aim to make China the transportation hub for all economic activity going through that area, and therefore have a tremendous amount of economic influence and then build other influence on top of that.

What about the military influence within that, which has been relatively restrained to this point. The Shanghai Cooperative Organization brings in a lot of those countries. We're familiar with the anti-piracy patrols. That they've had 30 rotations of, establishing a base in Djibouti.

So what comes -- what comes next? I think we do have to take seriously what the Chinese say. And as you read their documents, the power projection appears nowhere in those documents. They're not talking about it. I don't think there's some secret program that they're not talking about. I think they're not counting on it right now.

But the history of Chinese overseas missions has been that missions expand with expanding capability. So something that was not possible or talked about before, it becomes possible, it becomes talked about, capabilities grow. And we've seen that in Chinese areas. So I don't think the lack of it being addressed is particularly significant.

What about the real capabilities that are involved in power projection? Right now for China to get forces into the Indian Ocean, into South Asia, they have to pass. And to do that through international waters where they don't -- or airspace where they don't need anybody's

permission, they have to go through the Strait of Singapore, the Strait of Malacca. Pretty narrow entries. Both of them subject to interruption.

What they really need to be able to have a deployable, usable, high end projection capability in that part of the world, are a couple of bases. Think of United States bases in Yokosuka. Ones we used to have in the Philippines. I mean, you're talking about ship repair, and air strip, ammunition stowage, supply stowage, a serious maritime projection base.

The two candidates for that, I would say that grow out of the Belt and Road Initiative are the ends of the China-Myanmar economic corridor, which ends in the Myanmar port of -- I can never remember the name, Kyaukphyu or something like that, on the Andaman Sea. And then the China-Pakistan economic corridor, which ends in Gwadar, right at the mouth of the entrance of the Persian Gulf.

Now if China could establish bases on those two key ports, with secure supply lines running from China, they would have the basis for a serious projection capability in that part of the world. But there's some very major practical problems in achieving that. Primarily, the attitudes of both Myanmar and Pakistan, which heretofore have shown no desire to have Chinese troops stationed in their country. In fact, they've been very careful about it. In Myanmar's case, cut back Chinese influence.

And even if they did want to, when you look at those actual routes, both through Myanmar and through Pakistan, they go through pretty ungoverned areas in which the governments of Myanmar and Pakistan don't really run the show right now. And those lines of communication to key bases would be very much subject to interruption.

The United States has a fair amount of experience of trying to put military installations into difficult parts of the world, and it has not been a happy experience. So I think there's some practical difficulties there. Oh gosh. I'm out of time I think.

What do I -- what would I do about it? Which is more important, and I'll make this very quick. I think the United States needs to concentrate its efforts in East Asia, where the challenge is direct. We have allies that China is trying to undercut our support to. China is trying to undercut American use of air and sea space in that part of the world, and make it with Chinese permission.

And we need to keep building up the number and the capability of our forces there in order to enforce our rights, and that's mostly air and naval power, and keeping our alliances in good shape. That will not only protect strong interests we have in what is the economic center of the world. But in addition, that will tend to focus Chinese attention on that part of the world, and tend to dampen their appetite, capability, and interest in going further.

So let me stop there. And we can go further in questions. Thank you.

PREPARED STATEMENT OF ADMIRAL DENNIS BLAIR, DISTINGUISHED SENIOR FELLOW (NON-RESIDENT), SASAKAWA PEACE FOUNDATION USA

U.S. China Economic and Security Review Commission

Hearing on "China's Military Power Projection and U.S. National Interests"

February 20, 2020

Rayburn House Office Building, Room 2172

Written Testimony of Admiral Dennis C. Blair, U.S. Navy (retired)

Outline

The purpose of this hearing of the USCC is to understand China's global military ambitions, its power projection capabilities, and what they mean to the United States. As is true for most assessments of China's future developments, there can be no certainty. However, it is possible to analyze China's officially stated future military goals and objectives and to assess its current forces and their capability. It is possible to project the unstated but likely or possible future goals and objectives, and in addition to assess the strategic environment in the global regions where future Chinese power projection forces will be brought to bear. Finally, it is important to draw the implications for the United States and recommend actions this country needs to take to safeguard its national interests.

The Party Line

Chinese official statements and publications do not list power projection as an objective or task of the People's Liberation Army. The closest the latest white paper, "China's National Defense in the New Era," published in July 2019, comes to the concept of power projection is in the section headed "Protecting China's Overseas Interests." It says:

The PLA actively promotes international security and military cooperation and refines relevant mechanisms for protecting China's overseas interests. *To address deficiencies in overseas operations and support*, it *builds far seas forces, develops overseas logistical facilities, and enhances capabilities in accomplishing diversified military tasks*. The PLA conducts vessel protection operations, maintains the security of strategic SLOCs and carries out overseas evacuation and maritime rights protection operations. [emphasis added]

It is unlikely that the omission of power projection from this official document is for the purpose of disguising a massive secret power projection program in the PLA. Public American and other intelligence reports do not report the development of a joint task force combining amphibious and air assault, precision fires, air defense and logistic support. In addition, Chinese official documents on strategy and force development are directed at internal as well as external audiences, and if it were setting a robust power projection capability as a near-term military objective, the Chinese government needs to tell the PLA and its public.

Chinese Overseas Missions Grow with Chinese Power

However, the absence of current official Chinese discussion of power projection capability is no guarantee that it is not a Chinese ambition and will not appear in the future in official policies and strategies. The recent history of Chinese military development has been steady progress towards ever more difficult and expansive capabilities that can be brought to bear at greater distances from China. Missions are added into official documents as the component capabilities are developed and more ambitious missions become feasible. Admiral Michael McDevitt of the Center for Naval Analyses has documented this progression in numerous articles.

Admiral McDevitt emphasized the significance of the 2004 announcement by the then-chairman of the Central Military Commission Hu Jintao of a new set of "Strategic Missions and Objectives" for the Chinese armed forces:

Chairman Hu call[ed] on all the armed forces to broaden their view of security to account for China's growing national interests especially its growing global economic footprint, overseas investment and dramatic growth in the number Chinese civilians abroad, particularly in Africa. It [Chinese strategic guidance] also placed an emphasis on the critical importance of imported natural resources, especially oil, to feed the economy. Since the vast majority of those resources came to China by ship, sea lane of communication (SLOC) security, and maritime rights and interests shot to the top of security issues that are of direct relevance to China's navy.

This was the first official statement directing the PLA to expand its mission set from homeland defense and to build the capability to operate beyond China's homeland defensive zones. As Admiral McDevitt emphasized,

For the first time, the PLA (and therefore the PLA Navy) was being assigned responsibilities well beyond China and its immediate periphery. This was official recognition that China's national interests were global and that the PLA's missions were to be based on those expanding interests, not just geography. It was also an official announcement that Chinese leaders saw China as a global actor.¹

In the years since that 2004 announcement, the PLA building programs, force structure changes, personnel assignments, development of doctrine and exercise program have all built the military capability to carry out these newly assigned missions. In the Xi Jinping era, these ambitions have been confirmed, for example in the 2015 Chinese White Paper that stated:

In line with the strategic requirement of offshore waters defense [the defense of China proper] and open seas protection [SLOC protection, especially in the Indian Ocean] the PLA Navy will gradually shift its *focus* from "offshore waters defense" *to the*

¹ These two paragraphs are drawn from Michael McDevitt and Fredrick Vellucci, "The Evolution of the People's Liberation Army Navy: the Twin Missions of Area-Denial and Peacetime Operations," found in *Sea Power and Asia-Pacific: The Triumph of Neptune*, edited by Geoffrey Till and Patrick C. Bratten, Routledge, London and New York, 2011, p.75-92.

combination of "offshore waters defense" with "open seas protection," and build a combined, multi-functional and efficient marine combat force structure.

In the years since 2015 China has continued taking the logical steps to develop the capability to carry out these missions.

An overseas power projection capability would be a next logical step in the development of Chinese global military power, and the current Chairman of the Central Military Committee, Xi Jinping, could announce it publicly at any time.

However, the step to developing and deploying a large-scale overseas intervention capability would be a big one for China. There is a prominent section of the 2019 Defense White Paper entitled, "Never Seeking Hegemony, Expansion or Spheres of Influence." Some of the assertions in this section would ring hollow to Vietnamese, who have been invaded by Chinese divisions and fought battles with Chinese forces for the possession of islands, and to Philippine forces that have been bullied by Chinese warships. Nonetheless, statements like, "Though a country may become strong, bellicosity will lead to its ruin," or "History proves and will continue to prove that China will never follow the beaten track of big powers in seeking hegemony" do reflect a set of Chinese beliefs about themselves. China is not on a runaway race to global military hegemony. Its military budgets have been controlled as a percentage of its GDP, its nuclear forces are far smaller than those of the United States or Russia, and it has used diplomacy and its new-found economic power more than it has its military power.

In summary, it is impossible to predict with certainty whether China will take the major step of developing a major overseas combined arms intervention capability similar to that of the United States. It is a next logical step in "building a fortified national defense and a strong military commensurate with the country's international standing . . ." goals stated in the 2019 White Paper. Should the Chinese economy continue to grow at a healthy pace, the resources will be available to fund it. Chinese leaders have gone to school on American military capabilities and practices for years, and they know what would be necessary for such a capability. It would entail a major change in China's deeply held beliefs about the defensive nature of its military capabilities, and there would be plenty of unmistakable leading indicators of its adoption as a mission, from official statements through acquisition choices, exercises and doctrine changes.

However, the lack of a high-end major overseas intervention capability as an official military mission should not provide much comfort to the world community, including the United States, about the dangers posed by a globally engaged and aggressive China. Power projection takes place across a range of actions with a range of capabilities, and China already has the units and the experience to conduct most of them.

Power Projection

Power projection is asserting political influence at distance through the use or threat of military force. Carl von Clausewitz' insight that "war is the continuation of policy by other means," applies to power projection. Employed by a country, power projection combines the deployment and use of military force, the implicit or explicit employment of diplomacy at the same time, and

it can be carried out by a range of forces from a single frigate making a port visit to a major invasion.

The range of Power Projection Activities

Following is a taxonomy of power projection activities, grouped and listed from the most peaceful and small-scale up to the most aggressive, military and large-scale:

- 1. Rescue operations, humanitarian response and peace operations: This group of activities is conducted often far from their home bases by military forces, generally acting in multilateral coalitions, and generally authorized by UN or other international organizations. The level of violence associated with these operations is generally low, the most serious being forcible intervention as a part of Chapter VII UN peacemaking operations.
- 2. Symbolic shows of force, political intervention and coercive threat: This group of activities can range from publicized deployments of relatively small levels of military force, even a single ship, up through operations by major task forces. The political objective of the deployment is to influence the political calculations of another government, or to support or oppose one faction in a country that is politically split, or even fighting a civil war. The deployed military force can be a signaling force, to give more weight to a diplomatic position or initiative, or the deployed forces can actually intervene in another country.
- 3. Protection of trade: This is a maritime power projection operation involving the escort of commercial shipping against attack by other nations or pirates. It can also involve strikes against the coastal military installations or ports where the threat to commercial shipping is based.
- 4. Punitive attack and economic/territorial defense and attack: These are the largest and most violent power projection operations. They involve attacks on another country in retaliation for some action, or else major military interventions to overthrow a government and occupy its territory, or else to support or oppose a government or its opposition in a large-scale civil war.

Chinese Power Projection Operations

China has actually conducted virtually all of these types of power projection activities beyond its borders:

1. Rescue operations, humanitarian response and peace operations: China now routinely conducts all these types of military power projection activities. It is quite proud of the non-combatant evacuation operations its Navy conducted in Yemen and in Libya; China contributes the largest number of troops to UN peacekeeping operations of any member of the UN Security Council (The United States sends more troops abroad, but seldom in

UN forces), and Chinese military units often participate in international disaster relief operations.

These types of operations are benign, and expected of major military powers, but they not only demonstrate China's global interests and reach, they develop logistics capabilities to sustain military forces around the world.

2. Symbolic show of force, political intervention and coercive threat:

Chinese naval vessels deploy throughout the world, making port visits in Europe, Africa, South Asia, East Asia and Latin America. While a visit of one or two PLAN vessels to their ports is not a major threat even to small countries, and is always accompanied by emollient statements about China's peaceful intentions and desire for good relations, a visit by a warship carries the implicit message that China can bring military power to bear in the country being visited. It is not the same as a visit by the Beijing Symphony Orchestra.

Chinese submarine deployments into the Indian Ocean have caused special concern among the littoral nations, especially India, because of their stealth and capability against surface ships.

Beyond Taiwan and the South China Sea, China has not deployed military forces to threaten other countries over specific policy disputes. However, the tactics used against Taiwan and other rival claimants in the South China Sea have been very aggressive and could easily be applied at greater distances as China's blue-water capabilities continue to grow.

China has fired missiles near Taiwan to warn it off activities that incurred Chinese displeasure, and with its large and growing arsenal of longer-range weapons, similar shows of "missile diplomacy" can be made throughout South, Southeast and East Asia.

In the East and South China Seas China has threatened the use of military force for coercive purposes, and on several occasions actually used military force to take and defend islands. In 1974 a Chinese naval task force fought off South Vietnamese Navy attacks in the Paracel Islands. China and Vietnam also fought in 1988, this time over the PLAN's occupation of Fiery Cross Reef in the Spratly Islands; this battle resulted in the sinking of three Vietnamese ships and the loss of over seventy Vietnamese sailors. China would go on to further expand its position into Mischief Reef in 1995, although this occurred without violence. China has isolated small Philippine military units on Second Thomas Shoal, and prevented Chinese fisherman from entering the lagoon in Scarborough Shoal. In a well-publicized and much criticized series of actions it has expanded seven reefs in the South China Sea, later arming them with missile systems.

As China's blue-water Navy grows and its logistics maritime support structure increases, it will have the capability to conduct similar operations in other regions, especially South Asia.

3. Protection of trade: The protection of sea lines of communication became an official mission for the PLA as early as 2004, and in 2008 China sent its first task force to join the US-led, UN-approved anti-piracy operations off the coast of Somalia. It now has deployed about 30 more of these deployments. They provide an excellent example of how China sets itself a new mission, grows the capabilities for that mission, and uses those new capabilities as a basis for additional more ambitious missions. As Admiral McDevitt has written, "In retrospect it is clear that the leadership of the PLA Navy saw protecting merchant ships in the Gulf of Aden and Northern Arabian Sea as an opportunity. PLA Navy leadership embraced the mission, publicized it widely within China, and over time has acknowledged that it has been a dramatic "accelerant" in the development of the PLA Navy into a genuine open ocean global naval force."

In 2017 the PLA established its first overseas base, in Djibouti, on the justification of supporting its anti-piracy rotations. Now as acknowledged in the 2019 White Paper quoted above, the base is part of a system to support "far seas forces."

Protecting shipping from Somali pirates is one thing; protecting it from capable naval forces equipped with submarines and anti-ship missiles is another. China has not had the occasion to defend its merchant ships from serious threat yet, and it has yet to develop the full set of capabilities to do so.

4. Punitive attack and economic/territorial defense and attack: In 1979 China "taught Vietnam a lesson" in a one-month invasion by division-sized forces. The reasons for the military action were complicated. Vietnam and China had clashed over control of Cambodia, maritime claims in the Spratlys, and treatment of ethnic Chinese in Vietnam. Although the tactical results of the incursion were in Vietnam's favor, China served notice that it would exact a price if Vietnam did not take into account Chinese interests in Southeast Asia.

At the highest end of power projection capability is the capability the United States has developed during World War II and maintained and used in the 75 years since from Korea and Vietnam through Afghanistan and Iraq. These operations involved moving and sustaining hundreds of thousands of combat troops thousands of miles, bringing sea-and land-based air power into the theater, and controlling the sea areas around the areas of operation. Global communications, intelligence systems and logistic networks are other key components of the capability.

China is nowhere near developing this scale of power projection capability. It has neither the necessary number of brigade-sized ground forces trained and equipped for deployment and operations at those distances, nor the deployable air power to secure air superiority against even moderate opposition nor the naval forces to secure the maritime regions around the war zone. The only robust global capability it has developed are satellite reconnaissance and communication systems, but these are also not at the scale required by high intensity combat operations at long distances.

The final and perhaps most important limitation in China's capability for high-end power projection operations is the lack of allies and partners. In all of the American major interventions overseas, for both defensive and offensive purposes, there was a nearby friendly country or ally that provided ports, airfields and marshalling areas to which the United States could deploy initially, and from which it could then move into the war zone. For the Korean War, it was South Korea and Japan; for the Vietnam War, South Vietnam, Thailand and the Philippines; for Afghanistan, a combination of Pakistan, some of the Gulf States and the Central Asian republics; for Iraq it was Saudi Arabia, Kuwait and several of the other Gulf States.

In summary, Chinese leaders understand and have employed virtually all forms of power projection except large-scale military intervention in distant regions. The PLA has studied the requirements for these operations and is fully capable of developing the missing components of any of them. Whether China chooses to develop and employ power projection operations further in the future is a Chinese choice.

It is time to turn to Chinese specific regional political policies and ambitions in the context of its drive to become a world economic power with global influence.

Regional Application of China's Power Projection Capability

Chinese leaders think about the world as a series of concentric zones beginning with China itself.

1. The inner zone is formed by the countries on its land borders to the north, west and south, and its maritime borders to the east and southeast.

This zone is the most important for Chinese leaders, and for the military missions assigned to the PLA. It absorbs most of the PLA budget, planning and exercise activity. The minimum military goal for this zone is a defensive capability so strong that no other country will be able to launch an attack against China. The stretch goal is to develop such great influence over the policies of its neighboring countries that China will have a virtual veto over all their major military decisions.

China feels generally satisfied with the military defenses on all its land borders. Where it still feels insecure is on its maritime borders. It has increased the allocation of resources to its Navy, Air Force and missile forces, and developed capabilities that would make it costly for the United States to operate its armed forces in these regions in times of conflict. However, it is continually concerned that advances in military technology, not just in maritime and air forces, but also in space, cyber and electronic warfare capabilities, could negate its current capabilities and leave China vulnerable from the sea, air or space.

China does not yet have what it considers adequate influence over the military decisions of its neighbors, especially those supported by the United States. It believes that Taiwan's resistance to reunification with China, South Korea's decisions like the

deployment of THAAD missile systems, and Japan's truculence over the Senkaku Islands and even Vietnam's resistance to China's territorial claims in the South China Sea are all challenges to China's influence and authority that need to be brought under control. The key, China's leadership believes, is undermining and overmatching American military capability in the region.

As described above, most of China's power projection activities are focused on this inner zone. It is capable of, and has used, demonstrated or exercised, the entire range from humanitarian response through full-scale invasion.

2. The mid-range zone and next most important region for China is central and south Asia, the region stretching from the Middle East across the Indian Ocean to southeast Asia.

This region is the focus of President Xi's signature foreign policy program, the "Belt and Road Initiative." This diplomatic/economic strategy is designed to redraw the transportation and economic map of the region so that the major transportation routes all lead from and to China, and so that the prosperity of the countries in the region is tied to China. If this strategy succeeds, China will have a very strong, if not dominant influence on the full range of policies of these countries.

Military power projection capability currently plays a supporting and relatively minor role in the Belt and Road Initiative. Chinese military diplomacy is active in the region, centered on the Shanghai Cooperation Organization, with eight members, four observer states and six dialogue partners from the region. The PLA Navy has established a presence in the region, anchored on its new base in Djibouti, and including port visits and rudimentary exercises with some of the navies in the region.

In order for China to develop serious military influence in the region, it would have to establish a robust base structure that would support frequent, if not continuous deployments of major naval and air forces, as well as deployments of expeditionary ground forces, amphibious or air assault. Right now, Chinese air and naval deployments using international air and sea space must pass through the Singapore and Malacca Straits, where they are vulnerable. There are two links of the belt and road initiative that could potentially give China direct access to the Indian Ocean. These are the planned economic corridors through Myanmar and Pakistan. The China-Myanmar Economic Corridor terminates at Khaukpyu on the Andaman Sea, and the China-Pakistan Economic Corridor terminates in Gwadar at the entrance to the Persian Gulf.

If China could establish military bases in both these ports, supplied from China along the two economic corridors, then these secure and sustainable bases could support robust power projection interventions throughout South Asia. However, the practical obstacles are enormous. Neither Pakistan nor Myanmar has yet granted access to nor gives any sign of welcoming powerful Chinese military forces in their countries, and it is difficult to identify the threats that would cause them to change that policy. In both countries, the corridor itself runs through regions of Myanmar and Pakistan that are under tenuous control of the government and would be vulnerable to attack or sabotage. Even if

Pakistan and Myanmar decided to host Chinese bases, the reaction of other countries in the region, especially India, would be hostile and fearful, and would cause them to consider requesting help from outside countries, notably the United States, to offset Chinese influence and capability.

Under current circumstances the development of a high-end Chinese sustained intervention capability is unlikely, but the development of ships like the mini-aircraft carriers *Liaoning* and *Shandong*, and follow-on, more capable carriers, the newly launched Type 075 amphibious vessel, and the continued measured development of the PLA Marine Corps will allow China to exert military influence in the event of regional crises in South Asia. China could increase its influence by supporting one country over another in a confrontation, or by supporting a government against opposition forces, or vice versa. It could sustain these operations unless it were opposed by India or Indonesia, both countries that could cut its access through the Singapore and Malacca Straits.

3. The third, and most distant zone in Chinese military thinking includes Europe, Africa, Latin America and the Pacific Islands. China is putting major emphasis on stronger economic relations with these regions and often uses economic pressure when there are policy disagreements, and economic benefits to reward friendly policies. However, China does not employ nor currently aspire to use military means of influence in the region beyond basic military relations – visits, consultations and the occasional small-scale exercise.

If its military power grows, China could choose to exert more military influence in these regions. Africa is probably the most likely region for it to occur, and the most likely operations would be naval deployments.

Implications for the United States

Potential Chinese power projection capabilities in what it considers its most distant zone of interest, Europe, Latin America and Africa, pose little threat to American interests unless the United States drastically reduces its military forces or else the United States turns inward and makes a policy decision not to involve itself in these regions. Should there be a regional crisis in which the United States supports one country or faction, and China supports the other, and the United States decides to send a military task force to support its friend or ally, it could find a Chinese task force in the region. The United States found itself in situations like this in the Cold War, for example in the Middle East when it supported Israel and the Soviet Union supported Israel's Arab neighbors. Handling these crises requires a deft combination of force and diplomacy, but do not pose an unmanageable threat to American interests. The United States should have advantages of more friends and allies in these regions, experience operating there, and better developed global influence skills.

In China's mid-range zone, from the Middle East across the Indian Ocean, a more active Chinese military presence, and greater power projection capability would likely force the smaller countries of the region to accommodate China's preferences in their policies to a greater extent than at present. However, India is another story. The Indian reaction would almost certainly be an increase in its own defense forces, a vigorous campaign to check Chinese ambitions and activities and outreach to outside maritime powers, chiefly the United States, but also others – Japan, Australia and seafaring European countries. The United States would have many options for increasing its own presence and capability in the region, as part of a group offsetting Chinese buildups.

East Asia is the crucial area in which the United States must take action if its national interests are not to be undercut by increasing Chinese power projection capabilities. In what China considers a legitimate zone of defensive influence defined by what it calls the "first and second island chains" are several of America's most important allies. China's diplomatic and military quest to turn the South and East China Seas and most of the Yellow Sea into territorial waters directly challenges American access to its important allies and gives China a potential chokehold on East Asian sea and airborne commerce.

The United States to protect its national interests in this important part of the world must continue to increase both the size and capability of its forces in order to offset the Chinese buildup. Because of China's building program of advanced platforms, weapons and systems, it must increase the pace of its own modernization and force deployments to East Asia. It must keep its alliance structure strong and defuse tensions such as those between the ROK and Japan. It must go beyond its current polices in the South China Sea, of taking no position on territorial disputes, and opposing the use of force to settle disputes. It must decide what territorial settlement it supports, so that it can direct its military activities accordingly, defending the territory of its allies under treaty commitments, and insisting on high seas and air space rights. Strong policies and adequate forces in this region will not only protect American interests, but they will keep Chinese attention focused on its maritime boundary regions rather than deploying forces into other regions.

OPENING STATEMENT OF KRISTEN GUNNESS, CHIEF EXECUTIVE OFFICER, VANTAGE POINT ASIA, LLC; ADJUNCT SENIOR INTERNATIONAL POLICY ANALYST, RAND CORPORATION

MS. GUNNESS: Thank you, Co-Chairs Fiedler and Wortzel, members of the Commission, and staff. It's an honor to testify here on China's expeditionary military capabilities. I was asked to focus on the Belt and Road Initiative and the legal tools and security frameworks that China is using to justify the development and use of PLA expeditionary capabilities, as well as how the -- how PLA experience with overseas deployments is driving the development of these capabilities. I believe that was your question earlier.

So beyond the motivations discussed in the previous panel and by Admiral Blair, China justifies the development of PLA expeditionary capabilities in three ways. First, Beijing works to align the security interests of BRI countries with China's own interest through the creation of security dialogues and frameworks for security cooperation, which provide a foundation for future military cooperation and potentially expanded PLA presence overseas.

Examples include China's efforts to protect BRI projects through the Shanghai Cooperation Organization, which is focused on counterterrorism and protection of oil and gas pipelines in central Asia. The Quadrennial Cooperation and Coordination Mechanism, or the QCCM, includes Pakistan, Tajikistan, Afghanistan and China, and provides a forum for military and security cooperation between those members. So those are just a few examples of the type of security cooperation frameworks China is developing.

Second, in 2015 China adopted a counterterrorism law that provides legal justification for the PLA to deploy overseas for counterterrorism missions. This law does not state that China must receive permission of the host country prior to deploying. Furthermore, the language in the law is kind of vague. Counterterrorism missions can theoretically encompass threats to citizens, BRI infrastructure projects, and even threats to China's maritime interests such as overseas ports, facilities, and shipping lanes. So given this, the PLA could hypothetically deploy overseas under the counterterrorism law to address many of these threats and contingencies.

Third, China cultivates the narrative that PLA expeditionary capabilities contribute to international security. While this is not a security framework per se, it is a narrative that Beijing uses to justify PLA participation in overseas operations such as the UN peacekeeping missions, the Gulf of Aden counter-piracy operations, and the opening of the Djibouti Naval Base, which Chinese commentary stated was good for regional stability. And that the facility allows China to contribute to international obligations.

So these are three ways that China uses legal tools, security frameworks, and narratives to justify the acquisition and use of expeditionary capabilities. I was also asked to comment on PLA overseas deployments, and how the PLA uses these for training opportunities for expeditionary missions.

PLA participation in peacekeeping operations, counter-piracy efforts and HADR do provide low risk training environments for Chinese troops. And the Chinese talk about this a little bit in their literature. While the training is likely insufficient for the types of larger scale expeditionary operations the PLA might want to conduct in the future, it does offer the PLA a few benefits.

First, through UN peacekeeping missions, the PLA gains experience operating in a multinational force. Other than exercises conducted by the SCO, the PLA does not have a great deal of experience working with or commanding multinational forces in hostile environments.

Second, the Gulf of Aden counter-piracy operations have allowed the PLA to begin to iron out overseas logistics and clarify command and control for the deployed task forces, although this is limited. And these areas would still be challenges for sure for the PLA in larger overseas operations.

And finally perhaps the greatest benefit China and the PLA get from these deployments is that they help to normalize China's military presence abroad. They contribute to China's influence through building security cooperation and military ties with local forces and host country governments, and they support the narrative that a PLA with a stronger expeditionary capacity is beneficial to international security.

So although they do provide some deployment experience, the PLA's current overseas missions are relatively limited in scope and do not offer the kind of training that the military would likely need for more complex expeditionary operations. Furthermore, only a small percentage of troops and commanders have deployed to these missions. So the reality is that many of the PLA's expeditionary capabilities will be tested for the first time in a crisis.

In conclusion, China will continue to use a defense of its global security interests, along with security cooperation agreements and the counterterrorism law to justify the development and use of its expeditionary military capabilities. One implication of this approach is that we should be prepared for a China that will consider the use of its overseas military power as a foreign policy tool. And it doesn't need a great deal of overseas military power to use it as a foreign policy tool to influence things. This is already happening.

So the PLA and the People's Armed Police deployments to BRI countries in Africa, Central Asia, and South Asia augment China's economic and political influence in those regions, and boost relations with countries where China's interests are growing. Of course this also carries some risk for China, as increased use of the military overseas may backfire and alienate some countries.

Following on this point, one recommendation is to look for opportunities to shape China's use of its expeditionary military force overseas. This could include rallying U.S. allies and partners to back or coordinate with Chinese action when it's in the U.S. interest to resolve a security issue, or it might include using the lack of foreign support for PLA involvement to attempt to tip China's calculus in the direction of pursuing non-military options.

This would likely require increasing dialogue on the PLA's expanded role overseas between U.S. combatant commands, defense and diplomatic attachés around the world, and allies and partners. So I think I'll stop there. Thank you.

PREPARED STATEMENT KRISTEN GUNNESS, CHIEF EXECUTIVE OFFICER, VANTAGE POINT ASIA, LLC; ADJUNCT SENIOR INTERNATIONAL POLICY ANALYST, RAND CORPORATION

Testimony Before the U.S.-China Economic and Security Review Commission China's Military Power Projection and U.S. National Interests February 20, 2020

The Motivations Behind China's Development of Expeditionary Military Capabilities

By Kristen Gunness, Founder and CEO, Vantage Point Asia, LLC

Co-chairs Commissioner Wortzel and Commissioner Fiedler, members of the commission, thank you for the opportunity to testify for this hearing on China's Military Power Projection and U.S. National Interests. For my testimony, I will discuss the motivations behind China's development of expeditionary military capabilities, the influence that the Belt and Road Initiative (BRI) has on China's development of expeditionary capabilities, legal and security frameworks that Beijing uses to justify the deployment of its military overseas, and how the Chinese People's Liberation Army (PLA) uses participation in United Nations peacekeeping operations (PKOs), humanitarian assistance/disaster relief (HA/DR), and counter piracy operations to gain overseas experience.

The Motivations Behind a PLA Expeditionary Force

Over the past decade, Beijing has increasingly adopted a larger military footprint to secure China's expanding interests beyond East Asia—which include protecting the millions of Chinese citizens living abroad, preserving access to energy resources, protecting economic investments and BRI infrastructure projects, and securing critical shipping lanes. Although such operations have been relatively limited to date, the PLA is steadily improving its expeditionary capabilities and has engaged in HA/DR missions, noncombatant evacuation operations (NEOs), counter piracy operations, and peacekeeping missions abroad.

Significant questions remain as to what path China will ultimately take with its expeditionary force, overseas military infrastructure, and supporting logistical capabilities. Will the PLA keep its expeditionary capabilities modest, to be used for specific, discrete missions, or is Beijing aiming for a more ambitious force that can not only secure China's interests but also shape the security environment, project global power, and grow China's influence overseas? Examining the motivations behind why China desires an expeditionary capability is critical to assess the direction of a future PLA expeditionary force. Chinese literature and official speeches articulate several reasons why China needs expeditionary military capabilities. These can be binned into four categories: 1) Xi Jinping's "Chinese Dream" construct and the need for a strong military to achieve Great Power status; 2) Beijing's expanding involvement in international affairs and the desire to actively shape the security environment; 3) Domestic expectations for the protection of Chinese interests; and 4) Increased pressure on Beijing to be a security provider for the international community.

The Chinese Dream

Xi Jinping has outlined a vision to eleate China's role in the world, referred to by the terms the "Chinese Dream" and "National Rejuvenation." This vision lays out policy objectives to ensure economic prosperity, social stability, and an overall higher quality of life for Chinese citizens. It also contains policy objectives related to expanding the country's national power through

¹ "Xi Jinping: Pursuing Dream for 1.3 Billion Chinese," China.org, March 17, 2013, http://www.china.org.cn/china/NPC CPPCC 2013/2013-03/17/content 28267500 3.htm

modernizing the military to protect China's interests at home and abroad.² Although Hu Jintao in 2004 directed the PLA to develop the means to protect China's interests overseas through the New Historic Missions, the Chinese Dream takes this direction further by linking Beijing's economic and security goals through policy initiatives such as the BRI. According to Chinese analysis, the BRI contributes to a more stable security environment through regional integration, improves China's energy security, and expands Beijing's influence overseas.³ With the Chinese Dream and the BRI linked to China's security goals, Beijing has provided the PLA with justification for building an expeditionary force.

Beijing's Expanding Involvement in International Affairs

A second motivation behind the PLA's development of expeditionary capabilities is China's increasing involvement in international affairs and Beijing's willingness to use political, economic, and military power to actively shape the international environment in favor of China's interests. Increased investment in United Nations PKOs is one example of Beijing's greater willingness to use its military to shape the international environment. China is now the number one contributor of peacekeeping troops to the UN, with a force consisting of 8,000 soldiers. It is also the number two funder of PKOs, contributing 15% of the UN's peacekeeping budget in 2019.⁴ Another example of China's willingness to use the military to shape the international security environment is the opening of the PLA's naval base in Djibouti, which allows the PLA to preposition resources, conduct regular maritime operations, and station a permanent troop presence—currently a contingent of PLA Navy Marine Corps (PLANMC)—on the strategic waterways of the Red Sea and the Gulf of Aden.⁵

Domestic Expectations

The Chinese public increasingly expects the government to be able to protect citizens when an incident occurs overseas, and these expectations create pressure on the PLA to develop and deploy the necessary expeditionary capabilities. The PLA has been caught off guard in past situations where Chinese citizens were in danger, such as when unrest swept Libya in 2011 and

² These goals were reiterated in Xi Jinping's speech at the 19th Party Congress: "Full Text of Xi Jinping's Report at 19th CPC National Congress," *China Daily*, November 4, 2017, http://www.chinadaily.com.cn/china/19thcpcnationalcongress/2017-11/04/content 34115212.htm.

³ Yang Jian and Zheng Yingqin, "'Renlei mingyun gongtongti' sixiang yu xin jiang yu de guoji zhili" [The "Community of Common Destiny" Concept and the New Territories of International Governance], Guoji wenti yanjiu, no. 4 (2017). "Xi Jinping: Jianchi zongti guojia anquan guan, zou Zhongguo tese guojia anquan daolu" [Xi Jinping: Commit to a Grand National Security Concept, a Roadmap for National Security with Chinese Characteristics], Xinhua, April 14, 2014.

⁴ "Does China Contribute to the United Nations Peacekeeping Mission?" CSIS China Power, https://chinapower.csis.org/china-un-mission/. United Nations Peacekeeping, "How we are funded," https://peacekeeping.un.org/en/how-we-are-funded.

⁵ U.S. Department of Defense, *Annual Report to Congress, Military and Security Developments of the People's Republic of China* (Washington, D.C., 2019), pg. 26, https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019 CHINA MILITARY POWER REPORT.pdf.

Chinese oil companies were attacked. In that case, the PLA's lack of capabilities forced Beijing to dispatch civilian assets—including charter flights, China COSCO Shipping Company transport ships, and fishing boats—to rescue its citizens. Chinese citizens overseas have faced other dangerous situations such as in Mali in 2015, when 15 PRC citizens were taken hostage and 3 killed in a terrorist attack. In the aftermath of the attack, Xi Jinping promised the public that Beijing would strengthen China's ability to respond to terrorism abroad; a direct call for the PLA to hone its expeditionary capabilities. Similarly, PRC businessmen were in harm's way when a wave of unrest swept Uganda in 2018, targeting Chinese investments and forcing the Ugandan president to deploy the local military to protect Chinese citizens. As more Chinese nationals move abroad for BRI projects, the public expects that the PLA can keep them safe should a crisis arise.

Pressure to Be an International Security Provider

The use of PLA expeditionary capabilities to support disaster relief and augment international security is a rationale Beijing uses to justify both the building of an expeditionary force and overseas facilities such as the naval base in Djibouti. Xi Jinping has publicly stated that the military should play a pivotal role in "the maintenance of international security affairs" and try its best to provide more "public security products to the international community." This includes the provision of aid to other nations and their citizens when the PLA is called upon, such as during natural disasters or conflicts. The PLA has conducted limited operations to assist foreigners abroad, including the 2015 NEO in Yemen where the PLA rescued both Chinese nationals and citizens from other countries, and HA/DR operations in Haiti, where the PLA sent a contingent of peacekeeping troops to assist following the 2011 earthquake. ¹⁰

China has also come under criticism when it has failed to respond to disasters, including after Typhoon Haiyan in the Philippines where the U.S. provided substantial aid to the ravaged nation while China did little other than offer a small financial donation and send a relief team. ¹¹ Though

⁶ Geoff Dyer and Leslie Hook, "Chinese Oil Interests Attacked in Libya," *Financial Times*, February 24, 2011, https://www.ft.com/content/eef58d52-3fe2-11e0-811f-00144feabdc0.

⁷ "China Condemns Mali Hotel Attack, Pledges Improved Cooperation to Fight Terrorism," Xinhua, November 27, 2015, http://www.focac.org/eng/zjfz/t1318651.htm.

⁸ Xinhua, Uganda assures Chinese investors of security after series of attacks, November 13, 2018, http://www.chinadaily.com.cn/a/201811/15/WS5bec943ba310eff303288bbd.html

⁹ "Xi Jinping jieshou *Huaerjie Ribao* caifang" [Xi Jinping Interview with the *Wall Street Journal*], Xinhua, September 22, 2015, http://news.xinhuanet.com/politics/2015-09/22/c_1116642032.htm. China Daily (2017). "习 近平的国家安全观" ("Xi Jinping's View of National Security"), http://china.chinadaily.com.cn/2017-02/22/content_28299966.htm.

¹⁰ "China Sends 9th Peacekeeping Police Squad to Haiti," People's Daily, November 2, 2011.

¹¹ BBC, "Taiphoon Haiyan: China Sends Relief Team to the Philippines," https://www.bbc.com/news/world-asia-china-24997186.

in the past the PLA's lack of expeditionary capabilities hampered China's ability to render aid and provide security to other nations, it is building enough expeditionary maritime and air capabilities to provide at least limited assistance in the aftermath of disaster or conflict overseas, or to address threats such as piracy. Beijing will increasingly face pressure to use the PLA's expeditionary capabilities to assist with international security as China's role in the world grows.

The BRI and Development of PLA Expeditionary Capabilities

Beyond the drivers discussed above, BRI projects and investments, which are often located in unstable or vulnerable areas of the world, have heightened the operational and strategic security risks to Chinese interests. This in turn has increased the urgency for the PLA to develop the expeditionary capabilities required to address these threats to China's interests, which include:

Maritime Security

Security of sea lines of communication (SLOCs) and maritime trade routes. China's overseas trade relies on several major commercial shipping routes, which pass through regional hotspots such as the South China Sea, the Malacca Strait, the Bay of Bengal, the North Sea, and potentially the Arctic in the future. China has long held security concerns over the vulnerability of maritime trade routes such as the Malacca Strait, a strategic chokepoint, and recently raised the security level for its civilian shipping vessels heading through the Strait. The BRI "Maritime Silk Road," which seeks to better connect China and open new trade routes through strategic access to global ports and waterways, will further create vulnerabilities in the maritime domain such as greater exposure to piracy and terrorism.

Security for overseas ports and bases. As it expands its maritime footprint abroad, China must also consider security for overseas ports and bases. While security at Chinese-operated ports has so far been handled by a combination of local security forces and private security companies, as China's presence in the maritime realm expands it will likely attempt to negotiate dual civilian-military access agreements to be able to rely more on the PLA for protection. ¹⁵ This might include establishing agreements in BRI countries for preferred access to overseas commercial

¹² For a map of the various land and maritime routes proposed by BRI, "How Will the Belt and Road Initiative Advance China's Interests?" see Center for Strategic and International Studies, China Power, https://chinapower.csis.org/china-belt-and-road-initiative.

¹³ Bloomberg News, "China Raises Security Warning on Ships Plying Malacca Strait," July 30, 2019, https://www.bloomberg.com/news/articles/2019-07-03/china-raises-warning-for-shipping-in-malacca-strait-people-say

¹⁴ The State Council of the People's Republic of China, "Vision for Maritime Cooperation Under the Belt and Road Initiative" http://english.www.gov.cn/archive/publications/2017/06/20/content 281475691873460.htm

¹⁵ The 2019 version of the U.S. Department of Defense China military power report states that in 2018 China sought to expand its military basing and access in the Middle East, Southeast Asia, and the western Pacific, though it was constrained by the "willingness of host countries to support a PLA presence." U.S. Department of Defense, *Annual Report to Congress*, (Washington, D.C., 2019), p. 16.

ports and a limited number of PLA logistic facilities collocated with those ports. ¹⁶ A significant BRI investment recipient such as Pakistan might enter into such an agreement.

Border Security

With fourteen neighbors, China has the most land borders of any country in the world. As China's interests have increased so too have Beijing's concerns about border security, including the threat of terrorism along the border that targets Chinese citizens or BRI infrastructure and energy projects. BRI investments in Central Asia and South Asia, including Pakistan, Tajikistan, and Afghanistan are vulnerable to instability and terrorism, and China is also concerned about terrorists crossing the border via Afghanistan's Wakhan Corridor. As a result, the PLA, or the People's Armed Police (PAP), has reportedly established a small border facility in Tajikistan, from where they can monitor the passage into Afghanistan. The PLA has also conducted joint border patrols with the Pakistani and Tajik militaries, as well as with Afghan security forces, though this has not been officially confirmed.

Host Country Unrest and Conflict

China has already had to confront local unrest and conflict that threaten its investments and citizens, and this is likely to be a continuing theme as BRI investments in Africa, South America, and South Asia increase. For example, in 2018 the Ugandan military was ordered to protect Chinese companies following a spate of robberies that cost Chinese investors significant sums of money. In 2015, two Chinese diplomats were shot to death in the Philippines, and that same year seven Chinese nationals were among the 170 hostages taken in Mali. The PLA has had to deploy twice to evacuate citizens, sending a frigate to safeguard evacuees in Libya in 2011, and

¹⁶ U.S. Department of Defense, *Assessment on U.S. Defense Implications of China's Expanding Global Access*, December 2018, p. 4, https://media.defense.gov/2019/Jan/14/2002079292/-1/-1/1/EXPANDING-GLOBAL-ACCESS-REPORT-FINAL.PDF.

¹⁷ China borders North Korea, Russia, Mongolia, Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, India, Nepal, Bhutan, Myanmar, Laos, and Vietnam.

¹⁸ Dirk van der Kley, "China's Security Activities in Tajikistan and Afghanistan's Wakhan Corridor," *in Securing the Belt and Road Initiative*, Nadege Rolland (ed.), National Bureau of Asian Research, 2019, p. 73.

¹⁹ Gerry Shih, "In Central Asia's forbidding highlands, a quiet newcomer: Chinese troops," February 19, 2019, https://www.washingtonpost.com/world/asia pacific/in-central-asias-forbidding-highlands-a-quiet-newcomer-chinese-troops/2019/02/18/78d4a8d0-1e62-11e9-a759-2b8541bbbe20 story.html

²⁰ Huang Panyue, ed., "China, Pakistan Conduct Joint Border Patrol," China Military Online, July 4, 2018, http://english.chinamil.com.cn/view/2018-07/04/content_8079676_2.htm. Shan Jie and Huang Jingjing, "PLA Border Troops Fortified," *Global Times*, August 1, 2017, http://www.globaltimes.cn/content/1058947.shtml.

²¹ BBC News, "Uganda orders military to protect Chinese businesses," November 15, 2018, https://www.bbc.com/news/world-africa-46221236.

conducting a larger NEO in Yemen in 2015 to evacuate more than five hundred citizens of various countries.²²

Protection of infrastructure

BRI investments include building factories, pipelines, railways, and roadways, particularly in Central and South Asia. China has so far protected these investments using local security forces and, increasingly, private security companies.²³ While the PLA is unlikely to deploy abroad only to protect these investments (barring other security threats), it is possible that in the future the PLA or the PAP might negotiate agreements to join host country security forces to protect vulnerable or critical infrastructure such as large oil and gas pipelines or facilities.

Security Frameworks and Legal Justifications for PLA Expeditionary Operations

China justifies the acquisition and use of its nascent expeditionary military capabilities in the following ways:

First, Beijing has worked to align the security interests of BRI countries with China's own interests through the creation of security dialogs and frameworks for security cooperation, which in turn provide a foundation for future military cooperation and expanded PLA presence. Examples include China's efforts to protect BRI projects through the Shanghai Cooperation Organization (SCO), which has focused on counterterrorism and protection of oil and gas pipelines in Central Asia.²⁴ The Quadrennial Cooperation and Coordination Mechanism (QCCM), established in 2016, includes Pakistan, Tajikistan, Afghanistan, and China, and provides a forum for military and security cooperation with between its members. It also functions as the primary security dialogue between China and Afghanistan.²⁵

Second, in 2015 China adopted a counterterrorism law that provides legal justification for the PLA to deploy overseas, stating that the PLA and the PAP "may assign people to leave the country on counterterrorism missions as approved by the Central Military Commission." Notably, the law does not state that China must receive the permission of the host country prior to deploying. Furthermore, the term "counterterrorism missions" is broad and can encompass

²² Ankit Panda, "Chinese Nationals Evacuates Foreign Nationals from Yemen," *Diplomat*, April 06, 2015, https://thediplomat.com/2015/04/china-evacuates-foreign-nationals-from-yemen.

²³ For an in-depth discussion on China's use of private security companies overseas, see Timothy R. Heath, *China's Pursuit of Overseas Interests* (Santa Monica: RAND Corporation, 2018), https://www.rand.org/pubs/research_reports/RR2271.html.

²⁴ Shi Yinglun, "Commentary: "Belt" of security and "Road" to development for SCO in challenging times," Xinhua, June 13, 2019, http://www.xinhuanet.com/english/2019-06/13/c 138139849.htm.

²⁵ Zhang Tao, "2nd QCCM High-level Military Leaders' Meeting kicks off," China Military Online, August 28, 2017, http://eng.chinamil.com.cn/view/2017-08/28/content_7733834.htm.

²⁶ Zhou Jian, "The armed police force has a legal basis for going abroad to fight terrorism," [Wujing Budui chujing fankong you le falu yiju], Legal Daily, January 28, 2016.

threats to citizens, infrastructure, and even China's maritime interests such as overseas ports and facilities. Given this, the PLA could hypothetically deploy overseas under the counterterrorism law to address many of the threats to BRI interests discussed above.

Third, China cultivates the narrative that PLA expeditionary capabilities contribute to international security. Beijing uses this to justify PLA participation in UN peacekeeping operations, for example, where the PLA is the largest contributor of troops and is expanding its role. The PLA Navy has for years portrayed the Gulf of Aden counter piracy operations as beneficial to international security. Chinese media hailed the opening of the Djibouti naval base as "good for regional stability," and contributing to "international obligations.²⁷ The PLA's activities overseas help to normalize China's military presence abroad, contribute to China's influence, and support the narrative that the military can be beneficial to international security.

PLA Overseas Experience and Training for Future Expeditionary Operations

PLA participation in peacekeeping operations, counter piracy efforts, and HA/DR also provide a low-risk training environment for Chinese troops. Although the PLA's expeditionary missions have expanded in recent years, only a small percentage of troops and commanders have deployed to missions abroad. Deployments by the PLA Navy Marine Corps to Djibouti, increased participation in UN PKOs, and a possible future expansion of counter piracy operations to the Middle East will augment the PLA's overseas experience. UN PKOs, for example, provide the PLA with experience working with multinational forces deployed overseas. Apart from multilateral exercises conducted under the auspices of the SCO, the PLA does not have a great deal of experience working with or commanding multinational forces in hostile environments. The UN peacekeeping operations also provide some deployment experience for the PLA's Special Forces units (SOF), which have been sent to the UN mission in Mali.²⁸ The Gulf of Aden counter piracy operations have allowed the PLA to iron out logistics and clarify command and control for the deployed task forces, although these would likely still be challenges for the PLA in a larger overseas operation.

Although they do provide some deployment experience, the PLA's current overseas missions are relatively limited in scope and do not offer the kind of training that the military would need for more complex expeditionary operations. Lack of experience and training could hamper the PLA should it need to conduct large-scale complex expeditionary missions, such as a sustained operation to protect Chinese citizens and investments from unrest or a NEO in a hostile environment—both plausible scenarios given the expansion of BRI investments around the world. The reality is that many of the PLA's expeditionary capabilities will be tested for the first time during a crisis, and this, along with military planning, will shape the future of the PLA's expeditionary force. Finally, perhaps the greatest benefit to China of PLA participation in overseas operations is that it enables the military to build institutional ties with local forces,

²⁷ Huang Jingjing, "China's logistic hub in Djibouti to stabilize region, protect interests," Global Times, March 15, 2016, https://www.globaltimes.cn/content/973900.shtml.

²⁸ Chen Zhuo, "6th Chinese peacekeeping force to Mali returns home," China Military Online, May 27, 2019, http://eng.chinamil.com.cn/view/2019-05/27/content 9515387.htm.

increases China's influence with host country governments, and normalizes PLA presence overseas. Like the security frameworks discussed above, Beijing can use these military and security ties to expand China's overseas military footprint in the future.

Implications for the United States

The motivations described in this testimony demonstrate that the PLA has an operational imperative to develop the expeditionary capabilities to protect its overseas interests. China will continue to use the defense of its global security interests, along with security cooperation agreements like the QCCM and the counterterrorism law to justify the development and use of its expeditionary military capabilities in the coming decade.

These motivations also provide some clues as to how Beijing might choose to use its expeditionary capabilities in the future. The PLA might deploy when:

- Drivers pressure Beijing to act, such as the Chinese public's expectations to protect citizens or to prove to the international community that China can defend its interests.
 Examples include the 2015 NEO in Yemen and the counter piracy operations in the Gulf of Aden.
- Chinese interests are directly threatened. Examples include infrastructure and energy projects or terrorist threats against Chinese nationals living in BRI countries.
- PLA presence can help build influence and military ties with host governments, train local security forces to protect China's interests, and lay the groundwork for future military expansion if required. PLA and PAP deployments to Tajikistan are an example of this.
- The PLA can gain overseas deployment experience and training while protecting China's interests and contributing to international security missions. The PLA's participation in UN peacekeeping operations in Sudan and Mali fall into this category.
- The PLA's expeditionary capabilities are sufficiently developed to accomplish the mission.

Finally, the United States should be prepared for China to use its overseas military power as a foreign policy tool as the PLA's expeditionary capabilities grow. This is already happening: PLA and PAP deployments to BRI countries in Africa, Central Asia, and South Asia augment China's economic and political influence in those regions. Beijing will likely continue to use its military to boost relations with key countries and shape the international security environment. Of course, this also carries some risks for China as increased use of the military overseas may alienate some countries.

Policy Recommendations for the United States Congress

1) Work to deepen engagement with countries that are considering military cooperation with China. The United States should increase engagement with potential Chinese military partners. By offering a mix of incentives and disincentives, the U.S. can limit the options Beijing has to establish and expand military presence overseas while augmenting U.S. security cooperation efforts and deepening military relationships.

- 2) Take advantage of opportunities for closer international relationships as Chinese expeditionary capabilities expand. A stronger expeditionary PLA will undoubtedly create some angst around the world as concerns arise about China's military objectives and influence. The United States should look for opportunities to form closer relationships with states that have these concerns and that would consider more military engagement U.S. forces. For example, India, which is worried about the PLA Navy establishing routine patrols in the Indian Ocean, might welcome a closer U.S.-India military relationship, particularly with regard to surveillance assistance in the Indian Ocean and the tracking of Chinese submarines.
- 3) Consider options for influencing China's use of the PLA overseas. Although Beijing might have the option of deploying the PLA to address security threats or crises, the United States should look for opportunities to shape China's use of its expeditionary military force. This could include rallying U.S. allies and partners to back Chinese action to resolve a security issue, for example. Or it might include using the lack of foreign support for PLA involvement to attempt to tip China's calculus in the direction of pursuing nonmilitary options.
- 4) Increase dialogue on Chinese security issues between U.S. combatant commands, defense and diplomatic attachés around the world, and allies and partners. The PLA is likely to have an increased role in shaping the international security environment and building China's influence overseas as its expeditionary capabilities improve. To prepare for this, the United States should work to better connect U.S. and allied military organizations around the world to discuss PLA expeditionary capabilities and China's overseas influence.

PANEL I QUESTION AND ANSWER

CHAIR FIEDLER: Thank you very much. Commissioner Kamphausen? COMMISSIONER KAMPHAUSEN: Admiral Blair, I'm just going to thank you so much for being here today. And thank you for your testimony. Admiral, I have two questions for you. First, I appreciate your taxonomy on the types of power projection, how we ought to think of this term that which has a very broad application. And so you added a great deal of

In a way, the first three types of examples of power projected activity, as you say, are already underway. The PLA has already, or that China has already conducted them. In many ways this is comparable to the points that Secretary Sbragia was making earlier about the nature of steady-state competition.

I wanted to focus my question though on the fourth area of power projection. You say at the highest end of power projection capabilities, the capability of the United States has developed during World War II and maintained and used in the 75 years since. China is nowhere near developing this scale of power projection capability, and you cite a couple of reasons.

In your mind, if you put yourself back when you were the Commander in Chief of U.S.-Pacific Command, what would be the specific kinds of capabilities that would grab your attention to suggest that the PLA was more interested in conducting this Category Four level of power projection?

ADMIRAL BLAIR: I would not have anything terribly original there. I'd say a build up of amphibious assault capability. A whole lot of these Type 072 LHAs that they've just built the first one of, major exercises within China with airborne assault forces, and a tremendous thickening of their logistics support forces, primarily seaborne, which is how you have to carry most of it there.

And then on the political side, I would, as I emphasized in my testimony, what the United States really uses when we do a big scale overseas intervention is we have an ally close by that we can flow into, regroup, reorganize, and then go into the battle zone.

And if China, China's relationships with a Pakistan or a Myanmar, or one of the -- one of the countries that they deal with and give a lot of aid to, began to take that turn, then I would become concerned. So those would be the ones that I would look for.

COMMISSIONER KAMPHAUSEN: Thank you. And then in the second area in which your testimony is very helpful was you talk about the zones. And the Chinese interest in projecting power varies by zone. And very helpfully you point out, I think, that the attention of the United States and our role in advising Congress should really be the focus in the close in zone, in the maritime space in the East Asian Atole.

But there's also a concern about what are the transition points from zones one to two, and two to three. And you spoke at some length about zone two both in your testimony and then in your oral statement.

But in zone three, the most distant, and maybe the most concerning over a long period of time, not eminently, as you noted, would be the areas of Europe, Africa, Latin American and the Pacific Islands.

And you say China does not employ nor currently aspire to use military means of influence in this region. What would be the transition points that would suggest to you as an observer that maybe this was changing? What would be the indicators to suggest that they were desiring of employing or aspiring to use capabilities in that outermost zone?

clarity to this issue.

ADMIRAL BLAIR: I mean American relations with Europe, Latin America, Western Pacific and so on are so strong that although we suffer from neglect sometimes, and we, you know, we diss the Western Pacific countries, and don't come to their conferences, and don't carry out our trusteeship duties and so on.

The structure is all there. And it doesn't take much for us to get back in the game and be pretty dominant. So I think the main indicator there would be sort of a lessening of American interest and concern and involvement in these parts of the world.

I mean these are ours to lose. You know, if we screw up our relations with Europe, with Latin America, and with the Western Pacific countries, we leave a vacuum, and China can just waltz in there and make up for the deficit.

So that would be -- that would really be number one. And then as for the things that China itself could do, my experience is that economic influence, however strong, does not translate into control over another country's vital national security interests.

Countries try to keep them as separate as they can. But if it really comes down to a key decision, they'll go in terms of national security every time in my experience, especially if there's an aggressor who is just making life difficult for them.

So I think the United States just sort of has to keep good relations. Keep up the military diplomacy that we are very skilled and practiced with. Keep our parts of the region. And China just won't see a wedge there that it can drive into. And it will work on much closer, more vital to it areas of the -- its maritime zones and then this South Asia thing we talked about. So just keep minding the store.

COMMISSIONER KAMPHAUSEN: Thank you.

CHAIR FIEDLER: Ms. Gunness?

MS. GUNNESS: Sorry. Could I just -- I just wanted to add onto that. I don't think we should forget that China has a multilayered approach to developing security relationships overseas. And so in addition to the economic lever and the fact that they can use some of their expeditionary capabilities, there's also tools like arms sales.

So for example, before opening the base in Djibouti, there was an uptick in arms sales to Djibouti, as well as there have been other upticks in arms sales in the Middle East and other places where they want a strategic relationship.

And so, you know, for me one indicator, obviously with different governments it would be different. But one indicator would be whether China is pursuing efforts like that, as to whether they would want to develop a base somewhere else in those locations.

CHAIR FIEDLER: Commissioner Cleveland?

CHAIRMAN CLEVELAND: Thank you both. Very, very helpful testimony. My questions are for you, Ms. Gunness. You talk about, and I was scrambling to find it, you talk about the Chinese government's analysis of their role overseas and their understanding of how they are perceived.

We had a hearing last year about what keeps Xi up at night. And one of the issues that surfaced is what amounts to an echo chamber in decision making, that Xi knows best on all things. And that whether it's Taiwan or Hong Kong, or Pakistan, there are -- increasingly there is a sense that his authority is not questioned.

So I'm curious about when you say that the Chinese analysis of their position abroad, what does that analysis look like? Who conducts it? How does it filter up? What are the perceptions of rank and file out in the field in terms of how welcome they are versus what the party sense of their role and impact is in Beijing?

MS. GUNNESS: Well I could probably talk for an hour on that, but I won't.

CHAIRMAN CLEVELAND: Good.

CHAIR FIEDLER: Please don't.

CHAIRMAN CLEVELAND: But you have five minutes.

MS. GUNNESS: Yeah. I know. Yes, so I mean first of all a lot of that analysis comes from XI Jinping himself. You can see a lot of this in the official speeches. The motivations behind the development of an expeditionary PLA.

So things like the China Dream, connecting it to great power status and a strong military and the BRI, really links China's economic and security issues in such a way that it is basically taking what Hu Jintao couches as the new historic missions for the PLA, and broadening it out into the next step.

So you know, beyond official speeches, there are plenty of analysis from -- there's plenty of analysis on the BRI from think tanks that talk about the security issues, from those think tankers. And you know, there's definitely been a stovepiping of information going up to Xi Jinping in recent years. And so I can't answer exactly how much of that filters up to him.

But a lot of the motivations are discussed by him in official speeches and also in the defense white papers and things that they publish. In terms of party implements in the field, which I think was your second question.

CHAIRMAN CLEVELAND: Mm-hmm.

MS. GUNNESS: I, you know, they have an issue with command and control overseas. They've kind of managed to work it out for the counter PC task forces, but those are very limited missions. And their PLA reform effort, you know, they have these new theater commands. And there's even gaps within regional contingencies of who would command different operations for the theater command.

So for example, if there was an India -- an issue with India, the western theater command might send ground troops to the border. But if they needed naval assets, the western theater command doesn't have those, so they would have to coordinate with another theater command.

Now if you take that out to a global, you know, an expeditionary mission, who's commanding what? I mean, the PLA Marine Corps has a headquarters that isn't subordinate to any of the theater command's Navy headquarters. So it's independent, which is probably good so that they can carve out the troops when they need, to support different missions.

But I mean they don't have a joint task mechanism to coordinate these issues yet. I would think that's probably something they would have to develop if they would truly want an expeditionary capability in the future.

CHAIRMAN CLEVELAND: So I just want to clarify, when you talk about analysis in your statement and your comments, the analysis is entirely contained in Beijing in terms of what Xi thinks is reinforced by what Xi thinks in terms of the success of their operations abroad and their impact?

MS. GUNNESS: Well, I mean, yes. So Xi has really directed the PLA to do these things.

CHAIRMAN CLEVELAND: Mm-hmm.

MS. GUNNESS: To build an expeditionary capability. And it goes beyond just protecting their interests. So like when I talked about the new historic missions earlier, that was really about protecting China's interests at the time. But now it's about more than that. It's about becoming a great power.

CHAIRMAN CLEVELAND: Mm-hmm.

MS. GUNNESS: It's about, you know, being able to shape the international security environment. So yes, these are things that -- I mean I don't know what analysis he's getting to come up with those things, but they are things he's saying, so --

CHAIRMAN CLEVELAND: I'm always interested in analysis in terms of the calculation of risk. And if there is a dearth of really solid evidence, what's the likelihood of miscalculation? The one other thing I was interested in your testimony is you talk about the public as they participate in BRI investments or are deployed.

You characterized the citizens of China as expecting that the government will protect, whether it's military or economic or human assets, I'm curious about the basis for that assertion, that there is this public expectation of protection of Chinese assets abroad.

MS. GUNNESS: So first of all, there have been several polls in Chinese newspapers over the years, asking the public if they would support more overseas PLA presence, and the polls have been pretty supportive of that.

Second, there have been a number of studies on, done recently actually, on China's -- the Chinese public's view of the use of the military as a foreign policy tool. And what they -- what these studies have found, and one of them is not a Chinese study, but two others are, is that the public does support increasing use of the military. It's more hawkish in nature to shape foreign policy. They're not opposed to it. Let's put it that way.

So that's part of it. And I would -- but I would say it's also that when incidents have occurred, the public has -- there's been -- I don't want to go so far as to say that there's been unrest, but there's been some discontent. You can see it online. A lot of the netizens came online after the hostage taking in Mali, where three Chinese citizens were killed for example.

I think around that same time there was also an issue in the Philippines that involved the death of several Chinese citizens. And so these, you know, this actually forced Xi Jinping to come on television, Chinese television, and say look, you know, we are going to develop the means to protect -- to better protect citizens abroad.

CHAIR FIEDLER: Admiral Blair, did you have a comment that you wanted to make? ADMIRAL BLAIR: I was just reminded by something Dr. Gunness said, which is one real indicator of what China would be up to, would be the establishment of a regional combatant command strategy outside of China. Right now the United States is the only country that has the -- that feels obliged to divide the entire world up into geographic districts and put a four star officer in charge of each one.

If you were to see that in Chinese case, their current structure is strictly internal as we heard. That would be a -- that would say hey, a major indicator that ambitions are afoot.

CHAIR FIEDLER: Thank you. Commissioner Lewis?

COMMISSIONER LEWIS: Thank you very much for your presentations today. And you probably have more experience in China than many of us have ever had in our lives, even though we've all been there. I have twofold questions. Number one is, China now, or Chinese companies control about 90 ports throughout the world, including both ends of the Panama Canal. How concerned are you that these could become staging grounds for the expeditionary forces in a military sense?

And secondly, what is your view as to why China has not moved on Taiwan, and what can we do to deter them from ever moving on Taiwan?

ADMIRAL BLAIR: So on question number one, I'm not that concerned. If you go to these places and look into the COSCO-owned, or other owned places, you know, you can sort of look down into them, and there's some warehouses, some space. If the -- if the country in which

these are located decided that they wanted to take control, that bad things were going on in here, they could just walk right in with minor police forces and take them over.

So these are not bases. Good listening posts? You can gather a lot of information. Good economic levers that you can use right up to the point of using them. But if you look at, you know, Sri Lanka, the Panama Canal and so on, I don't see these as serious potential military bases.

On the question of Taiwan, the reason that China hasn't taken action to date? Well number one, they haven't really built the -- if you look carefully at the forces that they've built and the way that they've exercised them, they seemed more designed to keep China -- to keep Taiwan from becoming independent than they do actually taking and holding the place by force.

And you know, I think they're good Sun Tzu strategists. And Sun Tzu said it's best not to break your enemy into little pieces, but to defeat him and keep him whole, and then you can do a better job of controlling him once it's all over. And the mayhem that would be involved in a real invasion of Taiwan would be unpredictable. Have a hard time putting it back together -- it would be hard to put it back together.

And so I think the Chinese preferred capability is to use the military force to keep Taiwan from straying independence, keep its mind focused on Chinese objectives, and then try to reach some sort of an accommodation that is lubricated by economic, people to people, diplomatic things. And that would be their preferred solution for reuniting their country. Not to say it couldn't change. But that's, I think, the way they think about it now.

COMMISSIONER LEWIS: What do you think we should be doing to deter them from taking any military action --

ADMIRAL BLAIR: Well --

COMMISSIONER LEWIS: --- which Xi Jinping has been talking about?

ADMIRAL BLAIR: Yeah. More of what we're doing now. I mean I agree with the Administration's --- what is there, that we need to keep -- keep our, the quantity and the quality of our forces in the East Asia, those that we can bring to bear and those that are there, increased at a faster pace in order to offset China.

I mean when I was -- when I was CINCPAC, I would always think of that final briefing when the Generals and Admirals had to go into the Central Military Committee and say, okay. Here's our plan for taking over Taiwan. And we're ready to go. And you want that plan to have a high level of risk. You want the Chinese not to know what we might do.

You want them to be afraid of the capabilities that they don't know about that they could bring to bear. You want them to be worried about the secondary and tertiary effects of maybe being successful in the near term, but not able to reinforce. Maybe they enable a formation of an East Asian NATO in which all of the other countries actually join with the United States to form a strong military alliance against future moves.

You want all of those doubts to be really high so that China will continue to prefer a peaceful way to reach their goals. And we prefer that to go on for a very long time.

COMMISSIONER LEWIS: How do you assess the real Philippines' reactions to what -- to the western relationship with the Philippines?

ADMIRAL BLAIR: Which aspect of the Philippines, like Duterte renouncing the VFA recently, and so on? You know, he does not reflect most informed Philippine national security, either officials who can't talk, or those experienced in it who do talk to us informally.

Most Filipinos who think seriously about their country think that their alliance with the United States is their best bet for security over the long term. So we operated before we had a

VFA there. It was cumbersome. We had to negotiate the conditions of each individual exercise that we run.

We could go back to that again. So in my mind it keeps a -- it throws, you know, grit into the gears of serious military cooperation with the Philippines, but it does not eliminate it.

COMMISSIONER LEWIS: Thank you very much. Do you have anything to add to that?

MS. GUNNESS: Just on the port issue, I think it's not necessarily a matter of great concern, but I do think we will see in the future more logistics hubs co-located with commercial ports. You know, I do think that they are entering into these commercial agreements with the intention of expanding it to, at least in -- especially in countries where they have large BRI funding, like Pakistan and some other -- some other places like that. Where you would end up with a logistics hub co-located with a commercial port, that they could then use to kind of augment their expeditionary missions.

CHAIR FIEDLER: Commissioner Wortzel?

CHAIR WORTZEL: Thank you very much. Both of you had really thoughtful testimony. I've got a question for each of you. I'll start with Ms. Gunness. Peacekeeping aside, do PLA forces, when they are deployed, either for disaster relief, or in the Gulf of Aden operations, work in coalition with other forces?

ADMIRAL BLAIR: No.

MS. GUNNESS: Not usually.

CHAIR WORTZEL: So they're just out there.

MS. GUNNESS: Yeah. Well I mean, so I think -- I'm not sure about this, but I think the Gulf of Aden operations have. They have sometimes worked in coalitions, and they've certainly escorted foreign ships, you know, so.

CHAIR WORTZEL: Right.

MS. GUNNESS: But it's not in the same way as like the peacekeeping mission to Mali for example.

CHAIR WORTZEL: Right.

MS. GUNNESS: Where they're actually integrated into a multinational force.

CHAIR WORTZEL: And Admiral Blair, you intrigue me, because essentially you painted a competitive strategy, almost a cost imposition strategy, by keeping U.S. forces in the Asia Pacific strong, active, and able, it focuses Chinese attention in that near zone.

We're going to hear testimony later today that says that they already can send an amphibious ready group of about 2,000 Marines with helicopters out with a small surface warfare group, out certainly as far perhaps as the Indian Ocean.

So if they began -- they are building more amphibs. They are building more surface vessels. If they began regular presence operations in places that challenge us, could that turn that competitive strategy around? Would we have to turn to other commands to handle that?

ADMIRAL BLAIR: I mean I think there is a sense of scale there, 2,000 Marines versus a 150,000 person force to invade Taiwan. It's just that in the Maslow's hierarchy of Chinese concerns, I think the further away you get, the less it is a concern. If they're worried about their ability to achieve their goals within the first and second island chain, that will get priority. And they're feeling better about being able to do that, because we are not reacting as strongly and as forcibly as I think we should.

Were we to up our game there -- and I think our relations with Japan would now allow that in a way that it didn't when I was in command --- certainly the relations with Taiwan itself

would change that. Vietnam another possibility. Healing the ROK-Japan rift so that -- so that we'd have more of a northern extension also to the group of countries that worried about China. I think all of those would refocus Chinese attention on their near term.

The other one of course is technology. Although you can count ships and submarines and so on, in the new areas of warfare, cyberspace, revived electronic warfare, and so on, there are -- there are capabilities which the United States is closer to than anybody else which could make a huge difference, which would worry China a great deal that all of their investment in platforms, and in missiles, and submarines and all, could be undercut by things we -- and the more we do of that, the better I say.

Keeps them focused on their -- keeps them pouring their military resources into that, which are their highest priorities rather than building these more distance capabilities.

CHAIR FIEDLER: Commissioner Lee?

COMMISSIONER LEE: Thank you. Thanks to both of you for being here, and for your testimony. Really interesting. This question is for both of you, and it's a little bit of a broader question.

And you both in your testimony talk about the moti -- the various motivations that the Chinese government has for building up these expeditionary forces and power projection. And some of them are completely legitimate and laudatory and understandable. Things like, you know, protecting the safety of Chinese citizens abroad, or Chinese investments abroad, or participating in international disaster assistance. And then others are more problematic. And I think Ms. Gunness, you talked about the narrative that Beijing uses to justify certain operations.

Do either of you have some sort of insights or guidance for helping to disentangle the public narrative and the sort of totally defensible reasons for the kinds of build ups and actions that we've been talking about here, versus what might be the true motivations?

And it seems to me that there are implications certainly for U.S. policy of, you know, where the concern should be. You know, the United States isn't necessarily going to be concerned about stopping China from protecting its citizens abroad. But other kinds of military capability or sort of intimidation, or bullying or coercion that might be happening that could be of more concern. So just a broad question for both of you.

MS. GUNNESS: So thank you for that question. More than the narrative, I actually look at the actions. And so you know, things like these security cooperation agreements in Central Asia, which so far have allowed a small People's Armed Police, potentially PLA although it hasn't been officially confirmed, presence in Tajikistan for example, where they are starting to build some small facilities.

Things like that where it allows for increased influence by China with those countries, and it allows for a PLA presence that's stationed there. And that could be potentially expanded. You know, those are the areas where I would think we would be concerned about.

And also those are areas where, you know, it's actually becoming more and more apparent which countries China is wooing. So that gives the U.S. an opportunity to go in there and offer some incentives potentially to countries that are thinking about cooperating militarily, or allowing PLA presence, you know, in their area.

So you know, it's those types of actions that I would be concerned about, rather than what they say they're doing, which as you pointed out, is very justifiable in many ways. But you know, there's a broader -- there's a broader game at play.

ADMIRAL BLAIR: I think Dr. Gunness has it right. The, you know, international relations are really a very dense range of capabilities. And there are not too many red lines in

there that you can say we're in favor of this, and we're opposed to this. In the real world, it gets - it gets difficult.

For years, we have leaned in favor of giving China the benefit of the doubt in all of these things. And things that they say that otherwise would look pretty aggressive and against international norms, would be justified by emollient speeches by the Chinese. And we'd say, well they'll learn as they get older, that this is not how mature countries act. And I think we need to call, start calling those out on the basis of the reality, not of the other.

So I'd say it's -- every so often you can find a smoking gun, something that is truly an aggressive military move and no matter what you say about it. And that ought to be called out completely. Other things are pretty unexceptionable. I would say the way China has conducted noncombatant evacuations so far in Yemen and in Libya, it does respond to popular opinion that these are Chinese, they ought to be protected by their government.

They've conducted in a very responsible manner without taking advantage of it to leave behind force which would be useful in the future. And I would say that those would be okay. So I would say we just put our weight -- put the weight of our judgment on being a little more suspicious and a little more active in calling them out.

And frankly, in my experience with the Chinese, that's better for dealing with them too. If the United States is wishy-washy about something, they'll go to the end of the wishy and forget about the washy. And we need to be very clear as to what we will countenance, and what we will oppose.

COMMISSIONER LEE: Thank you both.

CHAIR FIEDLER: Senator Talent?

COMMISSIONER TALENT: So Admiral Blair, one for you, although you certainly can comment on it if you'd like, Ms. Gunness. Admiral, you -- as I read your testimony, I think you discounted a little bit, I don't want to overstate this, what the Chinese might be doing in Africa and Latin American, et cetera.

And I think I agree with that, if we're just talking about, you know, expedition -- expeditionary projection in the typical sense, but tell me whether you're concerned about the following kind of possible gray zone military scenario?

You know, investments in a West African country let's say, followed by inducements to the local leadership, you know, sort of corrupting them, coupled with increasing diplomatic integration over time. Perhaps training of their military forces, et cetera, leading up to a base on the west coast of Africa, from which they can monitor our ships in the Atlantic, et cetera.

I can easily see them moving in that direction. And I think that that may be a greater danger than I think you were estimating in terms of your testimony. So if you could comment on that.

And then the other one is for Ms. Gunness. You say in your testimony on page 7, while the PLA is unlikely to deploy abroad only to protect these investments that's there. And I was wondering if you'd expand on that? I mean why do you think it's unlikely that they would do that? I mean because everybody else who is testifying today says that's actually a primary driver of what they're doing. So have at it.

ADMIRAL BLAIR: On Africa and Latin America, I guess I've become a little bit cynical having been involved in Cold War competitions with the Soviet Union in these areas.

And the ability of these relatively undeveloped countries to accept huge amounts of economic aid, direct assistance and then to have a change of mind and say sorry, you know, don't let the door hit you on the way out. It's just infinite in my experience.

The political structure particularly of the authoritarian regimes can change quite quickly. And you either get another authoritarian, or you get something better.

Either one of those is probably better for American interests. So I just don't get quite so worried about some unbroken chain of influence, bases, hard allies lasting decades.

That doesn't mean that we don't contest that in those countries. That doesn't mean that we don't offer them alternatives. That doesn't mean that we stop calling out their authoritarian regimes and appeal more directly to the people who are eventually going to get rid of these thugs anyhow, I think. And they ought to be looking to the United States once they do that.

So I think that we have to be in that game. We have to be working hard on it, but I don't think we need to be overall driven by a fear that there will be a base there and have that distort our thinking to the point that we are worried about it.

MS. GUNNESS: So they are absolutely going to deploy abroad to protect their investments. That line from my testimony was specifically related to facilities, factories, railways, et cetera, like infrastructure.

And so the reason why may not deploy to protect those types of infrastructure projects is because they increasingly are using private security companies as well as a combination of those companies and local forces to protect those investments.

So, but for the rest of them, the maritime stuff, the larger BRI projects, energy investments, yeah, they are already deploying abroad to protect those, so.

COMMISSIONER TALENT: Well, I agree that in the first instance they'll rely on host country forces, private security, et cetera. But if they could get -- if necessary, then they had the invitation from the host country. Don't you think they would?

MS. GUNNESS: It depends. I mean I think it depends on how the private security company relationship evolves and what the threat is, frankly, you know?

I mean yeah. Just as an example, in like South Sudan, they're deploying their peacekeeping troops through the U.N., but they're actually deploying PLA there as, you know, as well as in some cases using local security forces to protect those oil fields.

But if you're talking about, you know, a factory in Uganda for example, which there was a wave of unrest in 2018 in Uganda that threatened Chinese businesses. They actually had -- they asked the Ugandan military to come out and protect those. And so it just depends on the relationship that China has with the country and the type of threat that exists.

CHAIR FIEDLER: Commissioner Goodwin, Senator Goodwin.

COMMISSIONER GOODWIN: Thank you, Commissioner Fiedler, and thank you Admiral, Mrs. Gunness for your testimony this morning. I had a quick follow up to Chairwoman Cleveland's question to you, Mrs. Gunness, about domestic expectations in China.

In response to her question and in your written testimony, you alluded to the fact that the Chinese public increasingly expects the government to be able to protect its citizens abroad and as a result to be able to develop and deploy these expeditionary capabilities to do so.

Certainly understandable expectations and understandable pressures. My question is whether there are broader domestic pressures as well, perhaps especially in this polling that you referenced.

Is there any indication of broad-based support among the Chinese domestic public for these other motivations behind the development of expeditionary capabilities, the Chinese Dream, the elevation of China's role in the world with the resulting increased involvement in international relations, international security and playing a larger role in the global order?

MS. GUNNESS: Yeah, there absolutely is that connection. You know, beyond the

protection of Chinese citizens abroad, the Chinese -- you know, so Xi Jinping with this Chinese Dream has really linked this idea of strong military to a prosperous society and China as a great power.

And so, the public supports this. And you know, part of being a great power is having bases abroad, having a carrier that you can send out, being able to, you know, do a noncombatant evacuation operation if you need to and being able to be self-sufficient enough as a military power to be on the global stage like that.

And so, I think there is that -- yeah, beyond sort of protection of interests, there is that expectation from the Chinese public. And it's -- you can see some of this in those foreign policy related studies that I had mentioned earlier, where the Chinese public were asked if they would support more military operations overseas.

You can also see it in some of the analysis in China on -- I don't want to say they're abandoning the noninterference principle, because that's not the case. But this idea that, you know, the noninterference principle has kind of been broadened. You know, the opening of the base in Djibouti and the enabling of the counter terrorism law that enables PLA troops to deploy overseas without asking host country permission, this is something that wouldn't have been expected before.

And so these are all, to me, indicators that the Chinese public does support a broader role for the PLA overseas.

COMMISSIONER GOODWIN: And I'm fascinated -- not to put you on the spot about these public opinion polls, but I really would be curious to learn more about how deep the support goes, especially when it would be separate and distinct from the protection of Chinese citizens in the event of a crisis or a hostage situation, like the two you alluded to. Was there any sense of that in this polling?

MS. GUNNESS: So I don't -- I would have to go back and look at those --

COMMISSIONER GOODWIN: Sure.

MS. GUNNESS: -- papers, so I don't have the specifics right now. But I mean yeah, what I said before about the general support for increased role of the military overseas to effect foreign policy objectives, yeah.

COMMISSIONER GOODWIN: Okay. Thank you very much.

CHAIR FIEDLER: Commissioner Bartholomew.

VICE CHAIRMAN BARTHOLOMEW: Thanks very much. And thank you to both of our witnesses for interesting testimony. I have a question for you, Admiral Blair.

I just wonder whether this idea that a lack of allies and partners would limit the ability of the Chinese, their capability for high-end power projection, in the context of you talked a little bit about economic coercion but also what's happening in a number of countries, of course, is united-front efforts and trying to shape the narrative.

And the Chinese are involved in training journalists in Africa, you know, they are involved in acquisition of media platforms. And so I find myself just wondering. This is a different world, right?

I mean if they succeed in shaping a population's vision or view of China in a way that is favorable to them, unfavorable to us, then the response in the context of some sort of intervention changes just how the population in these countries view it.

So for me, it's not just that the leadership is -- in some of these countries is being corrupted. It is that the message that China is trying to send is favorable to China's narrative.

And along with that, there is this issue of them sort of aggressively cracking down in

countries where people are saying things. I mean there's just been this campaign lately by Chinese diplomats and other people to just absolutely try to squash any stories or any dissent.

I mean in countries like Sweden -- and I don't know ultimately how successful they'll be, but can that change the whole calculus of what it is that you do when you're able to intervene? That's one question.

Mrs. Gunness, I sort of have two for you. One is, on noninterference it seems to me that it's a lot of what Beijing says but isn't necessarily what that they do when you look about them mucking around. I think of Zambian elections and things like that.

So I'd like your assessment of sort of how real is this noninterference. And then second for you, this polling I'm presuming was done before the coronavirus hit. And I'm wondering. It might be too soon to see this, but whether and how much we're going to see inside of China in the context that the government will tamp it down.

But why are we investing so much overseas in these different activities when we can't meet healthcare needs at home. And I just wondered if you have any sense of whether any of that will do. So sort of three questions for any of you, both of you.

ADMIRAL BLAIR: I could see that a combination of a unique dispute in say Africa or Latin America, these distant regions combined with some manipulation of the media could result in a situation in which one country would invite China to send serious military help to defend their borders against another, to support their aggression against country.

That is a feasible scenario that if -- and if China were really poised, ready and wanted to make that sort of a statement, you could see that happening.

I was trying to draw a distinction between that and sort of a long-term reliable basing structure with allies that have some stability, which can provide a basis for long-term use of the military component of force in support of regional or allied objectives in that region.

So yes, number one could be done in a particular area even in an Africa or Latin America. Number two, it's just much harder for me to see the Chinese being able to successfully pull off.

MS. GUNNESS: Thank you for your questions. In terms of the noninterference principal, I think they did adhere to it when they didn't have the means to interfere.

And now they have some limited means to interfere, and it's -- but I think that they, you know, when you look at the Belt and Road initiative even though they don't have alliances per se, they are trying to build partnerships.

And so it doesn't really behoove them. It doesn't do well for them to just go in and not, you know, try to work with the host country. So, for example, something like -- and I hate to bring up Tajikistan again, but it just seems like a good example though.

You know, there's a gas pipeline -- oil and gas pipeline that's supposed to open in the mid-2020s. I think it's called Line D, in Tajikistan.

And so, for example, if there were a terrorist threat against that, you know, the Chinese forces are -- potentially could deploy there train with the local Tajikistan forces to protect that. So I think they will do those kinds of things to increase security cooperation and try to work with the local governments where they can.

If a big crisis hits, you know, again they have the counterterrorism law. They legally have justified the ability to deploy overseas without asking the host country government. So, you know, that hasn't happened yet, but we'll see if it does in the future.

Your second question was the coronavirus. And so I don't know, I haven't seen anything that indicates that there's this discussion about domestic issues versus PLA international

activities.

I think that, you know, the PLA going out to distant seas operations and the development of a blue-water navy is very much tied to national sentiment for the public.

And so, you know, and also I don't think that there's -- I think there are different pots of money. There's different pots of funding, right? So I don't think that there's this sense that, you know, we can't deal with our healthcare stuff at home so why are we doing this military stuff abroad.

But, however, the coronavirus crisis as you know if very new. So we'll see if the domestic unrest continues with that.

VICE CHAIRMAN BARTHOLOMEW: Thank you.

CHAIR FIEDLER: Let me ask a couple of questions. One, you know, in testimony before the Commission years ago on energy acquisition, resource acquisition, a number of experts said Chinese -- China control the source of oil, the source of resources, is silly because, you know, you can buy it on the market.

And they persisted in their strategy of owning resources. So I mean they're not going to be able to protect their resource acquisitions in Australia and Canada.

They can in Africa, but it also seems to me that they have created, by owning more than any other great power, rising power, they have to -- that protecting it becomes problematical and therefore they're vulnerable.

So they're vulnerable on two levels. One, in the protection of critical resources and in sea lane protection, which presumably by the way, they are going to have a difficult time doing under any circumstances.

An expeditionary capability to protect resources except in a localized conflict -- I mean, if they get in a conflict with us, they got a problem, right? Comment?

ADMIRAL BLAIR: Yeah. I mean the Malacca problem is a huge one for China. I think they are feeling their way in a very Chinese practical fashion into this area.

Would they like to own and be able to protect secure sources of energy for China? Yeah. Is that practical in the real world? No other country has found a way to be able to do that.

So I find when I talk to Chinese who are not PLA navy people but who are Chinese energy people, there's a pretty sophisticated understanding of how this thing really works.

When I talk to PLA navy people I find these sort mini neo-Mahanists who, trade follows the flag, the flag follows trade. And, you know, those are sort of traditional talking points that navies have used for years in order to try to get blue-water forces funded at the expense of Army forces who generally have the advantage in China.

So, and if you look at the Chinese development of merchant shipping protection capability and you get beyond, you know, Somalian pirates, which is -- I thought the movie Captain Phillips was pretty accurate.

We've got a billion dollar Aegis cruiser that is serving as a platform for six special forces people who are shooting three Somalis. I mean, you know, this is not serious sea line communication protection.

If you look at the things that are necessary for serious sea line of protection against even small, not very sophisticated submarines of literal countries against surface to surface missiles, many of them sold by the Chinese on the open market for years, that's tough.

And as I look at the Chinese ability to do that at this distance, it's not very good. So I don't think that they have really gone after sea line of communication protection as a serious mission.

I think it's more been part of this, let's get overseas, let's add one more element to national power, and so on. So I think the Malacca conundrum exists for China.

If they did get into a serious confrontation with many countries, much less the United States, then they import their oil by sea at the sufferance of that adversary.

CHAIR FIEDLER: The -- thank you very much. The polling of the nationalist militaristic impulse of the Chinese people, that we've been discussing, seems to me to be offset by the following problem of the party. Which is defeat in any circumstance has a greater impact than it would be, say, defeat in the United States.

We've had all kinds of sort of minor defeats that don't shake our system. Their defeats, though, will have a greater impact on them. Am I misguided in thinking that way?

MS. GUNNESS: Well, no, I don't think so. And I mean so this is why I think until they really have an expeditionary force that's capable of doing more complex operations, they're going to be careful what they deploy for, if they can.

So, you know, we know they can do limited NEOs. We know they can do counter-piracy in some situations. But yeah, they don't want to deploy and then get egg on their face when they can't do a mission.

And so, you know, the areas where the expeditionary capabilities are most developed are definitely the maritime. It's definitely in the maritime domain.

But, you know, as Admiral Blair pointed out, there are many gaps in that. So yes, I think there is a definite risk for the PLA and China in terms of deploying overseas, which is why they've started small. And they might expand on that, but they started small.

CHAIR FIEDLER: Thank you. Commissioner Cleveland, you had a -- any second round of questions or beyond you?

CHAIRMAN CLEVELAND: I have several for you, Mrs. Gunness. You mentioned that building ties with local security forces is an element part of the rationale.

Can you give some examples of where that's gone well and where it has been perhaps less successful; the first question. The second is the PAP's role has changed in the last several years in terms of line of command and responsibilities.

You mentioned that they have been co-located or deployed with the PLA. I'm wondering about coordination and the role that the PAP is playing in terms of expeditionary forces versus the PLA.

And then you also mentioned in your testimony Special Operations Forces and that they have occasionally deployed. I'm curious less about -- I'm interested in the mission, but I'm more interested what formed the basis for the deployment. Why were they selected and what the rationale might have been?

So three questions. Thank you.

MS. GUNNESS: Sure. Sorry. Your first --

CHAIRMAN CLEVELAND: Local -- you mentioned.

MS. GUNNESS: Local ties.

CHAIRMAN CLEVELAND: Yeah, an example of what's gone well and what might not.

MS. GUNNESS: Right. So they've definitely trained with local forces in Djibouti. And that's part of that sort of overall effort along with, you know, helping the government expand its security capabilities and whatnot. And it was part of paving the way for the base opening.

But they've also done a lot of that in Central Asia, so Pakistan. You know, some coordination with the Afghani forces and Tajikistan again and then Uzbekistan, I believe, also they've deployed.

CHAIRMAN CLEVELAND: All PLA?

MS. GUNNESS: So PAP and some PLA for border patrols. But it's part of a broader effort, I think, to increase the security cooperation between those local forces and again to kind of normalize PLA or PAP presence in those areas.

So the PAP role has changed, and there is -- the PAP now falls under the CMC, so it's still considered a quasi -- a paramilitary force, but it's more militarily controlled, I guess.

And then so when it deploys, you know, presumably there is some coordination with the theater commands that would deploy to those areas, although I'm not -- I haven't done a lot of research on that, so I'm not sure about the specifics.

I'm sorry. You had one more question.

CHAIRMAN CLEVELAND: The SOF.

MS. GUNNESS: Oh, the SOF. Yeah, okay. So the Special Forces -- so there have been some examples of like we know that they've deployed Special Forces on the counter-piracy, some of the counter-piracy missions. And part of that is training purposes, but it's also to sort of, I think, to regularize this ground component with your maritime, you know, maritime components so you have a full package.

For example, some of those SOF forces were actually sent to Mali when the PLA deployed to Mali under the U.N. peacekeeping mission. They were sent there to support that.

And so, you know, some of it is training. I think a lot of is training because they're trying to better integrate the SOF right now into the maritime component. But some of it is actually they're sending them to support some of these other missions. I don't know if you have more on that.

ADMIRAL BLAIR: No, I would agree with that. You know, you can sort of look at these pretty small elements of what you would eventually need to have a serious intervention capability.

And you can draw lines, but it's a pretty big jump. You can't just throw together a few ships and SOF and FedEx support for your forces and say I've got an intervention capability.

I think there's some intermediate steps there that have to be done that we would see. And, you know, I think the Chinese military planners are doing a pretty sensible job of responding to the missions that they would like to do, well, what they were told to do, building component pieces.

I have a great deal of respect for what they've been able to do, the decisions they've made, both in East Asia and in this nascent capability to protect power elsewhere.

But, you know, the United States has just huge advantages in this whole area. And I think the only way we can lose in this competition is by forgetting what we know how to do and by not paying attention and withdrawing and not putting the resources behind it.

So I don't want to come across as somebody who says ah, it's all under control, because we have to keep stroking. We can't rest on our oars.

But our oars are very much stronger, oars, our experience, our relationships are all there. And as long as we keep pushing on them, resourcing them, putting good people there, we can handle this.

CHAIR FIEDLER: Commissioner Wortzel?

CHAIR WORTZEL: Mrs. Gunness, I want to draw on your discussion of your reading of legal justifications for what China may or may not do. And I want to give you kind of a special case and just see if you've read anything in China that even talks about it.

But if you think about justifications for an armed intervention in another state, whether

the state's failed or not to protect one's own citizens, they really do constitute the kind of challenge that Xi Jinping already had to respond to.

Now, you know, we have the Carolina Fair here in the U.S., 18-something. You've got Boxer Rebellion in China. But post the establishing of the United Nations in World War II, the raid on Entebbe, our actions in Granada, our actions in the Panama Canal Zone, have you seen any discussion in Chinese military legal literature on potentially the need to be able to do that? And if you want to comment on their capability to do so, I think it's pretty low but I mean these are big questions.

MS. GUNNESS: So I haven't seen anything in the literature. I do have an anecdote.

So I think someone who had recently talked to the PLA -- let's put it that way --- said to me one of the things that keeps them up at night, one of the scenarios would be like if a Chinese diplomat or a businessman were kidnapped and they'd have to go do a hostage rescue in a country, you know, where you had to keep it quiet and, you know, go in and rescue them. That would be one scenario.

Another one would be if there were a terrorist attack either on Chinese soil, for example, from Uighurs connected to Syrian ISIS fighters or something like that where, you know, right now China has very minimal -- it's just military advisors I believe on the round in Syria. They don't want to do more than that. But a terrorist attack like that might have them -- you know, force them to deploy.

They could do it under the U.N. to, you know, counterterrorism -- the U.N. counterterrorism mission in the Middle East, for example. So they have other options rather than unilaterally deploying what's on the ground.

But, you know, those are scenarios that I think are concerning to, at least according to these Chinese analysts, but I haven't read anything specific in the literature.

CHAIR WORTZEL: I don't know if you have anything to contribute to that, Admiral Blair, but if you do?

ADMIRAL BLAIR: No, I think that's a good discussion of where it stands right now with China. You know, I think we ought to also mention as I did in my written testimony that I think the Chinese sort of thinking about aggressive military action really sort of tails off with distance from China.

And you see that part even in the 2019 whitepaper that says, you know, nations that take the road of bellicosity -- you know better than I do having gone through that, but that is -- they do think they are the good guys and that what they are doing is defensive.

Now their definition of defense when you're talking about the first island chain looks a heck of a lot like offense to anybody who happens to be living there. But -- and they have that in a separate category.

And as we've heard, their definition of noninterference and the internal affairs of others is fraying a little bit about the edges and maybe if it's Chinese citizens involved, it's not interference and so on and so on.

But I do think that there is an ideological and sort of self image barrier here to getting the sort of aggressive intervention capability either on a medium or large scale.

And I think we would see -- I think that's another key indicator that we would see changing. And I don't think we should assume it exists right now and sort of encourage the Chinese to adopt it, I think we should watch closely for it, attempt to enforce the modes of international behavior, which you need the U.N. to be favoring what you're doing.

You need some sort of justification for doing this aside from naked self interest and work

that, while keeping our eye open for some of these other indicators which would indicate a big reach.

I think another interesting thing to watch is Xi Jinping himself. I mean I think it's terrific that he has decided he wanted to be in charge for a long time.

All of the longtime rulers that I know get their good ideas early on, and their later years are pretty much shot just following up old ideas.

So I think Xi Jinping's ideas are out there now, and if he lasts until 2030, we would just see reruns of that. And we'd sort of know what's there. So I think the sort of impetus to new ideas, it comes from new leadership within China.

The Chinese have forfeited for a while by sticking with what they have. So you know, I think we need to be -- what was it, that the Reagan administration used to say? That we need to be moderately worried about this, and intelligently worried about it, but not go crazy, which I think is what you said in your opening remarks.

CHAIR WORTZEL: I'm just going to -- I guess the last part of this is if you -- there's also in the U.N. charter, you know, an armed intervention for humanitarian purposes.

You wouldn't think you'd see that out of China, except they did threaten that a couple of times against both Vietnam and Indonesia. But we haven't seen them trained for it, and I think that's a very important point. Thank you, Admiral.

CHAIR FIEDLER: Commissioner Cleveland, you had another?

CHAIRMAN CLEVELAND: I just had one final question. Do we see any differentiation in Chinese assessments of what they are willing to protect when it comes to economic investments?

Is it -- are they more inclined to be willing to deploy or protect mining assets versus railroads or ports? Is there any distinction in the literature in terms of how they view priorities?

MS. GUNNESS: So I haven't seen anything in terms of prioritization, but you can kind of look at where they talk about -- their own threat assessment, how they talk about the threats.

And so yeah, port facilities are definitely on there. Energy interests, like the oil fields that you actually can go and guard. And there's also some discussion about things like oil pipelines.

You know, and then there's the broader discussions about the maritime vulnerabilities that we've already talked a little bit about.

But, you know, as the maritime Silk Road, you know, it's supposed to connect to China via all these different waterways. I mean, that creates a lot of vulnerability for them.

So beyond the Malacca issue, there's, you know, the Arctic. There's other vulnerabilities. And so I think there's a sense that they really -- not anytime soon but that at some point they need to develop a distant seas blue-water capability that does have the ability to protect their interests in those types of situations.

CHAIR FIEDLER: Admiral Blair, since we have you here, off subject slightly, I'm interested in your comments on Chinese-Russian military cooperation and its implications for the United States in a realistic way.

ADMIRAL BLAIR: I think that it is my enemy's enemy is my enemy, you know? I think it's a -- there is great advantage to both countries on specific issues in the near-term, coordinating their efforts so that they cause more problems for the United States.

Keep the United States worried about this while the other countries are grabbing them there. The National Bureau of Asian Research has done a very good detailed study on this recently, which I commend to you.

But, you know, you don't want to make too much of your personal knowledge, but the conversations I've had with Chinese and Russian over the years -- Russians over the years, the idea of them having long-term convergence of interests would have to overcome a lot of cultural history.

Could I take advantage of my time here to give you the two recommendations for your Commission that I think would be --

CHAIR FIEDLER: Sure. Absolutely.

ADMIRAL BLAIR: -- useful? I've said this to friends in the Executive Branch, and I've gotten nowhere, so maybe you all can have better luck than I.

But I think the area in which we have -- in which things are up for grabs most between us and China is in the South China Sea. I think we have -- things are pretty well locked down in Northeast Asia, in the Senkakus and Taiwan where there's a good balance of military force and clear policy.

South China Sea is really up for grabs. And I think the main thing that the United States is missing is a clear policy on what we want in the South China Sea, as opposed to what we don't want.

Any official statement from the United States starts out, we take no position on the territorial disputes going on here, and we don't want anything to happen by force.

I mean, what kind of a weak, non-policy is that? We need to have a policy on what we do think is a fair adjudication of the conflicting territorial claims in that region.

Then we can give orders to the people that have the job that I had, what you protect and what you let go and how you build -- work with your allies and how you build with your friends.

And right now, we just sort of send ships through there challenging everything -- and airplanes. I think that would best come from the other claimant countries, the other five countries that have claims there, but it could certainly be encouraged by the United States, Japan, other seafaring countries.

So I think some hearings -- you know, you get State Department people here and say just what is our policy, so we can tell our freedom of navigation program what objectives to occur. So that's number one.

Number two is -- the big factor, which we haven't discussed here, with the South Asian Belt and Road initiative Chinese moves, is India. I mean they sit right in the middle of it.

CHAIR FIEDLER: Absolutely.

ADMIRAL BLAIR: They're powerful, they have deep suspicions of India, and I would recommend strongly that you bring some Indian government if you can, ex-government and security experts, if you can, to sit here and just talk about these same, exact same questions because they look at it very -- more closely than we do in many cases. And they have a stake in what they would do if it would go a certain direction.

So those would be my two recommendations. Let's get a decent South China Sea policy that we can use our military power to enforce. And let's get a closer idea of what India wants to do and how we can work with it in dealing with this, I think, second big zone of South Asia, which the Chinese have their eyes on right now.

CHAIR FIEDLER: Thank you very much. I think that's a wonderful way to end this panel. We, by the way, spent some time in India some years ago, but -- meeting with the government or non -- ex-government officials because of some hiccup in the relationship between us and the United -- I mean in India.

At the time, they wouldn't meet with us governmentally. I agree with you wholeheartedly

on that. The South China Sea clearly has been the default situation for the United States that has probably worked against us.

But we are out of time unless anybody has one -- anything? Okay. Thank you again, Mrs. Gunness and Admiral Blair. Yeah, we will be back in session at 12:50, one hour from now.

(Whereupon, the above-entitled matter went off the record at 11:58 a.m. and resumed at 12:52 p.m.)

PANEL II INTRODUCTION BY COMMISSIONER LARRY WORTZEL

CO-CHAIR WORTZEL: Well, welcome back to the afternoon. Our second panel, really the first afternoon panel, will explore the development of China's expeditionary capabilities, including the PLA's efforts to improve its logistics organization and expand its access to overseas bases.

We're going to first hear from Mr. Chad Peltier. Is that -- that's the pronunciation? Mr. Peltier is senior analyst and consultant at Jane's. And he's the lead author of a forthcoming contracted report for the Commission on China's Expeditionary Capabilities. We're really looking forward to that.

At Jane's Mr. Peltier specializes in emerging technologies, threat assessment, forecasting and data signs. Much of his work analyzes China's armed forces modernization and U.S. long-range strategic planning.

Before joining Jane's, he was an external research assistant for Yale University's Department of Political Science where he did research on China's naval modernization.

Mr. Peltier has a master's of arts in international science from the University of Chicago, a good political realist school.

We'll next hear from Kevin McCauley. He's an independent analyst and was formerly the senior intelligence officer for the Soviet Union, Russia, China, and Taiwan during his 31 years in the U.S. government.

He was a senior China analyst for the Army's National Ground Intelligence Center, and he served on advisory boards and working groups supporting the intelligence community, the National Intelligence Council, and the U.S. Indo-Pacific Command.

His publications include "PLA System of Systems Operations: Enabling Joint Operations." And I don't know if you recall Deputy Assistant Secretary Sbragia's testimony, but he's a big system of systems guy.

And he's authored a chapter in a forthcoming Army War College book on the PLA's efforts to cultivate joint operations talent. He'll address how the PLA is developing its logistics system through advances to expeditionary capabilities as well as the system's limitations.

The third panelist is Dr. Isaac Kardon, who's an assistant professor in strategic and operational research at the U.S. Navy War College. Dr. Kardon's a member of the Navy War College's China Maritime Studies Institute, where he studies and writes on China's overseas port development, maritime disputes, and Indo-Pacific security and commerce.

He was formerly a research analyst at the National Defense University Center for the Study of Chinese Military Affairs. He's got a doctorate in government from Cornell.

I appreciate very much your written testimony, we look forward to your oral testimony. Try and hold it to seven minutes. You'll see the lights change as we go on if everybody stays awake.

And Mr. Peltier, we'll start with you.

OPENING STATEMENT OF CHAD PELTIER, SENIOR ANALYST, CONSULTING, JANE'S

MR. PELTIER: All right. Thank you, all for the opportunity to testify today. I've been asked to focus my testimony on the nuts and bolts of China's expeditionary capabilities.

The PLA Navy (PLAN) and PLA Air Force are undergoing a rapid modernization to address the shortfalls in their expeditionary capabilities, which include both offensive power projection and logistics platforms.

I want to start my testimony by focusing on their enabling capabilities, that is, their logistics and replenishment assets that are too often neglected in discussions of Chinese military modernization.

The PLAN had limited replenishment assets before 2013. In fact, they had only five total auxiliary ships between the Type 905, 908, and 903 classes.

The Type 905 ships were first commissioned in 1979, while the lone Type 908 is a repurposed Ukranian cargo tanker that was -- reportedly had much of its large cargo tanks converted into dry storage and state rooms in the time since.

In fact, during the first four years of China's Gulf of Aden counter-piracy missions, the PLAN rotated only three ships during that time period before replenishment, which the PLA Daily referred to as the era of the supply ship troika.

Since then, however, the PLAN has introduced seven ships that are part of the modified Type 903A class, which has really formed the backbone of these Gulf of Aden task force missions.

These feature some qualitative improvements, including better helicopter facilities and increased cargo space, but their primary improvement in terms of China's expeditionary capabilities has really been in their number, with seven introduced into service since 2013.

But potentially more important moving forward is the introduction of the Type 901 replenishment ship class, which so far two have been introduced into service. And they appear to be specifically designed for use with the PLAN's aircraft carrier groups.

The class is much larger than the Type 903A with roughly twice the displacement and a max speed of close to 25 knots, which enables it to keep pace with the aircraft carrier groups.

It appears to be fairly similar to the U.S. Navy's Supply-class ships. However, they appear to be more focused on replenishment of fuel and provisions, because they only have one dry cargo delivery station, compared to the supply class's -- three per side. This is important because the dry cargo delivery stations assist with the underway replenishment of ordinance.

In terms of offensive power capabilities, the introduction of the Type 075 landing helicopter dock in combination with eight to 10 Type 071 amphibious transport docks could allow for an effective equivalent to the U.S. Marine Expeditionary Units, as has been previously argued before this committee.

An MEU-style contingent of a Type 075 LHD, a Type 071 LPD, and a Type 072A or similar, could contain up to 35 helicopters, 50 Type 05 amphibious vehicles, 10 Type 726 LCACs, as well as over 2,000 marines and sailors.

This would allow the PLAN Marine Corps to conduct land operations, including humanitarian assistance and disaster relief operations, as well as limited counterinsurgency operations without the need for forward, ground-based stationing of weapons and supplies.

However, I should note that due to the limited -- still limited number of replenishment assets and forward bases, that sustained conduct of combat operations would be extremely

limited for the near and medium term.

I also would like to note that the PLAN will likely start to experiment and begin to introduce unmanned assets into its expeditionary capabilities. I'd like to suggest an equivalent to an experiment right now with the U.S. Marine Corps's Warfighting Laboratory with an autonomous beach landing capability should be expedited.

The PLA Air Force's strategic air lift and tanker capabilities have been historically extremely limited. However, images released just in the last month showed that at least two new Y-20s have been introduced into the 13th Transport Division, which is the second PLA Air Force division to receive the aircraft.

Over the long-term, we expect that the Y-20 tanker variant will likely have the integration of their refueling platform inside the fuselage, rather than as external refueling pods.

The Type 903As can support roughly two to three ships for approximately two weeks before needing replenishment of their own. And in general, the PLAN has used roughly five models of replenishment to extend its overseas operations.

The baseline is the inclusion of a replenishment ship on its overseas operations. But they've also used, frequently, civilian ports for replenishment or technical visits during its Gulf of Aden task force missions.

In fact, a colonel with the Naval Academy of Military Research noted that, in the Mediterranean region, COSCO has a lot of supply points which can be used for naval warships.

Third, just in November 2019, China's Ministry of National Defense reported the successful test of underway replenishment from the civilian container ship, the COSCO FUZHOU.

And interestingly, the FUZHOU's last port call before the test was in Dar es Salaam in Tanzania. And previous to that, it visited Mombasa Port in Kenya, in addition to locations in Singapore and China.

It's likely that the PLAN will continue to employ underway replenishment from civilian ships particularly in -- over the next 10 years, and with COSCO ships for low-intensity operations in the future.

Fourth, the PLAN could continue to use already deployed military assets, in what they call a replenishment relay model or a mobile supply point, which they tested on the -- en route to the Joint Sea-2017 exercise in Russia.

As mentioned, the PLA is likely currently capable of supporting two MEU-style packages at once for roughly six-month deployments, assuming that they are limited to no combat operations during that time.

Until 2025, Jane's expects that these forces will likely continue to resemble Gulf of Aden task force packages, which had been remarkably stable both in their duration and in their composition.

An example is the 34th Deployment, which left in late 2019, which included a Type 052D destroyer, a Type 054A frigate, and a Type 903 replenishment ship with two embarked helicopters, dozens of special operations personnel, and more than 690 troops, obviously more than is necessary for a Gulf of Aden anti-piracy sea mission.

I'd like to suggest, too, that the PLAN will gradually introduce its new Type 075 landing helicopter docks and its Type 055 destroyers into its overseas missions so that they can gain operational experience in the use of those assets abroad.

And an amphibious force package, in particular, would give China the kind of rapid reaction capability necessary to respond to contingencies at its overseas investments, particularly

its Belt and Road Initiative sites.

And I would project that over -- in the near future, this is going to be a concern to respond to terrorist incidents or terrorist threats at these BRI investments as well.

I have just a few conclusions to wrap up with. The PLA is still in the early stages of its development of expeditionary capabilities and will struggle to sustain kinetic operations overseas until approximately the late 2020s to 2030.

China's primary motivation in developing expeditionary capabilities is likely to protect their overseas economic investments at least in the short term, particularly through the Belt and Road Initiative.

And third, the rapid expansion in the number of PLAN replenishment ships, an increase in their capability to transport solid cargo, an increase in helicopters available to either the PLAN or PLAN Marine Corps or the pre-positioning of ordinance overseas, I view these as potential liminal moments in China's expeditionary ambitions and their capabilities. Thank you.

PREPARED STATEMENT OF CHAD PELTIER, SENIOR ANALYST, CONSULTING, JANE'S

Testimony before the U.S.-China Economic and Security Review Commission Hearing on China's Military Power Projection and U.S. National Interests

20 February 2020

By Chad Peltier, Senior Analyst-Consulting, Jane's

Introduction

Co-Chairs Wortzel and Fiedler, and all commissioners, thank you very much for the opportunity to testify today on China's evolving expeditionary capabilities. This is an important topic with deep ramifications for U.S. force posture, procurement and research & development investment decisions, and diplomatic relations both with China and our allies.

It is also an area of rapid change. The People's Liberation Army Navy (PLAN) is introducing new primary surface combatants and amphibious assault ships, the PLAN Marine Corps (PLANMC) has tripled in size, the PLA Air Force (PLAAF) is rapidly producing strategic airlift assets, and China established its first permanent overseas military base in Djibouti. Further, this list of achievements does not include either China's civilian and dual-use assets that may be mobilized for power projection or vast research into emerging technologies, such as artificial intelligence, electromagnetic capabilities, and directed energy weapons.

I have been asked to focus my testimony on the "nuts and bolts" of China's expeditionary capabilities. I will structure my comments to answer the following questions:

- By 2035, what is the PLA's force projection capability likely to encompass?
- How quickly can China deploy forces overseas?
- At what distance from its littoral waters can forces operate?
- What size expeditionary force is the PLA currently capable of supporting?
- How long can China sustain these deployments?
- What role do Chinese civilian organizations play in supporting the development of PLA expeditionary capabilities?

During the course of answering these questions, I will also assess how each of the PLA's services is working to develop expeditionary capabilities, how the PLA uses UN peacekeeping operations/humanitarian assistance/disaster relief (HA/DR), and counterpiracy operations to gain experience operating overseas, what the PLA's greatest shortfalls are in expeditionary capabilities, and how the military might overcomes these limitations in the future.

By 2035, what is the PLA's force projection capability likely to encompass?

The PLAN and PLAAF are undergoing a rapid modernization to address shortfalls in expeditionary capabilities, including both offensive power projection and logistics platforms. I will first discuss the PLA's enabling capabilities – logistics and replenishment assets that are often neglected in discussions of China's growing military capabilities.

The PLAN had limited replenishment and other auxiliary ships in service before 2013, when the first Type 903A replenishment ship was commissioned. Prior to 2013, the PLAN had only five total auxiliary ships in the Type 905, Type 908, and original Type 903 classes. These classes were commissioned in 1979, 1996, and 2004 respectively. During the first four years of the Gulf of Aden counterpiracy missions, the PLAN

rotated through only three ships – an era the PLA Daily referred to as the "supply ship troika." The PLA Daily noted that, "excluding regular maintenance, the three largest supply ships of the Chinese Navy at that time were always conducting escort missions." The PLAN's expeditionary logistics fleet was of insufficient size to sustain overseas operations, the ships were aging, and their capabilities are limited, severely limiting the PLAN's ability to meet potential overseas demands. The two Type 905 ships were first commissioned in 1979, while the lone Type 908 is a repurposed Ukrainian cargo tanker that has reportedly seen much of its large cargo tanks (23,000 tons of total cargo; 9,630 tons of fuel cargo capacity) converted to dry storage and state rooms.²

Since then, the PLAN has introduced seven ships in the modified Type 903A class as well as two ships in the new Type 901 class, improving PLAN auxiliary capabilities both qualitatively and quantitatively. The Type 903A features a flight deck and hangar capable of accommodating medium-lift helicopters such as the Z-8 or newer Z-18 and increased cargo capacity over the original Type 903s. The Type 903As have become the backbone of the PLAN's Gulf of Aden task forces, accompanying 12 of 18 deployments since their introduction.

The Type 901s appear to be designed specifically for operation in the PLAN's aircraft carrier groups. According to an anonymous "Beijing-based military expert" who spoke with China's *Global Times*, the Type 901 class will allow the PLAN to deploy "farther from coastal areas into deep blue waters without having to worry about logistics." Type 901 class *Hulunhu*'s political commissar Ni Jingdong said on CCTV in December 2019 that the *Hulunhu* was "now fully capable of comprehensively replenishing the carrier battle group." The *Hulunhu* conducted its first replenishment mission in December 2019.

The class is much larger than the Type 903A, with a length of 241 meters to the Type 903A's 178.5 (approximately 35% longer) and displacing an estimated 48,000 tons to the 903A's 23,369. The Type 901 features gas turbine engines that would enable a max speed of the claimed 25 knots, as well as its arrangement of refueling stations, with three to port and two to starboard (see Appendix A for details). This is because China's aircraft carriers have their islands to starboard; China's carriers are not nuclear powered, so require fuel for both the carriers themselves and their aircraft. As Andrew Erickson and Christopher Carlson previously noted in *Jane's Navy International*, the Type 901 class appears to be nearly identical to the USN Supply class.⁵ The Type 901s do however appear to be more focused on replenishment of fuel and provisions because it has only one dry cargo delivery station compared to the Supply class's three per side (which assists with UNREP of ordnance).⁶ That is an important distinction – that the Type 901s appear to be less focused on and are certainly less capable – of ordnance resupply. Jane's expects at least one Type 901 per aircraft carrier battle group, but a more likely ratio is 1.5:1 to both allow for a more sustainable operational tempo as well as the use of the Type 901s with other surface combatant and amphibious capabilities.

The increased production of Type 901 replenishment ships could be a signal that China expects the need to sustain more than two three-ship expeditionary task forces (as the PLAN currently maintains for the Gulf of Aden missions). Alternatively, because the Type 901 only has a single dry cargo transfer station on its

¹ Bei Guo Fang Wu, "PLA Navy ends era of "supply-ship troika" in its escort mission," China Military Online, August 9, 2018, http://enq.chinamil.com.cn/view/2018-08/09/content 9247256.htm

² Andrew Erickson and Christopher Carlson, "Sustained support: the PLAN evolves its expeditionary logistics strategy," Jane's Navy International, March 9, 2016, https://janes.ihs.com/Janes/Display/jni77511-ini-2016

³ Ibid

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

port and starboard sides, the U.S. should monitor whether China introduces any new Type 901 variants that contains additional capabilities for dry cargo transfer, as these could be used for UNREP of ordnance.

In terms of expeditionary combat capabilities, the PLAN of 2035 can be expected to include up to 25 Type 052D and 10-12 Type 055 destroyers, 2-4 additional aircraft carriers, and at least 6-8 Type 075 landing helicopter docks (LHD), in addition to older assets, including 28 Type 054A frigates, 8-10 Type 071 amphibious assault ships, 15 Type 072A amphibious warfare ships, among other classes. A follow-on to the Type 054A frigates may be expected by 2035 as well (named the Type 054B or adopting a new Type moniker), potentially incorporating Chinese advances in integrated electrical propulsion systems. These new ship classes significantly expand the PLAN's surface warfare and expeditionary amphibious capabilities:

- The Type 052D significantly improved over the Type 052C design by replacing the eight six-cell vertical SAM launchers with two grids of universal vertical launch systems (VLS), with 32 cells forward and 32 midships, capable of launching surface-to-air (SAMs), surface-to-surface (SSMs), and anti-submarine missiles. During exercise Sea Guardian 2020, the *Yinchuan* was identified as fitted with an anti-ship missile countermeasure system that appears similar to the USN Mk 59.7
- The first Type 055 Renhai-class destroyer was commissioned into the PLAN North Sea Fleet just over a month ago on 12 January 2020. The Type 055 is the largest surface combatant yet commissioned by the PLAN at approximately 25% larger than the Type 052D on which it derives. It is equipped with 112 VLS cells and has significantly upgraded anti-submarine warfare (ASW) capabilities an area in which the PLAN has been notably deficient meaning that two ships of the class may operate in each carrier strike group.⁸ Both the Type 055 and Type 052D can be expected to form the core of the PLAN's future carrier strike groups.
- The PLAN's Type 001 and Type 002 aircraft carriers are relatively unlikely to be used in an
 expeditionary role outside China's near seas. Instead, the PLAN will likely wait for an indigenous
 Type 003 aircraft carrier with catapult-assisted take-off but arrested recovery (CATOBAR) –
 reportedly a locally developed Electromagnetic Aircraft Launch System (EMALS). This would allow
 it to launch fighters with heavier payloads and more fuel for longer range strike options.
- The introduction of the Type 075, in combination with 8-10 Type 071s, could allow for an effective equivalent to the U.S. Marine Expeditionary Unit (MEU), as has been previously argued before the committee. The PLAN launched its first Type 075 in September 2019, which is likely to enter service in 2020 or early 2021. Jane's identified a third Type 075 LHD under construction at the Hudong-Zhonghua shipyard in Shanghai in November 2019. A three-ship package as described above could include approximately 36 helicopters, approximately ten LCACs, and likely more than 30 amphibious IFVs for amphibious operations. An MEU-style contingent of a Type 075 LHD, Type 071 LPD, and Type 072A (or similar) could contain approximately 35 helicopters (thanks to the Type 075's 30 helicopters), 50 Type 05 amphibious vehicles, and ten Type 726 landing craft air cushions (LCACs), as well as over 2,000 marines and sailors. This would allow the PLANMC to conduct land operations, including noncombatant evacuation operations (NEO), humanitarian

⁷ Andrew Tate, "Chinese Type 052D destroyer fitted with possible anti-ship missile decoy launchers," Jane's Defence Weekly, January 21, 2020, https://janes.ihs.com/Janes/Display/FG 2650465-JDW

⁸ Ridzwan Rahmat, "Power projection: China sharpens its carrier strike capabilities," Jane's Navy International, August 15, 2018, https://ianes.ihs.com/Janes/Display/FG 1002420-JNI

⁹ Christopher Yung, "China's Expeditionary and Power Projection Capabilities Trajectory: Lessons from Recent Expeditionary Operations," U.S.-China Economic and Security Review Commission, January 21, 2016, https://www.uscc.gov/sites/default/files/USCC%20Testimony%202016 Yung.pdf

- assistance/disaster relief (HA/DR), and limited counterinsurgency operations without the need for forward, ground-based stationing of weapons and supplies.¹⁰
- It is also likely that the PLAN will begin to incorporate unmanned assets into its expeditionary force structure. An equivalent of the Leidos/US Marine Corps' Marine Warfighting Laboratory autonomous beach landing capability should be expected, as should additional work on the Wuchang Shipbuilding Industry Group's unmanned amphibious assault vehicle, the Marine Lizard.¹¹ 12

In addition to PLAN expeditionary capabilities, the introduction of the PLAAF's Y-20 should significantly improve China's strategic airlift – another notable area of deficiency – to allow for rapid response to limited contingencies overseas. A 2016 PLA Daily article noted that "In the future, long-range combat areas will mostly be located in global 'public domain frontiers' far from the country... In recent local wars, the U.S. military was the first to call an airlift unit to deliver troops, and its forces were about 20 times the speed at sea." 13

The PLAAF's strategic airlift and tanker capabilities have been limited. The PLAAF acquired ten II-76MD strategic transport aircraft between 2012 and 2015 as well as three II-78 tankers from Ukraine between 2011 and 2016, augmenting the limited fleet of H-6U/DU tankers. These capabilities should be considered short-term stop-gaps, however, with the Y-20 and its tanker variant constituting the long-term core of PLAAF expeditionary capabilities. The China National Defense University's Center for Economic Research's 2014 "Chinese Military and Civilian Integration Development Report" recommended the PLAAF acquire up to 400 Y-20s. Jane's estimated in late 2018 that the PLAAF could have up to 70 strategic lift assets by 2025, including 18 II-76s, with 100+ Y-20s possible by 2030. The PLAAF's 13th Transport Division is likely to receive the next set of Y-20s. In terms of tankers, the PLAAF was previously reliant on 20 H-6U and three II-78 tankers, while the PLANAF had converted several H-6D aircraft into tankers. H-6Us are capable of offloading 18.5 metric tons of fuel out of a total of 37 metric tons carried, while the Y-20 is estimated to have a maximum payload of 66 metric tons. Jef Jane's identified a Y-20 tanker variant with an underwing inflight refueling pod a the primary XAC factory in 2018. While the use of underwing and rear refueling pods is similar to the II-78 and A400M, a longer-term solution is likely the integration of the refueling platform inside the fuselage, similar to the USAF KC-767.

Overall, the PLAN and PLAAF will have substantially improved forces by 2035 but are unlikely to have sufficient numbers to sustain a protracted overseas campaign. Instead, the PLAN and PLAAF's projected force structure suggests a focus on the protection of its overseas investments: physical infrastructure (particularly through the Belt and Road Initiative), strategic sea lanes, and overseas nationals. The

¹⁰ Ibid.

¹¹ Christopher P Cavas, "No hand at the helm: US Navy pushes ahead with unmanned surface vessel development," Jane's Navy International, December 13, 2019, https://janes.ihs.com/Janes/Display/FG_2593207-JNI

¹² Huang Panyue, "China builds world's first armed amphibious drone boat that can lead land assault," Global Times, April 15, 2019, http://english.chinamil.com.cn/view/2019-04/15/content_9477847.htm

¹³ Bin Bin Wang Shengli, 现代战争优势战斗力的来源:强大的空中战略投送能力 ["The Source of the Superior Fighting Power of Modern Warfare: Strong Air Strategic Projection Capability"], PLA Daily, June 12, 2016, http://www.81.cn/kj/2016-06/12/content_7095608.htm.

¹⁴ Craig Caffrey and Sean O'Connor, "China focuses on strategic airlift to support power projection," Jane's, November 6, 2018, https://janes.ihs.com/Janes/Display/FG_1205576-JIR.

¹⁵ Richard D. Fisher Jr. and James Hardy, "China's NDU recommends 400-strong Y-20 fleet," Jane's, July 28, 2014, https://janes.ihs.com/Janes/Display/jdw56045-jdw-2014

¹⁶ Craig Caffrey and Andrew Tate, "Possible Y-20 tanker variant spotted," Jane's Defence Weekly, November 21, 2018, https://janes.ihs.com/Janes/Display/FG 1291534-JDW

¹⁷ Andreas Ruprecht, "Image shows possible PLAAF Y-20 tanker variant in flight," Jane's, October 28, 2019, https://janes.ihs.com/Janes/Display/FG 2423377-JDW.

PLAAF's expeditionary capabilities are nascent with a limited carrier strike capability, few fifth-generation fighters or bombers capable of operating in contested environments. A more robust strategic airlift fleet by 2035 should allow the service to rapidly respond to limited contingencies by 2035, but it is unlikely to be capable of conducting sustained offensive operations.

How quickly can China deploy forces overseas?

The PLAN has important domestic bases for expeditionary operations at Zhanjiang, where the South Sea Fleet, including the 2nd Destroyer Flotilla, the 1st and 2nd Marine Corps Brigades, and the 6th Landing Ship Flotilla are located, as well as at Yulin Naval Base, where the 9th Destroyer Fleet is located. The first Y-20 fleet is located at Chengdu-Qianglai, while one of the three bases from the 13th Transport Division is reportedly set to receive the next set.

The speed of a PLAN overseas deployment would be limited by the slowest ship in its task group, which will often be the Type 903A (at 19 knots). Based on available open source data, an uninterrupted journey to the middle east (approximately 5,400 nautical miles) averages approximately two weeks of transit time.

Chinese analysts note that strategic airlift allows for a rapid response to overseas contingencies. The PLAAF will likely rely on civilian airfields to project its Y-20s, although a future logistics port that is collocated with an airfield capable of supporting strategic lift aircraft would be beneficial.

At what distance from its littoral waters can forces operate?

The Type 903A can support 2-3 ships for approximately two weeks before needing replenishment. This suggests that PLAN ships are currently capable of operating for approximately two weeks of sailing time from the Djibouti Logistics Base (i.e., around the Horn of Africa or in the Mediterranean) before requiring replenishment. Without guaranteed access to a friendly civilian port or establishing a military base in the Pacific, PLAN vessels would be capable of operating a similar distance in the Pacific (approximately half of 5,400 nautical miles to ensure supplies for the return journey home).

The PLAN has previously used five replenishment models to extend its overseas operations. The baseline estimate above (of approximately two weeks of sailing time) is assuming only a single accompanying Type 903A or Type 901 replenishment ship on non-combat operations. After two weeks or with combat operations, the replenishment ship would require external support via underway replenishment (UNREP) or by docking and resupplying in a foreign civilian or military port.

Second, the PLAN has frequently used civilian ports for replenishment during Gulf of Aden task force missions and en route to overseas exercises, including ports in Djibouti, France, Greece, Indonesia, Italy, Oman, Pakistan, Portugal, Saudi Arabia, Singapore, South Africa, Spain, Sri Lanka, and Yemen. The PLAN likely uses these visits to expand its soft power, often choosing countries with which it has important non-military diplomatic and/or economic goals.

Following China's 2013 participation in the international community's destruction of Syrian chemical weapons, Colonel Cao Weidong of the Naval Academy of Military Research noted that, "Moreover, in the Mediterranean region, China Ocean Shipping Group (COSCO) has a lot of supply points, which provide daily services for civilian ships. Chinese naval warships can also enter the port for supply." 18

Third, in November 2019, China's Ministry of National Defense reported that the PLAN had successfully tested underway replenishment (UNREP) from a civilian container ship, the COSCO *Fuzhou*. The MoD's

¹⁸ 中国参与叙化武销毁行动 海军赴地中海护航, Jiadong News, December 20, 2013, http://www.jiaodong.net/news/system/2013/12/20/012136191.shtml.

report concluded that, "Using civilian ships to carry out UNREP for naval ships is a new attempt in the field of naval logistics support. The civilian vessels cover a wide range of routes, thus have large potential for replenishment at sea, which implies remarkable military economic benefits. The success of the test provides important technical support for the future development of underway replenishment control technology." ¹⁹

The MoD reported on the UNREP test on 21 November 2019. According to open source ship tracking data, the *Fuzhou's* last port call was at Dar es Salaam, Tanzania, between 15 and 18 November. Over the last three months the *Fuzhou* also visited Mombasa Port, Kenya, in addition to locations in Singapore and China.²⁰ It is likely that the PLAN will continue to employ UNREP from civilian ships – particularly COSCO ships – in the future. While another panelist will concentrate on basing, it is likely that the PLAN could use COSCO terminals worldwide not as future formal military resupply bases, but as dual-use nodes in a largely civilian port (and airport) network that serves the PLA in an expeditionary capacity.

COSCO has the third-largest fleet in the world with over 1,318 vessels and over 53 container terminals, with 197 container berths in 37 ports worldwide, and is actively looking for new terminals for expansion.²¹ Its container ships have global routes between, with notable transit routes that link strategically important ports in Port Klang, Malaysia, Djibouti Port, Djibouti, Karachi, Pakistan, Gwadar, Pakistan, Port Qasim, Pakistan, Jakarta Port, Indonesia, and Colombo, Sri Lanka, among many others.²²

Jane's has previously noted that the reason for the PLAN's requirement for additional "ships taken up from trade" is unclear. It suggests that the PLAN forecasts the need to support multiple task groups on extended or distant operations beyond its existing capacity of replenishment ships. It also suggests that the PLAN does not anticipate expanding its capacity of embarked helicopters, as these may otherwise be capable of conducting vertical replenishment of solid stores.²³ As the PLANMC and PLAN are likely competing with the PLA ground forces for troop transport and assault helicopters, China's amphibious assault capabilities will likely remain substandard for the next 5-10 years despite the introduction of the Type 075 LHD. Chinese media reports highlighted solid store replenishment during civilian UNREP, and photographs of the transfer showed only a small-bore hose, which suggests a slow fuel transfer rate comparable to astern refueling rather than that of a conventional refueling at sea rig.²⁴ Finally, civilian UNREP is more likely for task forces that do not include the Type 901. The Type 903A has a relatively limited solid cargo capacity; its total cargo capacity is 11,400 tons, but supports 10,500 tons in fuel alone.

Fourth, the PLAN could use already-deployed military assets in a "replenishment relay" model. En route to the "Joint Sea 2017" exercise in St. Petersburg in July 2017, a Type 052D destroyer and Type 054A frigate received fresh drinking water and fuel from a Type 903A replenishment ship in the Indian Ocean. The PLA Daily referred to this as a "replenishment relay" or "mobile supply point". According to a Chinese military expert interviewed by the PLA Daily, "the amount of supplies it carries is limited and not capable of meeting the needs of the other two warships for fuel, fresh water and other supplies during the one-month-long voyage," which is approximately twice the length as the trip from China to the Gulf of Aden.²⁵ The expert

¹⁹ Xu Yi, "Civilian ship debuts underway replenishment to PLA naval ships," China Military Online, http://eng.mod.gov.cn/news/2019-11/21/content_4855357.htm

²⁰ "COSCO Fuzhou," My Shipping Now, https://www.myshiptracking.com/vessels/cosco-fuzhou-mmsi-477690800-imo-9403009

²¹ "Group Profile," China COSCO Shipping Corporation Limited, http://en.coscocs.com/col/col6918/index.html; "Interim Report 2019: Gearing Up for Growth," COSCO Shipping Ports Limited, 2019, https://doc.irasia.com/listco/hk/coscoship/interim/2019/intrep.pdf.

²² "Routes," COSCO Shipping Lines Co, http://lines.coscoshipping.com/home/Services/route/14.

²³ Andrew Tate, "PLAN trials underway replenishment from commercial ships," Jane's Defence Weekly, November 20, 2019, https://janes.ihs.com/Janes/Display/FG 2438028-JDW
²⁴ Ibid.

²⁵ Li Jiavao, "Chinese navy establishes "mobile supply point" in Indian Ocean," China Military Online, July 10, 2017,

continued that, "It is a useful exploration for the Chinese navy to take advantage of its escort taskforce in the Gulf of Aden to conduct front-end replenishment for Chinese warships passing by this water, which will be of great help for Chinese navy's similar ocean-going operations in the future."²⁶

Finally, the PLA could develop additional overseas military bases similar to the existing logistics base in Diibouti.

What size expeditionary force is the PLA currently capable of supporting?

The PLA is likely currently capable of supporting two MEU-like ship packages at once for roughly six-month deployments, assuming limited-to-no combat operations. Resupply during combat operations would currently be dependent on access to the existing network of civilian ports and airports that the PLAN and PLAAF have used on past operations and exercises. Until 2025, these forces will likely resemble Gulf of Aden task force packages. The Type 903A replenishment ship and Type 054A frigate have been constants (particularly the Type 054A, which has accompanied every deployment since 2013), allowing for experimentation with both various logistics models and with a third rotating surface combatant (see Appendix B). The latter surface combatant has included everything from a Type 052D Luyang III guided missile destroyer, second Type 054A frigate, to a Type 071 amphibious assault ship. For example, the 34th deployment left on 23 December 2019 and included a Type 052D destroyer, Type 054A frigate, and Type 903 replenishment ship, with two embarked helicopters, "dozens of special operations personnel" and more than 690 troops.²⁷ The Type 052D destroyer and Type 071 amphibious assault ships in particular are more than overkill for the threat that the task forces face in the Gulf of Aden.

The PLAN will gradually introduce its new Type 075 LHDs (and potentially its Type 055 destroyers) into overseas missions to gain operational experience as well. By 2030 we are likely to see the emergence of a force package closer to an MEU, containing at least a Type 075 LHD and Type 071 amphibious assault ship, as well as a replenishment ship or two, depending on the number of amphibious assault ships in the task force. This amphibious force would give China a rapid-reaction capacity to respond to contingencies at its overseas investments, particularly its most important Belt and Road Initiative (BRI) sites.

For example, Mollie Saltskog and Colin P. Clarke have argued in *Foreign Affairs* that "terrorism has come to pose a growing threat to Chinese interests and nationals abroad... In 2019, terrorist organizations such as al Qaeda and ISIS explicitly mentioned China in many of their propaganda materials—citing the CCP's abuse of Muslim minorities as a justification for going after China and Chinese nationals." The threat of terrorism led the PLA Daily in 2017 to mention that PLANMC marines could be deployed to Gwadar port to protect it from terrorist threats. Therefore, China's development of an expeditionary amphibious capability could be directly linked to the protection of BRI sites and concentrations of overseas Chinese nationals from terrorism.

How long can China sustain these deployments?

The PLAN's expeditionary capabilities through 2025 are likely to be capable of relatively similar deployments as have been achieved on Gulf of Aden missions. These missions have consistent in tempo, duration, and composition. The PLAN consistently maintains the concurrent deployment of two Gulf of

http://eng.chinamil.com.cn/view/2017-07/10/content_7671106.htm ²⁶ lbid.

²⁷ 第34批护航编队起航 ["The 34th escort formation set off"], People.com.cn, December 24, 2019, http://military.people.com.cn/n1/2019/1224/c1011-31520270.html.

²⁸ Mollie Saltskog and Colin P. Clarke, "China's Rights Abuses in Xinjiang Could Provoke a Global Terrorist Backlash," Foreign Affairs, January 16, 2020, https://www.foreignaffairs.com/articles/china/2020-01-16/chinas-rights-abuses-xinjiang-could-provoke-global-terrorist-backlash

Aden task forces, with new departures leaving approximately every four months and the typical deployment lasting approximately 209 days (nearly seven months).

Using that information, we can estimate that non-combat deployments of approximately 7-8 months are currently feasible in the Middle East, Indian Ocean, and east coast of Africa.

Combat operations would currently be difficult to sustain for more than two weeks because of the lack of prepositioned ordnance at the PLAN's overseas logistics nodes as well as the limited capabilities that PLAN replenishment ships have for dry cargo delivery. For example, the U.S. Navy's Supply class has three dry cargo delivery stations on both port and starboard sides, while the Type 901 has only one, reflecting a likely focus on the delivery of fuel and provisions over ordnance. Further, prepositioning ordnance would be unlikely at foreign civilian facilities, requiring the PLA to stockpile munitions at its lone dedicated military base.

What role do Chinese civilian organizations play in supporting the development of PLA expeditionary capabilities?

In 2015 China released several documents and sets of standards intended to improve the integration of civilian capabilities into military operations if required. These included the "Technical Standards for the Implementation of National Defense Requirements for Newly Built Civil Ships," "Regulations on National Defense Mobilization of Civil Transport Capacity," and the "National Defense Traffic Law." These apply to container, roll-on/roll-off, multipurpose, bulk carrier and break bulk ships.²⁹ These standards were reportedly based on the experience of the United Kingdom during the Falklands War.³⁰

As previously mentioned, China has tested UNREP from civilian ships from COSCO. Of COSCO's more than 360 container ships, 64 can both transport over 10,000 Twenty-Foot Equivalent Units (TEUs) and travel at more than 20 knots (for comparison, PLAN Type 903As and Type 901s are capable of top speeds of 19 and 25 knots, respectively).³¹

Many other companies have also been integrated into the PLA's potential expeditionary capabilities. For example, the the Bohai Ferry Group has 11 roll-on / roll-off (RO-RO) ships that have been integrated into the strategic support ship fleet. Recently built ships, such as the *Bohai Cuizhu* have been explicitly built to military specifications.³² In February 2018, the Wuxi JLSC practices transporting ammunition on a civilian RO-RO.³³

Authors Liu New and Su Chunhua have argued that, "In recent years, China has advocated and proposed the 'Belt and Road' strategy, and urgently requires military forces to 'go out' in a peaceful posture to provide a strong guarantee for the expansion of China's overseas interests... Due to the limited number of equipment required for these military operations, it is often difficult to find suitable cargo ships or ro-ro ships

²⁹ Xiong Huaming, 如何让民用船舶助力军事运输?["How can civilian ships help military transportation?"], China National Defense Network, May 24, 2019, http://www.81.cn/gfbmap/content/2019-05/24/content_234451.htm.

³⁰ Zhao Lei, "New rules mean ships can be used by military," ChinaDaily.com.cn, June 18, 2015, http://www.chinadaily.com.cn/china/2015-06/18/content 21036944.htm.

³¹ Data compiled from "COSCO Shipping Lines VESSELS," COSCO Shipping Lines, http://lines.coscoshipping.com/home/Services/ship/0.

³² 李鹏, 孙浩, 赵喜庆 [Li Peng, Sun Hao, Zhao Xiqing], 国家战略投送能力发展对合成部队建设的影响与对策 ["Impact of National

Strategic Delivery Capability Development on Construction of Synthetic Forces and Countermeasures"], 军事交通学院学报 [Journal of Military Transportation University], no. 8 (2019), quoted in Kennedy, "China Maritime Report No. 4"

³³ Department of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019", Office of the Secretary of Defense, May 2, 2019, https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019 CHINA MILITARY POWER REPORT.pdf

for short periods of time, which affects the completion of military operations, while container ships have stable schedules, high speeds, and long sailing times... [I]f military equipment can be transported in containers, container ships will surely become the preferred tool for overseas transportation of military equipment."³⁴

Chinese military analysts have studied U.S. container-based multimodal transport, with Yuan Mu and Liu Baoxin noting that, "The supply of U.S. military supplies and equipment abroad mainly relies on container multimodal transport from home to foreign military bases," and estimating that 90% of U.S. military materials are transported in containers. The authors recommend that the PLA develop a "strong military-civilian integrated container transport capacity" and advanced technologies, including self-loading and unloading technologies at the point of delivery in the field. Another Chinese news article argues that China should leverage its civilian container ships because of the wide variety of routes they operate on, which offer a "great potential for building maritime supply forces and has significant military economic benefits."

Similar to the PLAN, the PLAAF has organized "strategic air support fleets", which are particularly important in the short term given the PLAAF's limited strategic lift capabilities. Chinese authors argue that "Air strategic projection capabilities can promote military-civilian integration. Air strategic projection is the largest integration of national air transport capacity. It is manpower-intensive, technology-intensive, and capital-intensive. It is difficult for the military itself to form a 'strategic' level of delivery capability. Therefore, it is necessary to rely on the entire national system to promote the organic use of military and civilian transportation Integration."³⁷ Chinese experts within the Chinese Army Military Transportation University estimate that China will have approximately 8,000 civilian passenger aircraft and over 2,600 cargo aircraft by 2035, up from 3,160 total passenger aircraft and only 143 medium and large civilian cargo aircraft today.³⁸

China Postal Airlines (which has 33 cargo aircraft) has support PLAAF operations through prior humanitarian assistance missions, but also participated in a strategic combat readiness exercise in September 2017.³⁹ 40

³⁴ Liu New and Su Chunhua, <u>军事装备的水路集装箱运输研究</u> ["Research on Waterborne Container Transportation of Military Equipment"], 物流技术与应用, https://www.ixueshu.com/document/55ec50dd5050528abafae32faf5e676f.html.

³⁵美军开展集装箱多式联运的做法及启示, ['The U.S. military's practice of container multimodal transport and its inspiration'], Shangexinzhi, May 9, 2019, https://www.shangyexinzhi.com/article/details/id-119708/

³⁶ 重大突破!民船为海军水面舰艇实施干货补给, Guancha, November 15, 2019,

https://www.guancha.cn/politics/2019 11 15 525320.shtml.; Conor M. Kennedy, "China Maritime Report No. 4: Civil Transport in PLA Power Projection," CMSI China Maritime Reports, 2019

³⁷ 现代战争优势战斗力的来源:强大的空中战略投送能力, ["The Source of the Superior Fighting Power of Modern Warfare: Strong Air Strategic Projection Capability"], PLA Daily, June 12, 2016, http://www.81.cn/ki/2016-06/12/content_7095608.htm

³⁸孙振岚, 海军 [Sun Zhenlan, Hai Jun], 我国民航运输业建设 现状与未来发展 ["On the Present Situation and the Future

Development of the Construction of the Civilian Aviation Transportation in China"], 2019, 国防交通工程与技术 [*Traffic Engineering and Technology for National Defence*], no. 1, quoted in Kennedy, "China Maritime Report No. 4".

39 Kennedy, "China Maritime Report No. 4"

Conclusions

I have three primary conclusions about the current and future state of China's expeditionary capabilities:

- 1. The PLA is still in the early stages of its development of expeditionary capabilities and will struggle to sustain kinetic operations overseas until approximately 2030.
- China's primary motivation in developing expeditionary capabilities is likely to protect their
 overseas economic investments, particularly through the Belt and Road Initiative. Its
 growing amphibious capabilities and the expansion of the PLANMC are largely related to
 this concern.
- The rapid expansion of PLAN replenishment ships, an increase in their ability to transport solid cargo, an increase in helicopters available to the PLAN and PLANMC, and/or the prepositioning of ordnance overseas are liminal moments for Chinese expeditionary ambitions and capabilities.

First, despite the PLAN and PLAAF's rapid modernization of expeditionary combat capabilities, it is important for the United States not to overinflate its assessment of China's conventional power projection capabilities. The PLA's expeditionary combat capabilities are still nascent in terms of platforms and in both doctrine and experience, to effectively employ these new capabilities. The overall projected size of the PLAN in does not yet suggest the intention to fight and win expeditionary wars against a peer or near-peer. Further, the PLAAF is still only in the early stages of correcting its long-standing deficiencies in strategic airlift and tankers.

Second, at least until approximately 2030, China is prioritizing (1) the ability to impose unacceptable costs on the access or freedom of maneuver within its near-abroad, (2) the ability to contribute to international commons operations (that is, fulfilling the perceived responsibilities of a great power, as Chinese-language reports on China's Gulf of Aden participation frequently mention⁴¹), and (3) defending its overseas economic interests related to the BRI – in terms of both infrastructure investments and personnel. The potential for an increase in terrorist activity targeting Chinese facilities and personnel is likely to be a major driver of PLA expeditionary combat operations through 2030.

Third, the United States should nevertheless understand that China's expeditionary operations provide it with incredibly valuable experience and opportunities to develop concepts of operation and expeditionary doctrine. The U.S. should monitor for signs that China's goals have shifted. The United States should continue to monitor the composition of China's expeditionary task forces. The deployment of the PLAN's new Type 075 LHD or Type 055 destroyer, or of the Type 901 replenishment ship should be of interest to U.S. observers. The pre-positioning of ordnance at its Djibouti logistics base – or at any other overseas logistics node – should also be interpreted as a liminal point in China's expeditionary ambitions. The U.S. should expect China to pursue access to civilian airfields as the PLAAF's fleet of Y-20s grows and it becomes increasingly involved in overseas operations.

⁴¹ 亚丁湾上的中国担当 ["Chinese role on the Gulf of Aden"]. PLA Daily. December 24, 2019. http://military.people.com.cn/n1/2019/1224/c1011-31520247.html

Recommendations to Congress

Based on those conclusions, a few recommendations follow:

- While China's expeditionary capabilities, doctrine, and experience are still limited, the U.S. should recognize the revolutionary potential of China's pursuit of emerging defense technologies and weapons systems. The U.S. should increase its investment in basic science research and applied R&D in these areas of emerging technology to counter any potential Chinese advances.
- 2. The U.S. should closely monitor China's human rights record abroad, particularly in its use of mass surveillance technologies as China attempts to expand its global footprint.
- 3. The U.S. should bolster its non-military tools principally diplomatic and economic to engage with countries in which China develops an overseas presence.

First, given the relative imbalance of expeditionary capabilities between the U.S. and China at least through 2030, the United States should monitor the PLA's continued pursuit of asymmetric and emerging defense technologies such as unmanned and autonomous systems, artificial intelligence more broadly, offensive cyber capabilities, quantum capabilities, and directed energy weapons – among others. These advanced weapons systems allow for the possibility that China could impose significant costs on adversaries disproportionate to the number of physical platforms it possesses. The U.S. must continue to increase its investment in all forms of research and development that will allow it to compete in these areas of emerging technology.

Second, the United States should closely monitor China's human rights record overseas. A 2019 *New York Times* report noted that, "Under President Xi Jinping, the Chinese government has vastly expanded domestic surveillance, fueling a new generation of companies that make sophisticated technology at ever lower prices. A global infrastructure initiative is spreading that technology even further... With China's surveillance know-how and equipment now flowing to the world, critics warn that it could help underpin a future of tech-driven authoritarianism, potentially leading to a loss of privacy on an industrial scale." ⁴² 18 countries are already using Chinese intelligence monitoring systems. The United States should be aware of the potential for China to export and implement its mass surveillance systems in countries that are a part of the PLA's growing overseas logistics network. The U.S. should set the example worldwide against the use and spread of surveillance systems that further authoritarian tactics and regimes by exploring international agreements to prevent their adoption.

Third, as an analyst argued in the *South China Morning Post*, "bigger supply ships were no substitute for more overseas bases when it came to supporting the expanding mission of China's naval fleets." While China may principally rely on civilian and dual-use facilities as it grows its expeditionary capabilities, China may increasingly pursue overseas military bases after approximately 2030. The U.S. should engage with these countries using its non-military tools.

Paul Mozur, Jonah M. Kessel and Melissa Chan, "Made in China, Exported to the World: The Surveillance State," The New York Times, April 24, 2019, https://www.nytimes.com/2019/04/24/technology/ecuador-surveillance-cameras-police-government.html
 Viola Zhou and Sarah Zheng, "China commissions new naval supply ship," August 1, 2017, https://www.scmp.com/news/china/diplomacy-defence/article/2105010/china-commissions-new-naval-supply-ship

Appendix A

, pp. 18.27								
Platform	In service (Planned)	Delivery	Max Speed	Tonnage	Fueling Stations	Fuel capacity	Total cargo	Helicopters
Type 901	2 (4-8)	2017	25 kt	48,000	3P/2S	20,000	25,000	2 Z-8 / Z-18
Type 903/903A	9 (9)	2004	19 kt	23,369	1P/1S	10,500	11,400	1 Z-8 / Z-18
Type 908	1 (1)	1996	16 kt	37,594	2P/2S	9,630	23,000	1 Z-8
Type 905	2 (2)	1979	18 kt	22,099	2P/2S	12,000	12,500	1 medium
Type 904A/B	3 (3-7)	2007	~22 kt	15,241		10,550		1 medium

Figure 1: PLAN replenishment ships. Data compiled from Jane's Fighting Ships

Appendix B

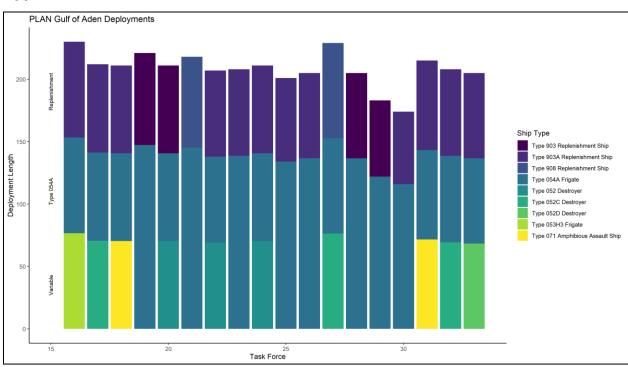


Figure 2: PLAN Gulf of Aden Task Force deployments by deployment length. Bar color refer to the ship composition of each task force. The Type 054A frigates have accompanied each of the last 13 deployments dating back to mid-2015, while Type 903 and Type 903A replenishment ships have joined all but two of the last 13 task forces. Note that exact deployment lengths for the 18th, 20th, 28th, and 33rd task forces were estimated based on previous missions. Data in chart compiled primarily from chinamil.com.cn.

OPENING STATEMENT OF KEVIN MCCAULEY, INDEPENDENT ANALYST

CHAIR WORTZEL: Thank you.

Mr. McCauley?

MR. McCAULEY: Again, I'd like to thank you for inviting me here. I'll provide some key points on logistic support expeditionary operations.

The PLA logistics capabilities are crucial to supporting expanding overseas non-war and wartime missions. And while the PLA assesses current military civilian logistics capabilities as inadequate to support increased operations globally, research by PLA theorists over the past decade has examined methods to improve these logistics capabilities.

Importantly, China views strategic delivery as a critical logistics component to support expeditionary operations, as well as an important means of deterrence and gaining influence regionally.

The 2017 National Defense Transportation law strengthens construction development of national defense integration as well as promoting civil-military transportation integration.

And the transportation law provides the basis for mobilizing civilian transportation resources to support both peacetime and wartime military missions, although some PLA sources suggest that this law needs to be revised and improved.

Civil-military integration is an important component supporting PLA modernization and improving military capabilities. This integration allows a PLA to leverage civilian research expertise and capabilities to support the military.

And the Joint Logistic Support Force plays an important role in civil military integration in the logistics area. And both the Joint Logistics Support Force and service logistics will play a role in supporting overseas operations.

Currently, logistics support for non-war overseas missions is mostly adequate. The establishment of the Djibouti logistics supply base uses logistics and maintenance for the anti-piracy escort mission and other missions, such as peacekeeping, although escort ships still continue to seek support from friendly ports in the region.

And the current PLA logistics has problems supporting the relatively small peacekeeping force, in particular the infantry battalion in South Sudan, which indicates supporting a larger force under combat conditions would stress the logistics system, especially currently.

PLA logisticians are examining requirements for a network for overseas logistics bases, both ports and air bases, importantly. PLA strategists advocate the establishment of air bases to support strategic delivery of forces, equipment, and material. And air transport is considered the most rapid method of moving supplies and forces.

In addition to establishing a support network for overseas ports and air bases, PLA sources identify several other means for supporting operations.

And these methods include constructing artificial islands, or floating bases. The Chinese concept for floating bases resembles the U.S. military mobile offshore base concept. And the PLA assesses that the advantages of these support methods would include avoiding host nation restrictions.

The PLA recognizes pre-positioning of material and equipment as an important means to rapidly introduce forces into a region. And PLA theorists have examined U.S. military pre-positioning for lessons learned. The pre-positioning could use military or civilian ships, in addition to floating bases, artificial islands, or bases on land.

And PLA recognizes pre-positioning as an important component of future naval logistics.

The PLA Navy's current logistics and strategic delivery capabilities are limited.

A fleet of comprehensive supply ships and tankers, as we heard, are relatively few. While the newer, more capable amphibious assault ships for transportation are few, albeit growing.

Therefore strategic delivery capabilities are currently limited as well. As we heard, the Y-20 transport is being fielded, but large numbers of these heavy transports, or other heavy transports, are needed to meet strategic delivery requirements.

The PLA will mobilize large and medium civilian shipping enterprises to support overseas missions. Some PLA sources suggest mobilizing at least 100 civilian ships to support emergency operations.

Since 2012, civilian shipping companies are forming a strategic delivery support fleet to include support to PLA offshore and open sea offensive and defensive operations.

The PLA assesses the training of the civilian reserve fleet as inadequate. Skills required for wartime support missions are particularly lacking.

And civilian ships do train with the PLA active force, but normally in relatively small numbers. And despite the transportation law, many civilian ships require modification before augmenting the Navy.

As with the PLA Navy, the Air Force can mobilize civilian aircraft trying to begin establishing a strategic delivery support force for civilian aviation in 2013. Currently, there are 15 civilian support fleets, based on major airlines, to meet increasing requirements for overseas non-war and wartime missions.

And while the civil air fleet has many cargo aircraft, only approximately 143 large and medium cargo planes are assessed as meeting PLA standards, and many of these are involving transports.

The overseas logistics support and strategic delivery capabilities are currently limited, and air and maritime transports will need conservable expansion to meet future expeditionary operational requirements.

While the PLA acknowledges that its current logistics and strategic delivery capabilities, even with civil augmentation, are inadequate, modernization and planning efforts appear likely to improve the PLA's capabilities to support future, non-war and wartime expeditionary missions.

And while non-war missions provide the U.S. an opportunity to work cooperatively with China and the PLA, however, as the PLA expands its capabilities to support wartime missions globally, the threat to U.S. and allied forces operating overseas will only increase.

The mobilization employment of civilian assets could make identification and targeting of transportation assets conducting military missions difficult. In overseas PLA bases, civilian ships, aircraft, and enterprises are expected to provide intelligence and other data to the PLA. The U.S. will need to carefully consider cooperation and critical technology transfers that can contribute to the PLA's precision logistics capability. And this consideration should include sales, cooperation, and technology transfers to Chinese shipping and airline enterprises.

That concludes my testimony.

PREPARED STATEMENT OF KEVIN MCCAULEY, INDEPENDENT ANALYST

20 February 2020 Kevin McCauley Independent Analyst

Testimony before the U.S.-China Economic and Security Review Commission "China's Military Power Projection and U.S. National Interests"

China's Logistic Support to Expeditionary Operations

Key Judgments

- People's Liberation Army (PLA) logistics capabilities are crucial to support expanding
 overseas non-war and wartime missions. While the PLA assesses current military and
 civilian logistics capabilities as inadequate to support increased operations globally,
 research over the past decade has examined methods to improve logistics capabilities.
- China views a strategic delivery capability as a critical logistics component to support
 expeditionary operations as well as an important means of deterrence and gaining
 influence. The Joint Logistic Support Force plays an important role in coordinating
 strategic delivery.
- The 2017 *Science of Strategy* contains a chapter on overseas operations identifying war and non-war military operations. The PLA currently conducts a broad range of non-war operations overseas such as peacekeeping, maritime escort, training and exercises, and military diplomacy. Potential overseas combat operations could range in scale from limited counterterrorism operations, operations to maintain maritime rights to a regional conflict in the case of operations against Taiwan.
- The 2017 National Defense Transportation Law strengthens construction and development of national defense integration, as well as promoting civil-military transportation integration. The Transportation Law provides the basis for mobilizing civilian transportation resources to support peacetime or wartime military missions.
 - The mobilization structure is complex relying on coordination between military, civilian government and civilian enterprise organizations. An additional mobilization issue is that the required civilian transports could be anywhere in the world when needed.
 - o Under the law, civilian transportation assets are formed into reserve formations.
 - Incorporation of military standards into civilian construction is meant to ensure compatibility with military requirements. However, civilian enterprises do not appear to be fully complying with the Law and PLA sources believe the law is inadequate as currently formulated.
- Civil-military integration is an important component supporting PLA modernization and improving military capabilities. This integration allows the PLA to leverage civilian research, expertise and capabilities to support the military. The Joint Logistic Support Force plays an important role in civil-military integration in the area of logistics.

- The Joint Logistic Support Force is responsible for logistic and equipment support for general supplies common to all the services as well as coordination of strategic delivery. The services maintain logistics for items specific to the service. Both the Joint Logistic Support Force and service logistics will support overseas operations. Navy logistics are especially important as that service undertakes expanded global missions.
- Current logistics support for non-war overseas missions is mostly adequate. The
 establishment of the Djibouti Logistics Supply Base eases logistics and maintenance for
 the anti-piracy escort missions, although escort ships continue to seek support from
 friendly foreign ports in the region.
- The PLA has had difficulties providing equipment support for peacekeeping. The South Sudan peacekeeping battalion has had difficulties meeting the United Nations strict equipment verification procedure. Current PLA logistics problems supporting a relatively small force indicate supporting a larger force under combat conditions would stress the logistics system.
- PLA logisticians are examining requirements for a network of overseas logistics bases both ports and airbases. Base on PLA analysis, it appears that additional logistics bases will be established. The 2017 *Science of Strategy* states the need to establish both temporary and fixed overseas supply points highlighting the strategic maritime corridors in the Pacific and Indian Ocean. Chinese overseas enterprises can also provide support to operations.
- PLA strategists advocate the establishment of airbases to support strategic delivery of forces, equipment and material. Air transport is the most rapid method for moving supplies and forces. The Belt and Road Initiative has led to China establishing international air passenger agreements with 65 countries and freight transportation agreements with 26 countries taking part on the economic project. PLA sources identify five strategic regions for potential airbases Africa, the Middle East and Central Asia, South Asia, Southeast Asia, and Central and South America.
- In addition to establishing a support network of overseas ports and airbases, PLA sources identify several other methods for supporting operations. These methods include constructing artificial islands or floating bases. The Chinese concept for floating bases resembles the US military "mobile offshore base" concept using a very large floating structure made of modules that can be linked together. The PLA's assessment of the advantages of these support methods include avoiding host nation restrictions.
- The PLA recognizes prepositioning of material and equipment as an important means to rapidly introduce forces into a region. PLA theorists have examined US military prepositioning for lessons. Prepositioning could use military or civilian ships, in addition to floating bases, artificial islands or bases on land. The PLA recognizes prepositioning as an important component of future naval logistics.

- The Joint Logistic Support Force plays an important role in coordinating strategic delivery, although multiple organizations are involved. Some PLA sources recommend establishing centralized organizations similar to the US Air Force Military Airlift Command and US Navy Military Sealift Commands. The Central Military Commission could empower the Logistic Support Department's Transport and Delivery Bureau to play a more centralized role in coordinating strategic delivery resources.
- The PLA Navy's current logistics and strategic delivery capabilities are limited. The fleet of comprehensive supply ships and tankers are few and relatively slow, while newer, more capable amphibious assault ships for transportation are few, albeit growing.
- PLA Air Force strategic delivery capabilities are currently limited as well. The Y-20 transport is being fielded, but large numbers of heavy transports are needed to meet strategic delivery requirements. Refueling tankers are also few.
- The PLA will mobilize large and medium civilian shipping enterprises to support
 overseas missions. Some PLA sources suggest mobilizing at least 100 civilian ships to
 support emergency operations. Since 2012, civilian shipping companies are forming a
 "strategic delivery support fleet" to include support to PLA offshore and open sea
 offensive and defensive operations.
- The PLA assesses the training of the civilian reserve fleet as inadequate. Skills required for wartime support missions are particularly lacking. Civilian ships do train with the PLA active force, but in small numbers. Despite the Transportation Law, many civilian ships require modifications before augmenting the Navy.
- As with the PLA Navy, the Air Force can mobilize civilian aircraft. China began
 establishing a strategic delivery support force for civil aviation in 2013. Currently there
 are 15 civil support fleets based on major airlines to meet increasing requirements for
 overseas non-war and wartime missions. While the civil air fleet has many cargo aircraft,
 only approximately 143 large and medium cargo planes are assessed as meeting PLA
 standards, many of them Boeing transports.
- The PLA Air Force has begun experimenting with the use of unmanned aerial vehicles for resupply to remote locations. The Air Force Logistic Department has partnered with a civilian company using medium-size drones. The Air Force views the experiment as part of the intelligent battlefield revolution.
- Road and rail delivery remain an important transportation method, although more suitable for operations along China's land borders, for example in Central Asia under the auspices of the Shanghai Cooperation Organization. In addition to rail movement, the PLA employs heavy equipment transporters (HET) for moving heavy equipment over long distances. The number of PLA and civilian HETs meeting military requirements are too few, with recommendations that the PLA acquire additional equipment. The PLA also has a large but unknown number of motor transport brigades and regiments for movement of supplies and forces.

- PLA overseas logistics support and strategic delivery requirements are currently limited, and air and maritime transports will need considerable expansion to meet future expeditionary operation requirements. Logistics' weaknesses include the following:
 - Lack of a network of overseas logistics support bases and prepositioning of material and equipment for rapid deployment and continued sustainment of forces operating overseas.
 - A complex coordination system for strategic delivery and mobilization of civilian asset including military, civilian government, and civilian enterprises.
 Requirement for greater centralization of coordination responsibilities.
 - o Greater civil-military integration with the incorporation of military standards into ship and aircraft construction.
 - Civilian transportation personnel need regular and improved training to include more extensive training with the PLA active duty force.
 - The need to incorporate new technologies into the military and civilian logistics force to provide for a precision logistics support capability to overseas forces. These technologies include big data, intelligent delivery decision making systems, autonomous logistic systems, dynamic monitoring systems, precision airdrop technology, hypersonic transport aircraft, and logistics equipment capable of operating in special and extreme environments.
 - Improvements in rapid loading and unloading; greater palletization and containerization; faster and larger long-range transport ships and aircraft
- While the PLA acknowledges that its current logistics and strategic delivery capabilities –
 even with civilian augmentation are inadequate, modernization and planning efforts
 appear likely to improve the PLA's capability to support future non-war and wartime
 expeditionary operations.
- Non-war missions provide the US an opportunity to work cooperatively with China and
 the PLA. However, as the PLA expands its capability to support wartime missions
 globally, the threat to US and allied forces operating overseas will increase. The
 mobilization and employment of civilian assets could make identification and targeting of
 transportation assets conducting military missions difficult. Overseas PLA bases, civilian
 ships, aircraft and enterprises can provide intelligence and targeting data.
- The US will need to carefully consider cooperation and technology transfers on critical technologies that can contribute to the PLA's precision logistics. This consideration should include sales, cooperation and technology transfers to Chinese shipping and airline enterprises.

Background

The 2017 "Science of Strategy (战略学)" published by the PLA's National Defense University highlights overseas operations with a chapter on force employment in war and non-war situations. The PLA identifies basic overseas operations mainly as the following: peacekeeping; humanitarian assistance and rescue; maritime escort; evacuation of overseas personnel; international military exercises; strategic cruises; maritime training; military assistance; warship visits; and international antiterrorism.¹ In addition to the PLA's list of non-war missions, conflict scenarios could range from limited combat operations exemplified by counterterrorism operations in Central Asia in support of Shanghai Cooperation Organization (SCO) countries to a regional conflict as in the case of operations against Taiwan. Any overseas mission has the fundamental requirement of logistics support if it is to succeed.

The *Science of Strategy* (2017) acknowledges the difficulty of providing comprehensive support to overseas operations; in part based on the PLA's accumulated experience in international peacekeeping, humanitarian assistance, overseas evacuations, and exercises and training with foreign militaries. Strategic delivery, primarily sea and air transport, and timely support of overseas forces are difficult as domestic logistics support facilities and mechanisms cannot play a role in overseas operations.²

China's BRI, the "new security concept (新安全观)", and the "Go Out (走出去)" strategy are placing greater importance on Navy and Air Force long-range capabilities. The Navy is moving towards a blue water, distant sea force while the Air Force is becoming a strategic force. This transformation towards global operations creates complex logistics requirements. Overseas operations are conducted over long distances, require endurance as well has exhibiting high consumption rates, posing difficult problems for the PLA to overcome currently. Naval logistics has relied on shore-based replenishment from China's coast, accompanying maritime replenishment from a small fleet of supply ships, or reliance on replenishment and maintenance in friendly countries. As China's overseas missions continue to expand, logistics support will transition to the development of a network of overseas support bases, prepositioning, relay support, strengthening accompanying support with the construction of new-type rapid, multifunction supply ships, and replenishment from civilian ships or overseas enterprises. Some PLA sources suggest the use of floating bases or the creation of artificial islands to support logistics and the prepositioning of supplies and equipment.³

The PLA is expanding it logistics capabilities, including civilian strategic delivery forces, to deploy and sustain forces during overseas missions. The PLA has experience in supporting non-war, for example peacekeeping, training and military diplomacy missions overseas. The PLA is also improving civil-military integration to leverage the civilian sector to support overseas operations. Logistics mobilization can call-up substantial civilian assets to support the military. PLA discussions include the possibility of employing foreign transportation assets.

¹ Xiao Tianliang (肖天亮) chief ed., 战略学 (Science of Strategy), Beijing, China: NDU Press, 2017, pp. 307-308.

² Xiao Tianliang (肖天亮) chief ed., 战略学 (Science of Strategy), Beijing, China: NDU Press, 2017, p. 314

³ Han Yue (韩跃), "中美海军远海护航行动后勤保障模式比较研究" ("A Comparative Study of Logistic Support Methods of China and US Navy Escort Operations"), *National Defense* (*国防*), June 2017, pp. 40-43

Some PLA sources suggest the need to establish a specialized overseas logistics support force. Expeditionary logistics support requires specialized capabilities, advanced skills training, and a high degree of informationized or intelligent systems to support diverse operations. Personnel serving overseas also require knowledge of international of foreign laws and regulations, local military geography, local customs, culture and religion.⁴

The PLA views strategic delivery as an important aspect of overseas logistics support. The PLA is examining US, as well as Russian, strategic delivery capabilities and operations to support expeditionary operations. The PLA believes that strong strategic delivery capabilities can also serve as a deterrent or influence countries actions.

Transportation Regulations

China intends to improve civilian-military integration and transportation support to military logistics and strategic delivery. The National Defense Transportation Law that came into force in 2017 strengthens civil-military construction and development of national defense transportation and mobilization of civilian resources. The law promotes integration of military standards into civilian transportation construction as well as requiring overseas enterprise support to military operations. The 2017 transportation law provides for the following:⁵

- Railways, roads, waterways, shipping, aviation, and pipelines are planned, constructed and managed to support defense requirements.
- Civil-military integration optimizes the allocation and sharing of all transportation resources in peacetime, emergencies and wartime.
- The state national defense transportation administration provides planning, direction and coordination of local national defense transportation administrations at and above the county level. These organizations may expropriate civilian vehicles, transportation facilities, transportation materials, and other civil transportation resources.
- Technical standards and specifications of transportation facilities and equipment will meet national defense requirements.
- Improved information construction supporting national defense transportation.
- The armed forces determine the scope and categories of civil transportation requirements and deliver the standards to the civilian sector in a timely manner.
- The state, in coordination with large and medium transport enterprises, organizes the construction of civilian strategic delivery support forces to augment the military, enhance the strategic delivery capacity, and provide effective support for the rapid organization of long-distance and large-scale national defense transport.
- State agencies stationed abroad, enterprises engaged in international transportation and their overseas institutions shall aid with the replenishment, maintenance and repair of military vessels, aircraft, vehicles and personnel engaged in overseas operations.

⁴ Dong Zhigao (董智高) and Zhou Lei (周磊), "关于海外军事后勤保障力量建设的认识与思考" ("The understanding and reflections on overseas military logistics support force construction"), 国防科技 (National Defense Science & Technology) Vol. 37 No. 2 April 2016, pp. 83-86

⁵ "中华人民共和国国防交通法" ("National Defense Transportation Law of the People's Republic of China"), available from http://www.mod.gov.cn/regulatory/2016-09/03/content_4724196.htm, accessed December 20, 2019

- The state government at or above the county level, with support by the military, shall organize the relevant enterprises to carry out the rush repair of traffic facilities and vehicles to ensure the smooth progress of national defense activities.
- The state government and the military will organize training and drills of the transportation enterprises under the relevant provisions of the militia's participation in military training.
- Mobilized transportation assets may be given movement priority.
- A national defense transportation reserve system will support transportation requirements during peacetime and war.

The standards and technical requirements for civilian ship construction includes container ships, roll-on roll-off (RORO), multi-purpose, bulk cargo and general cargo ships. The requirements define ship performance, utilization objectives, and design. Civilian aircraft and other transportation resources are included. The standards requirement is intended to transform China's large civilian ship and aircraft inventory into a military strength for strategic delivery and logistics support.⁶

The transportation law is intended to improve civil-military integration and civil enterprise mobilization and support to internal and external military operations. However, numerous PLA sources detail problems with a lack of suitable civilian ships and aircraft, equipment not meeting military standards, as well as poor training.

Civil-Military Integration⁷

Civil-military integration is a critical foundation to enhance support for military operations including overseas operations relying on civil aircraft and shipping to supplement military capabilities. The Joint Logistic Support Force (JLSF) plays an important role in civil-military integration related to logistics. This is important for leveraging civilian expertise, research, production and capabilities to reinforce joint logistics. Outsourcing to the private sector of certain logistics requirements is intended to create greater efficiency, flexibility, and timeliness to support activities. The logistics force has arrangements with private companies to provide supplies directly to units, and Chinese overseas enterprises will support military missions. Logistics mobilization in wartime relies greatly on civilian resources. The concept of "supporting the front" has local governments and the population supporting military forces with manpower, material and financial resources, medical, transportation, maintenance, and engineering support, as well as intelligence.⁸

^{6 &}quot;《新造民船贯彻国防要求技术标准》颁布实施" ("Promulgation and implementation of 'Technical Standards for the Implementation of National Defense Requirements for Newly Built Civil Ships'"), available from http://www.mod.gov.cn/regulatory/2016-02/19/content 4617916.htm, accessed December 20, 2019

⁷ The PLA consistently translates 军民融合 as civil military integration, not civil military fusion or military civilian fusion.

^{* &}quot;国家国防交通" ("National Defense Transportation"), 中国国防报 (China National Defense News"), April 18, 2017; "联勤保障部队探索被装供应保障新模式" (Joint Logistic Support Force Explores New Model of Outfitting Supply Support"), available from http://www.81.cn/jfjbmap/content/2017-05/03/content_176307.htm, accessed December 20, 2019; "国防部举行联勤保障体制改革专题新闻发布会" ("Ministry of National Defense Holds Special Press Conference on Joint Logistics Support System Reform"), available from http://www.81.cn/jwgz/2016-

Key components of the integration are improving the military logistics research and production system supported by the State Administration for Science, Technology and Industry for National Defense (SASTIND), as well as improving military specialized talent and education. The current form of civil-military integration promotes the following objectives:⁹

- Accelerating logistics mobilization capability through the integration of the civilian economy, industry, and infrastructure to support military requirements, and the leveraging of civilian capabilities in the areas of medical, materials, maintenance and transport.
 - Civilian construction projects are designed to meet military requirements. This includes civilian aircraft and shipping, construction of highways to include aircraft landing strips, and civilian airports and ports. In particular, the development of civilian transportation and communications infrastructure is designed to improve the national defense mobilization system.
 - Military logistics incorporates the civilian support system for military reserves, transportation and distribution.
- The PLA leverages civilian scientific research to support its interests in key technologies such as quantum computing and communications, artificial intelligence and other emerging technologies believed capable of the next revolution in military affairs.

Joint Logistic Support Force

Logistics and equipment support are divided between the Joint Logistic Support Force (JLSF) and service support forces. The JLSF is responsible for logistics and equipment support of general items common to all the services, while the individual service logistics and equipment support is focused on items specific to the service. Based on this division of labor, both joint and service support systems would support overseas missions. The JLSF is part of a complex system of organizations responsible for mobilization and strategic delivery. Navy and Air Force service logistics systems would have significant overseas involvement due to the likelihood of those two services extensive participation in overseas operations.

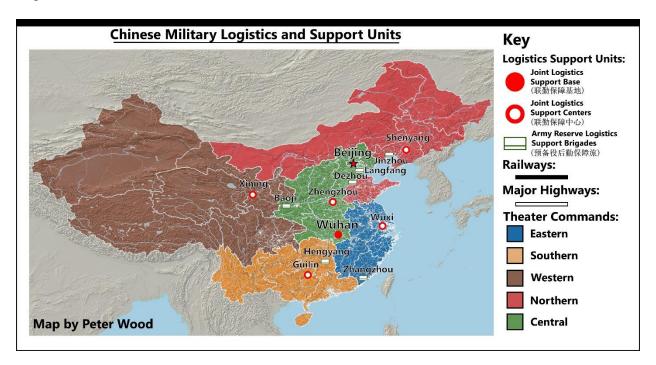
The JLSF appears to be currently focused on support to theater command (TC) joint operations and training, as well as supporting transiting forces during cross-region exercises. ¹⁰

^{09/13/}content 7257124.htm, accessed December 20, 2019; "军语" ("Military Terms"), Beijing: Military Science Press, 2011, pp. 481-482

⁹ Guo Zhonghou (郭中侯) chief editor, "军民融合概论" ("Introduction to Civil Military Integration"), Beijing: National Defense University Press, 2015, pp. 32-39

¹⁰ Zhang Tao, ed., "China Establishes Joint Logistic Support Force," available from http://eng.chinamil.com.cn/view/2016-09/13/content_7256651.htm, accessed December 12 2919; Tian Xuejun (田学军) and He Yongliang (何永良), "军委联勤保障部队首次高级专业技术资格评审" ("The First Senior Specialized and Technical Qualification Evaluation of Joint Logistic Support Force of CMC"), available from http://www.xinhuanet.com//politics/2016-12/16/c_1120128046.htm, accessed December 12, 2019; "揭秘新成立的中央军委联勤保障部队" ("Revealing the Newly Established Joint Logistic Support Force of the Central Military Commission"), available from http://military.people.com.cn/n1/2017/0119/c1011-29035648.htm, accessed December 12, 2019

Joint Logistic Support Centers' support brigades are modular adhoc units to provide long-range mobile comprehensive joint logistics support in a main operational direction. There are also Army reserve logistics support brigades available for mobilization. These brigades could support cross border operations along China's periphery; for example, as part of a Shanghai Cooperation Organization (SCO) combined force.¹¹



Command coordination for force projection under the new theater command organization is complicated. An example given in a PLA article discusses the following commands and organizations involved in coordination of force projection: the theater joint command center, the joint logistic support center command, the headquarters of the participating unit(s), the country involved, and national and local rail, road, water, air transportation dispatch centers depending on the situation as well as the civilian enterprise if their assets are mobilized. The joint logistic support center within a theater assists in planning and use of the civilian and military transportation resources.¹²

Examples of Current Overseas Missions

The PLA's conducts diverse non-war missions abroad. Logistics and strategic delivery requirements for the non-war missions are not overly taxing and have been supported by military and civilian transport and support assets, although logistics problems have arisen. The following are select examples of PLA missions abroad.

Maritime Escort

PLA Daily, November 12, 2012; Chinamil.com, August 15, 2013; PLA Daily, October 9,2013; Chinamil.com, July 26, 2014; Joint Operations Research, (Beijing: National Defense University Press, 2013), pp. 289-290
 Li Peng (李鹏) et al, "战区联合投送指挥研究" ("Study on Joint Projection Command for Theater Command"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 5 May 2019, pp. 1-5

The Gulf of Aden anti-piracy escort mission began in 2008. In December 2019 the 34th escort fleet departed Sanya consisting of the guided missile destroyer *Yinchuan*, the guided missile frigate *Yuncheng*, and the comprehensive supply ship *Weishanhu*. The escorts typically include two warships and a comprehensive supply ship.¹³ Until August 2013 a "supply ship troika" of the *Weishanhu*, *Qiandaohu*, and *Qinghaihu* alternately accompanied the escort taskforce. Since then a variety of supply ships have accompanied the escort taskforce providing experience to the Navy's supply ships.¹⁴ Some logistics highlights for the escort mission include the following:

- The 11th naval escort conducted the first maritime replenishment of fuel and water in 2012. ¹⁵
- In 2014 the 16th escort's comprehensive supply ship conducted longitudinal and lateral replenishment of the two guided missile frigates in the Atlantic Ocean for the first time. ¹⁶
- In 2017 the 26tth escort's supply ship provided fuel and water to a destroyer and frigate en route to a Sino-Russian exercise in the Baltic Sea.

Prior to the establishment of the Djibouti Support Base the escort fleets received replenishment in friendly regional ports, for example the Port of Salalah in Oman. The escort ships continue to conduct some resupply and maintenance at foreign ports after the establishment of the Djibouti base.¹⁷

Peacekeeping Missions

The PLA has participated in 24 United Nations (UN) peacekeeping operations since 1990 and has become a major contributor of financial support and forces. From 2006 to 2015 the PLA organized more than 240 flights transporting more than 37,000 personnel and 2,700 tons of material to its peacekeeping missions. As of May 2019, most of the missions are in Africa followed by the Middle East, with the largest located in South Sudan UNMISS 1.055 personnel. As of June 2019, China's UN peacekeeping missions include Mali MINUSMA 413 personnel, Lebanon UNIFIL 419 personnel, Darfur UNAMID 365 personnel, Democratic Republic of the Congo MONUSCO 218 personnel, Western Sahara MINURSO 12 personnel, Jerusalem UNTSO 5 personnel, and Cyprus UNFICYP 4 personnel.¹⁸

¹³ " 第 34 批护航编队起航" (The 34th Escort Sets Sail"), available from http://www.81.cn/jfjbmap/content/2019-12/24/content 250599.htm, accessed December 24, 2019

Huang Panyue, editor, "PLA Navy ends era of "supply-ship troika" in its escort mission." available from http://eng.chinamil.com.cn/view/2018-08/09/content_9247256.htm, accessed December 17, 2019
 "11th Chinese naval escort taskforce conducts first maritime replenishment," China Military Online, March 5, 2012

^{16 &}quot;Chinese escort taskforce conducts replenishment in Atlantic Ocean," *China Military Online*, May 14, 2014
17 Guo Renjie, editor, "Chinese naval ship berths in Salalah Port for replenishment," available from http://eng.mod.gov.cn/Photos/2014-10/08/content_4542052.htm, accessed December 14, 2019; "第 33 批护航编队开始第 2 轮靠港补给" ("The 33rd Escort Formation begins the Second Round of Port Resupply"), available from http://www.81.cn/ifjbmap/content/2019-10/26/content_246132.htm, accessed December 17, 2019
18 Chen Zhuo, editor, "Graphics: China's role in world's peacekeeping cause," available from http://eng.mod.gov.cn/news/2019-05/30/content_4842503.htm, accessed December 14, 2019; Zhang Xin (张昕) et al, "依托战略投送支援机队实施海外航空战略投送" ("Overseas Aviation Strategic Projection Using Strategic

The UN has an integrated logistics network and each peacekeeping mission provides procurement plans. UN logistics includes purchasing and distributing supplies such as fuel, drinking water and food. Contributing country contingents are responsible for first-line self-sustainment which is transportation of supplies from battalion level to company level and below, as well as equipment maintenance and repair. ¹⁹ Chinese peacekeeping units also use local procurement for fresh food. The Djibouti Support Base improves Chinese peacekeeping logistics serving as a transit hub for operations in Africa and the Middle East. ²⁰ China's peacekeeping personnel are transported by chartered civilian aircraft or Air Force transports while much of the logistics support is sent by ship which takes about 10 days to reach the Gulf of Aden. ²¹

The PLA peacekeeping infantry battalion in South Sudan is equipped with more than 100 vehicles including command, infantry fighting, personnel, protective assault, transport and special vehicles. The maintenance and support organization consist of a support company including a logistics platoon with a repair shop responsible for the entire battalion. The equipment support personnel are too few and require high levels of training to support the arduous task of maintaining and repairing equipment. PLA sources report that the quality of logistics personnel has been problematic. The harsh environment and battalion's high-tempo operations combined with difficulties obtaining spare parts rapidly degrade equipment performance. Apparently, the logistic platoon's ability to anticipate spare part requirements has been poor. The UNs equipment verification of peacekeeping forces is strict with PLA units having difficulty passing.²² These difficulties providing logistics support to a relatively small unit overseas could indicate that the PLA would currently have difficulty supporting a larger force under combat conditions.

Exercises Abroad

The PLA conducts combined exercises on the territory of other nations and at sea. The PLA has participated large exercises in Russia including some of the Peace Mission exercise

-

Projection Support Fleet"), 军事交通学院学报 (Journal of Military Transportation University), Vol 20 No. 4 April 2018, p. 6

¹⁹ "Military Logistics Unit for United Nations Peacekeeping Operations," available from dag.un.org/bitstream/handle/11176/400724/Military Logistic Unit STM 3.1.pdf?sequence=13&isAllowed=, accessed on December 14, 2019

²⁰ Institute for Security & Development Policy, "China's Role in UN Peacekeeping;" available from http://isdp.eu/content/uploads/2018/03/PRC-Peacekeeping-Backgrounder.pdf, accessed December 14, 2019 ²¹ Yao Jianing, editor, "Chinese peacekeeping engineers to Lebanon set out," available from http://eng.mod.gov.cn/TopNews/2016-05/20/content_4661717.htm, accessed December 14, 2019; Yu Donghai and Chen Kaikai, "6th Chinese peacekeeping infantry battalion to South Sudan (Juba) sets out," available from http://eng.mod.gov.cn/news/2019-11/20/content_4855272.htm, accessed December 14, 2019; Ma Fangfang (马方方), "加强我军维和行动后勤保障的几点思考" ("Some Thoughts on Strengthening the Logistic Support of our Army's Peacekeeping Operations"), 国防 (National Defense) No. 12 2017, pp. 33-36
https://eng.mod.gov.cn/news/2019-11/20/content_4855272.htm, accessed December 14, 2019; Ma Fangfang (马方方), "加强我军维和行动后勤保障的几点思考" ("Some Thoughts on Strengthening Stationed Abroad"), 国防 (National Defense) No. 12 2017, pp. 33-36; Ma Fangfang (马方方), "加强我军维和行动后勤保障的几点思考" ("Some Thoughts on Strengthening the Logistic Support of our Army's Peacekeeping Operations"), 国防 (National Defense) No. 12 2017, pp. 33-36

series sponsored by the Shanghai Cooperation Organization, the Russian Vostok-2018 exercise (PLA forces included 3200 troops, 900 pieces of equipment and 30 fixed and rotary-wing aircraft) and the Russian Tsentr-2019 exercise (PLA forces included 1600 troops, 300 pieces of equipment, and approximately 30 fixed and rotary-wing aircraft). The various SCO sponsored exercises are focused mostly on large scale counter-insurgency operations for potential SCO combined force operations within the Central Asian member states. The PLA has used primarily rail and military aircraft to transport troops, equipment and supplies to these exercises. There have been no reported logistics issues during these foreign exercises.

Evacuation of Overseas Personnel

Military transport forces require the capability to respond rapidly to overseas crises requiring the evacuation of personnel. Evacuations of citizens from Libya and Yemen are examples of this mission. The 2011 deterioration of the security environment in Libya required the evacuation of Chinese citizens. The military in cooperation with the Ministry of Foreign Affairs, the Ministry of Transport and diplomatic missions was able to evacuate 35,860 personnel within ten days. Most citizens were transported by chartered shipping with 5,000 evacuated by aircraft.²⁵

In March 2015 the Gulf of Aden escort ships were redirected to evacuate Chinese citizens and diplomats from Yemen after the Saudi-led coalition began air strikes on rebel forces. The Chinese press reported that there were approximately 590 Chinese nationals as well as over 200 foreign nationals evacuated.²⁶

Overseas Logistics Bases

Overseas bases are critical for strategic delivery and timely logistics support. While most speculation involves future naval support bases, the expansion of China's military air transport capability will possibly lead to access to foreign airfields or the establishment of external airbases. However, the PLA notes that overseas bases can lead to strategic competition and complicate relations with other countries in addition to the high costs related to establishing and maintaining bases.²⁷

٦.

²³ Li Meng, "Top ten firsts of Chinese military diplomacy from 2002 to 2012," available from http://en.people.cn/90786/7960693.html, accessed December 10, 2019; "Chinese military to participate in strategic drills in Russia," available from http://www.globaltimes.cn/content/1116371.shtml, accessed December 10, 2019; "First batch of Chinese troops arrive in Russia for Center-2019 drills," available from http://eng.mod.gov.cn/news/2019-09/06/content_4849920.htm, accessed December 10, 2019
http://eng.mod.gov.cn/news/2019-09/06/content_4849920.htm, accessed December 10, 2019

http://eng.mod.gov.cn/news/2019-09/06/content_4849920.htm, accessed December 10, 2019
http://eng.mod.gov.c

²⁴ "我车参加"中部-2019"演习部队全部抵俄" ("All Our Troops Participating in the "Center-2019" Exercise Arrived in Russia"), available from http://www.81.cn/jfjbmap/content/2019-09/08/content 242867.htm, accessed December 13, 2019

²⁵ Xiao Tianliang (肖天亮) chief ed., 战略学 (Science of Strategy), Beijing, China: NDU Press, 2017, p. 308.

²⁶ "Warship arrives to evacuate Chinese nationals from Yemen," available from http://usa.chinadaily.com.cn/world/2015-03/30/content 19950055.htm , accessed on December 10, 2019; "China helps 10 countries evacuate nationals from Yemen," available from http://usa.chinadaily.com.cn/china/2015-04/03/content 19995132.htm, accessed on December 10, 2019

²⁷ Hu Xin (胡欣), "国家利益拓展与海外战略支撑点建设" ("Expansion of National Interests and Construction of Overseas Strategic Strong Points"), 世界经济与政治论坛(Forum of World Economics and Politics), No. 1 January

China's Ministry of Foreign Affairs announced the construction of a logistics support facility in Djibouti in 2016. This first overseas military base conducted a flag raising ceremony opening China's first permanent overseas base on August 1, 2017. The naval support facility provides logistics and personnel recuperation for the anti-piracy escort taskforce, as well as supporting humanitarian assistance, disaster relief and peacekeeping missions in the region.²⁸

China's reclamation of islands in the South China Sea are equipped with harbors, berthing areas, airfields and facilities to provide logistics support for PLA Navy and Air Force operations in this critical sea lines of communication.

The PLA sources and Chinese academics have proposed the establishment of "strategic strong points (战略支撑点)" to support the Maritime Silk Road. Strategic strong points are needed to support and sustain overseas operations. A network of strong points will provide comprehensive supply, maintenance and repair, information collection, maritime monitoring, humanitarian and medical rescue, as well as maintain maritime development, control and rights. Establishing a network of strong points can reduce the Navy's dependence on comprehensive supply ships which are too few currently to meet expanded Navy requirements. PLA sources state that the strong points would become part of an integrated intelligence network.²⁹

It appears that China will certainly establish additional overseas logistics bases in the future. It is also likely that China will carefully and systematically plan the location of future bases due to the costs of establishing and maintaining bases, as well as the potential negative international reactions to base construction that could promote the "China Threat" narrative. Future bases need to be strategically placed to provide maximum support as a hub of operations with good transportation, geographical conditions and security situation. Maritime bases should be on major international sea lines of communications. Prepositioning of equipment and supplies on ships, mobile offshore bases such as floating platforms, or artificial islands can avoid host country restrictions. PLA theorists propose a combination of land and sea-based support points.³⁰

http://english.chinamil.com.cn/news-channels/china-military-news/2016-02/25/content 6929065.htm, accessed December 17, 2019; "Additional overseas PLA bases 'possible'," available from

http://www.china.org.cn/china/2019-01/10/content_74358640.htm, accessed December 17, 2019

^{2019,} pp. 21-35; Guo Yiming, "China to conduct medical service operations in Djibouti," available from http://www.china.org.cn/china/2019-11/29/content 75460578.htm, accessed December 30, 2019; Chen Liwang (谌力汪) and Li Weizheng (丽韦政), "新安全观视域下海外基地转型重塑的影响及启示" ("Influence and Enlightenment of Overseas Base Transformation and Reconstruction from the Perspective of New Security Concept"), 国防 (National Defense) Issue 9 2017, pp. 41-45

²⁸ Wang Xu and Zhang Yunbi, "Logistics base in Djibouti 'essential,' ministry says," available from http://usa.chinadaily.com.cn/china/2016-02/04/content 23399429.htm, accessed December 17, 2019; Zhang Tao, editor, "Defense Ministry's regular press conference on Feb. 25," available from

²⁹ Zheng Chongwei (郑崇伟) et al, "经略"21 世纪海上丝路":战略支撑点的构建" ("Managing the "21st Century Maritime Silk Road": Construction of Strategic Support Points"), 第八届海洋强国战略论坛论文集 (Proceedings of the Eighth Forum on the Strategy of Maritime Power), October 21, 2016.

³⁰ Dong Zhigao (董智高) and Zhou Lei (周磊), "关于海外军事后勤保障力量建设的认识与思考" ("The understanding and reflections on overseas military logistics support force construction"), 国防科技 (National Defense Science & Technology) Vol. 37 No. 2 April 2016, pp. 83-86

The *Science of Strategy* (2017) states that temporary and fixed overseas supply bases will support overseas operations. The authoritative publication recommends strengthening relationships with countries along strategic maritime corridors in the Pacific and Indian Ocean to improve the accompanying support capability for overseas naval operations. The authors recommend that China should explore agreements with friendly states to use airports in addition to ports. Chinese enterprises and personnel overseas can also provide support to operations. ³¹

One PLA academic described four types of bases or strategic strong points. These include a long-term or temporary leased support base; a multifunctional ocean port built or improved primarily with China's investment; a port facility leased for commercial operations; and overseas base with sustained usage rights.³²

China would also require access to airfields in friendly nations or establish airbases to support air delivery. The Belt and Road Initiative (BRI) has provided China with links to international air passenger and freight transportation. As of 2019 China has established international air passenger links with 65 countries and 89 cities along the BRI. International air cargo links are established with 14 countries and 26 cities. These links provide China with an air transport network that leverages economic cooperation.³³

PLA sources have proposed several additional methods to support expeditionary operations to include construction of artificial islands for use as support bases or pre-positioning. The PLA is moving towards the use of modular and prefabricated structures and logistics facilities. These structures could be used to construct temporary support facilities abroad. An exhibition in Beijing unveiled a concept for floating bases similar to the US military "mobile offshore base" concept. The exhibit depicted a very large floating structure (VLFS) made of modules that can link together. The PLA Navy reportedly has two mobile landing platforms to support operations. 35

³¹ Xiao Tianliang (肖天亮) chief ed., 战略学 (Science of Strategy), Beijing, China: NDU Press, 2017, pp. 304, 320-321 ³² Hu Xin (胡欣), "国家利益拓展与海外战略支撑点建设" (National Interest Expansion and Overseas Strategic Support Point Construction"), 世界经济与政治论坛 (Forum of World Economics & Politics) No. 1 January 2019, pp. 21-35

³³ Chen Yu (陈瑜) et al, "境外空中战略投送能力建设研究" ("Research on Development of Overseas Strategic Airlift Capability"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 2 February 2019, pp. 5-8 and 40

³⁴ Xu Yi, "Chinese military to use more modular buildings and prefabricated structures," available from http://eng.mod.gov.cn/news/2019-12/04/content 4856228.htm, accessed December 27, 2019; Han Yue (韩跃), "中美海军远海护航行动后勤保障模式比较研究" ("A Comparative Study of Logistic Support Methods of China and US Navy Escort Operations"), *National Defense* (*国防*), June, 2017, pp. 40-43; Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), *军事交通学院学报 (Journal of Military Transportation University)*, Vol. 20, No. 6, June 2018, pp. 46-49

³⁵ Liu Gang (刘刚) and Yu Pengcheng (虞鵬程), "关于组建快速动员海运力量的思考" (Our Reflection on the Quick Organization of Military Sealift Reserve Forces"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology), Issue 3 2014, pp. 2-3; "无锡联勤保障中心积极做好新下水半潜船"民参军"各项工作" ("Wuxi Joint Logistic Support Center actively completes the work of "people's participation in the army" for newly launched semi-submersible ships"), available from http://www.81.cn/jfjbmap/content/2017-04/16/content_174964.htm, accessed January 25, 2020; "China Unveiled its First VLFS Project Similar to the US

Large comprehensive base requirements would include large material delivery flow, unloading and loading equipment, storage facilities, fuel storage, maintenance and repair equipment, transport vehicles, medical facilities, and an information system for managing and dispatching material and forces.³⁶

While China currently has confirmed one overseas military base, it appears highly likely that Beijing will establish additional military support bases in the future as overseas missions expand in number and scale. PLA theorist note that bases attenuate the problem of supporting forces over long distances. Chinese company investments in ports and terminals primarily along the BRI can provide sites for replenishment and maintenance as they have for the anti-piracy escort formations. However, an over reliance on these enterprises for logistics support is not conducive to maintaining a pure business image and could negatively impact overseas investments and enterprise operations. It is also likely that Beijing will gain access to foreign airfields on at least a temporary basis to support strategic air delivery.

Prepositioning

As China's overseas military requirements expand, the need for prepositioning becomes an important solution to the current limitations of strategic delivery and maritime accompanying support capabilities. The PLA has examined US military prepositioning for lessons to support future operations. The PLA is examining the future development primarily of maritime prepositioning of supplies and equipment to supplement a future network of comprehensive support bases which could also provide prepositioning.³⁷

The PLA assesses maritime pre-positioning should be an important component of naval logistics support to increase capabilities from the current limited method of accompanying support. Pre-positioning ships can include civilian ships. The PLA acknowledges that its comprehensive supply ships' capabilities are low, increasing the importance of overseas bases, and the pre-positioning. The establishment of pre-positioned equipment could support the deployment of a rapid reaction force – likely based on the expanding Marine force as well as the

Military Mobile Offshore Base Concept," Navy Recognition, available from

http://www.navyrecognition.com/index.php?option=com_content&view=article&id=2973, accessed on January 29, 2020

³⁶ Yu Dianxiang (于殿祥) and Ju Xiaolin (鞠小林), "综合性投送基地建设基本构想" ("Basic Conception of Comprehensive Projection Base Construction"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 20 No. 3 March 2018, pp. 1-5; Pan Hongda (潘宏达) et al, "战略投送基地物资投送保障能力构成与生成机理" ('Constitution and Generation Mechanism of Material Delivery Support Ability for Strategic Projection Base"), 军事交通学院学报 (Journal of Military Transportation University) Vol. No. 5 May 2017, pp. 48-52
³⁷ Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), *军事交通学院学报* (Journal of Military Transportation University), Vol. 20, No. 6, June 2018, pp. 46-47; Cao Yang (曹杨), "新时代海上战略投送体系建设的思考" ("Thoughts on Construction of Maritime Strategic Projection System in New Era"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 2 February 2019, pp. 1-4

airborne force - for timely deployment abroad. The PLA cites the US military objective of delivering one brigade in four days, one division in five days, and five divisions in 30 days.³⁸

The overseas support requirement characteristics and methods are complex and diverse. Maritime pre-positioning has the advantage of reducing dependence on foreign countries and bases where access to ports and airports cannot be guaranteed. The PLA considers maritime pre-positioning as having a rapid response and effective support to a crisis impacting the effectiveness of expeditionary mobile combat support. However, pre-positioning ships require defensive support as they would be the focus of enemy attacks in wartime as well as threats from pirates, terrorists, enemy agents or special force as well as weather. Furthermore, pre-positioned ships have high operating costs, although they can reduce the cost and increase the speed of deploying emergency forces.³⁹

In analyzing US pre-positioning, the PLA has drawn the lessons of containerization to improve the efficiency and speed of long-distance delivery of material; reliance on RO/RO ships; special transport ships with high speed and load capabilities; and ships capable of carrying transport helicopters. The PLA clearly intends to improve the construction of its maritime logistics support system to include maritime pre-positioning. Emphasis is placed on formulating plans for the construction of large floating bases and the creation of artificial islands in key areas to provide large-scale logistics support for Navy operations.⁴⁰

Strategic Delivery

The PLA views a strategic delivery capability as a core element of its overseas logistics capability providing greater flexibility for support and force deployment. This is especially true as China enters a new historical stage with global interests.⁴¹

The PLA considers strategic delivery as a core military capability blending strategic mobility, logistics support, and national mobilization. Construction of a strategic delivery capability is required to respond to crises, safeguard peace, deter war, protect national interests, and win wars. Strategic delivery includes both military and civilian maritime, air and ground transport. The PLA considers a strategic delivery capability as a strategic deterrent; an important factor in determining the outcome of a war; an important requirement enabling overseas joint logistics and joint operations; and an important means for gaining global influence.⁴²

³⁸ Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), *军事交通学院学报 (Journal of Military Transportation University),* Vol. 20, No. 6, June 2018, p. 47

³⁹ Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), *军事交通学院学报 (Journal of Military Transportation University),* Vol. 20, No. 6, June 2018, pp. 47-48

⁴⁰ Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), *军事交通学院学报 (Journal of Military Transportation University),* Vol. 20, No. 6, June 2018, pp. 48-49

⁴¹ Cao Tingze (曹廷泽) and Yin Peixiang (殷培祥) ed., 战略投送问题研究 (*Research on Problems of Strategic Delivery*), (Beijing: National Defense University Press, 2014), Forward

⁴² Cao Tingze (曹廷泽) and Yin Peixiang (殷培祥) ed., 战略投送问题研究 (Research on Problems of Strategic Delivery), (Beijing: National Defense University Press, 2014), pp. 1-10

The PLA assesses the current inventories and capabilities of air, maritime and ground transport as well as civilian transport limit long-range logistics support and strategic delivery. These capabilities will increase with the fielding of additional military heavy air transports and rapid maritime transport means, as well as integration of military standards into the construction of civilian resources. Mobilization of civilian transportation as mandated in the transportation law serves as an important means to augment military capabilities.

Maritime Strategic Delivery

Navy Logistics and Strategic Delivery Capabilities

The PLA considers its current long-range supply and transport capability to support overseas operations as relatively weak. The Navy would require civilian shipping mobilization with RORO; container; bulk cargo; oil and water tankers; auxiliary crane; carrier barges; and semi-submersible ships in the 5,00 to 30,000 ton range. 43 PLA naval logisticians recommend the use of containers for bulk cargo as well as equipment – including wheeled and tracked vehicles to enable rapid loading and unloading. The Navy has several comprehensive supply ships, and new large amphibious warfare ships to support strategic delivery; however, supply and oiler ships are currently a weak link in Navy long-range accompanying support. The Navy currently has approximately 18 supply ships, which is a low ratio to first-line ships for a Navy with global ambitions. 44 The Navy reportedly has more construction planned to improve support capabilities. The Type 901 comprehensive supply ship has a sophisticated logistics support system that allows real time monitoring via data link of consumption and remaining stocks of all ships under its assignment. The Navy's newer amphibious ships are most suitable for long-range delivery of forces compared to older amphibious ships. The Type 071 amphibious dock ship (LPD) is the Navy's newest and most capable amphibious warfare ship for delivering forces.

Current Navy Supply and Transport Ships				
Ship	Type/Tonnage	Maximum	Capability	Estimated
		Speed		Inventory
Type-901	Fast Combat	25 knots	Fuel, water, dry	2
	Support		cargo; medical	
	Ship/45,000		support; 2 x Z-8	
			helicopters	

⁴³ Liu Gang (刘刚) and Yu Pengcheng (虞鹏程), "关于组建快速动员海运力量的思考" (Our Reflection on the Quick Organization of Military Sealift Reserve Forces"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology), Issue 3 2014, pp. 1-3

⁴⁴ The US Navy has a ratio of 1 supply ship to 5 supported ships: Liu Baoxin (刘宝新) and Su Chunhua (苏春华), "军 事装备的水路集装箱运输研究" ("Research on Maritime Container Transportation of Military Equipment"), 物流 技术与应用 (Logistics Technology and Application), January 2018, pp. 124-126 see also Conor M. Kennedy, "China Maritime Report No. 4: Civil Transport in PLA Power Projection," U.S. Naval War College, December 2019

Type- 903/903A/908	Replenishment Ship	20 knots	Fuel, water, cargo; 1 Z-8 or Z-9 helicopter	2/6/1
Type- 904/904A/904B	General Stores/10975	22 knots	Not capable of underway replenishment; Primarily resupply offshore garrisons; helipad	2/1/2
Type-905	Replenishment Oiler	18 knots	helipad	2
Type 071	LPD/25,000	25 knots	500-800 troops & 60 amphibious IFVs; 4 x Z-8 transport helicopters; 4 x Yuyi LCAC	5; plans for total of 6
Type 075	LHD/40,000	23 knots	30 helicopters; can provide command and control	One under construction

<u>Logistics Support to Amphibious Landings</u>

The US Department of Defense's Annual Report to Congress assess that the PLA does not currently have the amphibious lift required to deliver first echelon campaign forces to conduct a full-scale invasion of Taiwan. However, the PLA is examining methods to provide logistics support to an island landing campaign. In addition to seizing a port by the first echelon group army, these methods include construction of floating piers and elevated fixed piers for RORO ships to unload equipment and supplies. Another method would employ a floating maritime transport platform. This method would have transport ships unload equipment and supplies on the transfer platform for lightering to unloading areas at the support area on the shore. These methods rely on a landing base secured by a first echelon group army. Civilian cargo ships could be used at offshore transfer areas to offload supplies to smaller landing craft for ship-to-shore lightering.⁴⁵

The PLA believes that civilian semi-submersible transport vessels could support overseas military logistics and strategic delivery with their ship-to-shore landing capability. The ships' large flat deck can carry amphibious vehicles and air cushion landing craft if a port or wharves are not available for unloading. Semi-submersibles as well as other suitable civilian ships

⁴⁵ Department of Defense, "Military and Security Developments Involving the People's Republic of China 2019," available from https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019 CHINA MILITARY POWER REPORT.pdf, accessed January 29, 2020

carrying fuel supplies could use floating or underwater pipelines to pump fuel to the shore. As of 2016 there were 13 semi-submersibles in Chinese civilian.⁴⁶

In addition to increasing the use of containers to ship military material, a PLA source recommends developing the capability to unload containers without a terminal. This includes the development of auxiliary crane ships, specialized unloading and transport equipment to allow the unloading of containers without a terminal or wharf.⁴⁷

The PLA considers the civil fleet lacking the capabilities for amphibious force delivery, equipment and material unloading without a wharf, at sea roll-off, hoisting and load change, and sea-to-shore large-scale pipeline unloading. In addition, active or reserve specialized technical personnel need to supplement the civilian crews; however, the PLA assesses specialized reserve personnel are too few.⁴⁸

Civilian Maritime Strategic Delivery Support Fleet

The PLA can mobilize large and medium state-owned civil shipping enterprises to support overseas logistics and strategic delivery. The PLA estimates the requirement to mobilize at least 100 civilian vessels in an emergency, as well as using civilian ships to preposition equipment and supplies. There are two methods of civilian ship mobilization: agreement mobilization is employed to mobilize civilian ships for non-war maritime support missions; compulsory requisition is employed in an emergency to mobilize civilian ships into the active force as reserves. China established the first national maritime strategic delivery support fleet in October 2012 based on the China Shipping Group (now merged with COSCO). The joint logistics force has identified civilian ships built to military specification for mobilization.⁴⁹

The strategic delivery support fleet is a component of the national strategic delivery support force. It is a reserve component formed from large shipping enterprises - China COSCO Shipping, Hainan Strait Shipping Company, China National Offshore Oil Corporation, and China Shipbuilding Industry Corporation for example - responsible primarily for force transport and logistics support. They are formed into a three-tier structure – "general corps (总队)," "group (大

⁴⁶ Liu Gang (刘刚), "我国半潜式运输船动员需求及能力展望" ("Prospect and Demand for Mobilization of Semisubmersible Carriers in China"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology) Issue 3 2015, pp. 1-3

⁴⁷ Liu Baoxin (刘宝新) and Yuan Mu (袁沐), "基于 SWOT 分析的军事装备水路集装箱运输发展策略研究" ("Research on the Development Countermeasures of Military Equipment in Waterway Container Transportation Based on SWOT Analysis Method"), 物流科技 (Logistics Sci-Tech) No.7, 2018, pp. 134-136

⁴⁸ Liu Gang (刘刚) and Yu Pengcheng (虞鹏程), "关于组建快速动员海运力量的思考" (Our Reflection on the Quick Organization of Military Sealift Reserve Forces"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology), Issue 3 2014, p. 3

⁴⁹ Liu Gang (刘刚) and Yu Pengcheng (虞鵬程), "关于组建快速动员海运力量的思考" (Our Reflection on the Quick Organization of Military Sealift Reserve Forces"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology), Issue 3 2014, pp. 2-3; "无锡联勤保障中心积极做好新下水半潜船"民参军"各项工作" ("Wuxi Joint Logistic Support Center actively completes the work of "people's participation in the army" for newly launched semi-submersible ships"), available from http://www.81.cn/jfjbmap/content/2017-04/16/content_174964.htm, accessed January 25, 2020

 $\mbox{$\mathbb{K}$}$)," and "squadron ($\mbox{$\mathbb{H}$}$)." The civilian fleet is also required to support offshore and open sea offensive and defensive operations. ⁵⁰

The Air Force has relied on civilian shipping as well as aircraft to support units stationed at bases in the South China Sea. The Air Force experience has reinforced other PLA sources that problems exist with mobilization and employment of civilian shipping. The Air Force complains that Navy transport capabilities are inadequate and at best can only support the Navy. The Air Force has found coordination of civilian ship and aircraft mobilization through the various relevant military and civilian organizations difficult and confusing. The Air Force has also found the capability of civilian shipping to support its transportation requirements is limited with regards to large RORO ships, oil tankers, container ships as well as large transport aircraft. Contributing to mobilization issues is the required civilian vessel or aircraft could be deployed anywhere in the world when needed. The transport of fuel and particularly ammunition create special transport problems for civilian ships as they require loading and unloading at special ports with specialized handling requirements, transport on special ships, and cannot be mixed with personnel. PLA sources have proposed a four-level cross-sea delivery system to provide logistics support to South China Sea bases. This system would employ the mainland as the rear base; Hainan as the "pivot base (枢纽基地 – a key central point);" Xisha as the forward base; and Nanshan as the front support. This would include expanding transportation, supply and container handling facilities and the use of the Guangdong Hainan Railway for military shipments to Hainan.⁵¹

A PLA article from 2017 noted that the civilian shipping force needs improved training for wartime operations and training assessment standards to ensure the overall quality of the civilian force. PLA sources complain that the commercial enterprises are focused more on business than military related training and have not established the training required under the National Defense Transportation Law. Training issues include training organizations with designated personnel have not been established to formulate training requirements and plans, and crews are not trained for skills required to operate under combat conditions. The PLA has made proposals to improve training organization to include establishing training supervision and guidance for the strategic delivery support fleet; annual assessments of the civilian fleet to improve quality; establishment of a training department at the general corps, a training section at the group, and a training group at squadron to ensure training requirements are met. However, it is not known whether any proposals have been implemented. PLA sources also recommend

_

⁵⁰ He Guoben (何国本) et al, "战略投送支援船队训练现状及对策" ("Current Situation and Countermeasures of Strategic Projection Support Fleet Training"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 19 No. 5 May 2017, pp. 1-4; Liang Feng (梁峰) et al, "关于我军海上预置能力建设的思考" ("Thoughts on the Construction of Our Army's Maritime Pre-positioning Capability"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 20, No. 6, June 2018, pp. 48-49

⁵¹ Liu Yonghua (刘永华) et al, "空军部队南海岛礁驻训水路投送问题研究" ("Maritime Projection for PLA Air Force Troops of Training in South China Sea Islands and Reefs"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 7 July 2019, pp. 10-13

⁵² He Guoben (何国本) et al, "战略投送支援船队训练现状及对策" ("Current Situation and Countermeasures of Strategic Projection Support Fleet Training"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 19 No. 5 May 2017, pp. 1-4

increased training of mobilized civilian shipping with the Navy focused on logistics support, overseas delivery and wartime operations.⁵³

The table below lists civilian ship missions and mission relevant ships to support the PLA. Civilian ships require some modifications including deployment of specialized military communications equipment; living areas for military personnel augmentation; medical facilities; improvements to ship structure and performance such as reinforcing decks or preparing helicopter landing sites; and firefighting and rescue equipment.⁵⁴

Civilian Ship Support Missions ⁵⁵			
Mission Purpose	Support Task	Applicable Ship Type	
Transportation and Delivery	Conduct joint implementation of troop, equipment and material supply transportation support	Passenger RO/RO ship or vehicle RO/RO ship, multi- purpose ship, container ship, bulk cargo ship, general	
	support	cargo ship, oil tanker	
	Landing and unloading support for organic units	Semi-submersible barge (ship) or heavy cargo carrier, multi-purpose ship or bulk carrier, decked barge, tugboat	
At Sea Replenishment	As a supplement to comprehensive supply ships, dry and liquid replenishment for maritime fleet	Oil tanker, multipurpose or container ship	
Medical Support	As a supplement to the standard medical service equipment, implement rescue and transfer of patients, early treatment and evacuation support for large numbers of patients	Passenger RO/RO ship (refitted as health transport ship), container ship (refitted as hospital ship), high-speed passenger ship and maritime motorized fishing boat (refitted as rescue boat), rescue/salvage boat	
Engineering Support	As a supplement to military auxiliary ships, assist in port and wharf repair, channel dredging and obstacle clearing, etc.	Tugboat, decked barge, salvage boat	

-

⁵³ Liu Gang (刘刚) and Yu Pengcheng (虞鵬程), "关于组建快速动员海运力量的思考" (Our Reflection on the Quick Organization of Military Sealift Reserve Forces"), 国防交通工程与技术 (National Defense Transportation Engineering and Technology), Issue 3 2014, p. 4

⁵⁴ Wang Hewen (王和文), "新形势下推动民船贯彻国防要求体系发展的思考" ("Thoughts on Promoting Development of Civilian Ship Carrying Out National Defense Requirements Under New Situation"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 17 No. 11 November 2015, pp. 22-26

⁵⁵ Wang Hewen (王和文), "新形势下推动民船贯彻国防要求体系发展的思考" ("Thoughts on Promoting Development of Civilian Ship Carrying Out National Defense Requirements Under New Situation"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 17 No. 11 November 2015, p. 23

Equipment Technical Support	Implement maintenance,	Tugs, semi-submersibles
	towing and other equipment	(barges) or heavy cargo
	technical support for ship	carriers, crane boats
	repair, as well as helicopter	
	relay support, etc.	
Safeguard Maritime Interests	Participation in protecting	Maritime motorized fishing
	maritime rights and other	boats
	support operations	

The PLA has tested mobilization of civilian shipping in training with the active force, albeit on a small scale. Several examples include the following:

- In 2014 a China Shipping Tanker oil tanker refueled Navy ships in the East China Sea.⁵⁶
- The 2016 mobilization of a 5,000-ton civilian tanker as part of a "strategic maritime delivery group (战略海运大队)" in training with the active force in the East China Sea. The exercise included the ship preparing quarters for military personnel, installment of the prepositioned piping system for use with military ships and switching to prepositioned military communications equipment. The maritime transport group mainly consisted of passenger RORO, oil tanker, and container ships. Multiple departments were involved in the mobilization. ⁵⁷
- In March 2017 a maritime emergency delivery exercise occurred based at the Port of Guangzhou including the "5th strategic maritime delivery group (战略海运五大队)"⁵⁸ from the Sinotrans & CSC Holdings Co., Ltd. The Sinotrans company and CSC RORO Logistics Co., Ltd. had worked previously with the Military Representative Office to modify two RORO ships under construction to accommodate heavy equipment.⁵⁹
- A ship from Sinotrans & CSC Holdings Co., Ltd provided at sea replenishment of dry cargo. During exercises by the Southern Theater Command Navy between May and June 2019, a civilian ship replenished two Navy ships in parallel. The Naval Research Institute and the Northern Theater Command Navy had developed a resupply module that can easily be installed on a civilian ship to resupply Navy ships.⁶⁰

⁵⁶ Hu Shanmin(胡善敏) and Yang Jun (杨俊), "民船首次对军舰实施海上输油补给" ("Civilian Ships Supply Warships with Oil at Sea for the First Time"), available from https://china.huanqiu.com/gallery/9CaKrnQh8ap, accessed February 1, 2020

⁵⁷ "战略投送支援船队开进联合演练场" ("Strategic Delivery Support Fleet Enters Joint Exercise"), available from http://www.81.cn/jfjbmap/content/2016-09/11/content 156271.htm, accessed January 31, 2020

⁵⁸ Also identified are a 7th Strategic Maritime Delivery Group and an 8th Strategic Maritime Delivery Group based on the Bohai Ferry Group Co., Ltd. which has, 11 RORO ships.

⁵⁹ Lu Wendi (鲁文帝), "一场海上应急投送演练在广州港拉开战幕" ("An Emergency Maritime Delivery Drill begins in the Port of Guangzhou"), available from http://www.81.cn/gfbmap/content/2017-o3/28/content_173420.htm, accessed January 31, 2020

⁶⁰ "Chinese PLA Navy uses civilian ship to supply warships," Global Times, available from http://www.globaltimes.cn/content/1170225.shtml, accessed January 29, 2020

Air Force Strategic Delivery Capabilities

The Air Force is fielding and developing larger transport aircraft to support strategic delivery. Air transport can deliver supplies and personnel over great distances more rapidly than ships. The Army Aviation force is expanding as well, with new transport helicopters fielded, and a heavy lift helicopter planned for delivery of forces and supplies suitable for operations across China's borders. The Y-20 medium transport entered military service in 2016 and can reportedly carry the 58-ton Type 99A2 main battle tank. Chinese press reports speculate that the Air Force will eventually receive 100 to 400 or more Y-20s. Large numbers of this or future large transport aircraft are required if the PLA plans on a significant rapid strategic air delivery capability. In addition, the Air Force has the Y-8C and Y-9 medium transport. A Y-30 transport aircraft, reportedly capable of a larger payload than the Y-9, is in development.⁶¹

Current Air Force Heavy and Medium Transports ⁶²			
Aircraft	Maximum Payload	Maximum Range	Estimated Inventory
Il-76/TD Transport	44 tons	4500 km/2795 miles	24
Y-20/A Transport	66 tons	4400 km/ 2734 miles	9
Y-9 Transport	20 tons	5200 km/3231 miles	24
Y-8C Transport	22 tons	5615 km/3032 miles	64

The Air Force and Naval Air Force have a small number of refueling for extending aircraft ranges. China is reportedly developing Y-20 tanker variant.⁶³

Current Air Force and Navy Refueling Tankers			
Refueling Tanker	Refueling Capacity	Combat Range	Estimated Inventory
H6-U / H6-DU	18.5 tons	5600 km/3480 miles	10 / 5
II-78	65 tons	7600 km/4722 miles	4

The Air Force has studied US military use of unmanned vehicles and precision air delivery to provide logistics support in Afghanistan.⁶⁴ In 2017 the PLA Air Force began experimenting with delivering supplies to remote units with unmanned aerial vehicles (UAV).

⁶¹ Xinhua, July 7, 2016; WantChinaTimes, March 5, 2014; — Zhao Lei, "Y-20 gives air power push," available from http://usa.chinadaily.com.cn/epaper/2013-01/28/content 16180440.htm, accessed January 3, 2020; Zhao Tao, "Heavy-duty Y-20 military airlifter weighs in at show," available from http://eng.mod.gov.cn/DefenseNews/2014-11/13/content 4550942.htm, accessed January 3, 2020; Zhao Lei, "Transport planes boost PLA capabilities," available from http://usa.chinadaily.com.cn/a/201712/20/WS5a39a438a31008cf16da24a8.html, accessed January 3, 2020; "China, Russia progress in talks to produce heavy-lift helicopters," available from http://www.globaltimes.cn/content/1066343.shtml, accessed January 3, 2020; see also Cristina L. Garafola, Timothy R. Heath, "The Chinese Air Force's First Steps Toward Becoming an Expeditionary Air Force." RAND Corporation, March 2017

⁶² Based on a database maintained by Lawrence Sid Trevethan; Andreas Rupprecht, *Modern Chinese Warplanes:* Chinese Air Force – Aircraft and Units, Houston: Harpia Publishing, 2018

⁶³ Zhang Tao, "H-6U aerial refueling tanker improves PLA Air Force's long-range raid capability," available from http://english.chinamil.com.cn/news-channels/china-military-news/2015-09/08/content 6671974.htm, accessed January 3, 2020

⁶⁴ Zhao Xiangang (赵先刚), "打通保障链"最后一公里"" ("Open the 'Last Mile' of the Support Chain"), available from http://www.81.cn/jfjbmap/content/2019-10/15/content 245287.htm, accessed January 29, 2020

The Air Force Logistic Department partnered with the civilian company SF Express to use a medium-size drone to provide supplies by parachute. The Air Force viewed this experiment as part of the intelligent battlefield revolution.⁶⁵

Civilian Airline Strategic Delivery Support Fleet

The civil air fleet reserve force is an important resource to augment the Air Force's current limited strategic delivery capabilities. The CMC in 2011 incorporated the establishment of a strategic delivery reserve force in the 12th Five-Year Plan. China began establishing a strategic delivery support fleet for the civil aviation force in 2013. This force was initially based on the China Southern Airlines and China Eastern Airlines followed by other air transport enterprises. Currently there are 15 civil support fleets based on major airlines to meet increasing requirements for overseas non-war and wartime operations. The civilian airlines support fleet has supported evacuations from Libya and international disaster relief operations such as the Indian Ocean tsunami and earthquakes in Haiti and Chile.⁶⁶

China's civilian passenger aircraft numbers by airline are shown in the table below. Air transport of personnel is the most rapid method of delivery and could combine in the future with prepositioning of equipment to provide an overseas rapid reaction capability. According to the PLA, China currently has 143 civilian large and medium cargo aircraft that would meet PLA standards for overseas strategic delivery. These civilian cargo aircraft have a total payload of 6,200 tons and include sixty 737 and thirty 757 and twenty-six 777 Boeing cargo aircraft. The indigenous C919 airliner reportedly will constitute a large proportion of the future civil air fleet.⁶⁷

China's Major Civilian Airlines and Passenger Aircraft Inventory		
Airline Company	Number of Aircraft	
Air China	662	
China Southern	786	
China Eastern	642	
Hainan Airlines	740	
Xiamen Air	116	
Shenzhen Airlines	116	
Sichuan Airlines	130	

⁶⁵ Zhang Mimi (张汩汩) and Feng Guobao (冯国宝), "我军首次运用无人机实施联合补给演练" ("Our Army Uses UAVs for the First Joint Supply Exercise"), available from http://www.81.cn/jwgz/2018-01/27/content 7923080.htm, accessed January 29, 2020

⁶⁶ Zhang Xin (张昕) et al, "依托战略投送支援机队实施海外航空战略投送" ("Overseas Aviation Strategic Projection Using Strategic Projection Support Fleet"), 军事交通学院学报 (Journal of Military Transportation University), Vol 20 No. 4 April 2018, pp. 5-7 and 12; Sun Zhenlan (孙振岚) and Hai Jun (海军), "我国民航运输业建设现状与未来发展" ("On the Present Situation and the Future Development of the Construction of Civilian Aviation Transportation in China"), 国防交通工程与技术 (National Defense Traffic Engineering and Technology) Vol. 17 No. 01 January 2019, p. 1

67 Sun Zhenlan (孙振岚) and Hai Jun (海军), "我国民航运输业建设现状与未来发展" ("On the Present Situation and the Future Development of the Construction of Civilian Aviation Transportation in China"), 国防交通工程与技术 (National Defense Traffic Engineering and Technology) Vol. 17 No. 01 January 2019, pp. 1-3

Supporting non-war missions does not appear to pose a great problem for Chinese civilian airlines. However, the PLA recognizes that strategic air delivery missions are difficult and complex without overseas airbases or access to airfields in friendly countries. PLA writings suggest using airfields in friendly nations in five strategic regions – Africa, the Middle East and Central Asia, South Asia, Southeast Asia, and Central and South America – to create a system of bases with a central hub and spoke airport structure. PLA sources believe the primary emphasis for this system of airfields would be in Africa, Central and South America with greater distances from China. As part of this hub and spoke system, the central base would provide comprehensive support to rest personnel, supply fuel, ground service, aviation maintenance and storage. Trunk centers would provide basic support, while branch stations would provide temporary support functions during technical stops.⁶⁸

The PLA identifies significant problems with coordination of the strategic air delivery system, with top-level design and direction in the area of civil air transport integration with the military as lacking. Transport Delivery Departments exist in the theaters, the joint logistic support base and centers, but the division of responsibilities and workflow are not entirely resolved. PLA sources recommend the establishment of a full-time organization to coordinate strategic delivery support fleet overseas missions. Strategic air delivery requires the coordination between military and government departments, civil airlines, public security, and customs for example. Some sources discuss the US Air Force Military Airlift Command as an example of a centralized command. Such a command mission could become part of the CMC Logistic Support Department's Transport and Delivery Bureau since the Joint Logistic Support Force plays a key role in strategic delivery, ⁶⁹

Additional issues with strategic air delivery include the following: an inadequate ground support system with limited quantities of loading and unloading equipment, where loading and unloading capabilities are critical to rapid delivery of forces and equipment; poor management; weak specialized support teams; a requirement to ensure access to aeronautical charts and meteorological support data for overseas air operations; special training for civilian air crews supporting the military, especially during wartime missions; and out of date military standards for civilian equipment production.⁷⁰

Civilian aircraft are mobilized to transport new recruits, units on trans-regional exercises, units responding to floods or earthquakes, and for logistics support. The following are several examples of civilian aircraft support to the PLA:

⁶⁸ Zhang Xin (张昕) et al, "依托战略投送支援机队实施海外航空战略投送" ("Overseas Aviation Strategic Projection Using Strategic Projection Support Fleet"), 军事交通学院学报 (Journal of Military Transportation University), Vol 20 No. 4 April 2018, p. 7

⁶⁹ Zhang Xin (张昕) et al, "依托战略投送支援机队实施海外航空战略投送" ("Overseas Aviation Strategic Projection Using Strategic Projection Support Fleet"), 军事交通学院学报 (Journal of Military Transportation University), Vol 20 No. 4 April 2018, p. 7

⁷⁰ Zhang Fang (张方) et al, "加强空中战略投送地面保障体系建设的思考" ("Thoughts on Accelerating Ground Support System Construction for Air Strategic Projection"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 19 No. 4 April 2017, pp.1-4

- In January 2019 the Air Force called for emergency support from the Joint Logistic Support Force. The JLSF sent relief by air and road, with civilian aircraft mobilized to delivery supplies.⁷¹
- The former Shenyang Military Region conducted a large force projection exercise "Tengfei 2011 (腾飞-2011)" using civilian aircraft in 2011. Air China and China Eastern Airlines transported troops and supplies including ammunition.⁷²
- The "Firepower-2015- Qingtongxia A" trans-regional exercise included transporting units employing China Eastern Airlines aircraft.⁷³

Rail and Road Delivery

The PLA conducts long-range trans-regional exercises employing road and rail transport within China, as well as movement to foreign countries for combined exercises as described above. Rail or heavy equipment transport is often used for movement over long distances. The PLA could employ road and rail movement to support operations in Central Asia for example, with permission of the transited countries or PLA control of the lines of communication. The theater commands have Dispatch Centers to coordinate transport between various Joint Logistic Support Centers' Military Representative Offices embedded in the rail system to coordinate and prioritize military rail transport. The PLA does not always use permanent rail transfer points (RTP) for loading and unloading equipment. Mobile ramps and field expedient means - for example ramps made from wooden railroad ties - are used for loading and unloading equipment. The use of mobile and field expedient ramps in place of fixed RTPs allows the PLA to load or unload in the field as well as attempt to avoid detection.⁷⁴

Units also road march, particularly wheeled vehicles. Heavy equipment transporters (HET) are an important peacetime and wartime transport asset. HET units are subordinate to the Joint Logistic Support Force and the Army for strategic delivery of heavy and tracked equipment. These transport brigades and regiments, as well as mobilized civilian equipment, are becoming increasingly important as the PLA mechanizes. Employment of these transportation units requires coordination between multiple departments. The PLA inventory includes an

⁷¹ Huang Yuliang (黄余良), "联勤保障部队组织冬季实战化演练" ("Joint Logistics Support Force Organizes Winter Combat Training"), available from http://mod.gov.cn/power/2019-01/07/content 4833748.htm, accessed February 1, 2020

^{72 &}quot;解放军演练调民航客机投送兵力 军人登机前须验枪" ("People's Liberation Army Exercises Tune Civil Aviation Passenger Jets' Projection Strength"), available from http://military.people.com.cn/GB/15220334.html. Accessed February 1, 2020

⁷³ Zhang Zhenxing (张振兴) and Li Ke (李科), ""火力-2015•青铜峡 A"跨区演习拉开战幕" (""Firepower-2015 - Qingtongxia A" Cross-region Exercise Kicks off"), available from http://www.81.cn/syjdt/2015-06/24/content 6553109.htm, accessed February 2, 2020

^{74 &}quot;军事运输: 更快更远更智能" ("Military Transportation: Faster, Farther, Smarter"), available from http://www.81.cn/ifjbmap/content/2019-01/14/content-225216.htm, accessed December 13, 2019; :东部战区某调度中心挖掘人员和制度潜力" ("Exploiting Personnel and System Potential in a Dispatch Center in the Eastern Theater"), available from http://www.xinhuanet.com/mil/2019-08/26/c_1210257264.htm, accessed December 13, 2019; "东部战区某调度中心协调军地破解跨局投送难题" ("An Eastern Theater Dispatch Center Coordinates Military and Local Forces to Solve the Problem of Cross Bureau Delivery"), available from http://www.chinamil.com.cn/zg/2019-09/18/content-9684254.htm, accessed December 13, 2019

unknown number of HETs, and civilian HETs are mobilized when required.⁷⁵ The PLA also fields a large albeit unknown number of motor transport brigades and regiments for strategic delivery by road.⁷⁶

The PLA assesses that the current numbers of military and civilian HETs are insufficient to support emergency requirements. Large numbers of civilian HETs would need to be mobilized for wartime employment. The PLA requires additional construction of military and civilian HETs to support transportation requirements. Civilian enterprises contain large numbers of HETs, but many including newly produced vehicles do not meet military requirements for movement of armor. Additionally, civilian HETs are not evenly distributed throughout China, with HETs concentrated in eastern and southern coastal regions, with few in the north or west. Semi-trailers that are suitable for military use often require modification by the receiving unit. PLA sources assess the current vehicle mobilization system as immature. Problems with vehicle mobilization include the following issues: a National Defense Mobilization Department is established but civilian organizations at the local levels are inadequate for the task; the mobilization information system requires greater integration between the military and civilian networks as well as improvements in civilian information systems; a comprehensive database to track civilian vehicle and equipment support resources for precision mobilization; increased civilian training with the military; poor communications interoperability between HET units and supported units, and occasional unavailability of the Beidou satellite navigation and the dynamic monitoring system of the transportation units hindering operations.⁷⁷ It is unknown if these problems are being addressed.

7

Transportation University), Vol. 17 No. 6 June 2015, pp. 11-13 and 40

^{75 &}quot;我军首支重装备运输部队亮相 "大家伙"这样上高原组图" ("The First Heavy Equipment Transportation Unit of Our Army Appears on the Plateau like "Big Guy"'), available from http://photo.81.cn/pla/2016-2/27/content_7425199.htm, accessed December 13, 2019

⁷⁶ "磨砺能打胜仗的通途劲旅" ("Thoroughfare Strong Brigade Grinding Can Win the War"), available from http://www.81.cn/jfjbmap/content/2019-09/02/content 242319.htm, accessed December 13, 2019; Ren Jie (任) et al, "军民融合履带式重装备公路运输力量建设" ("Construction of Road Transportation Force for Tracked Heavy Equipment in Conditions of Civil Military Integration"), 军事交通学院学报 (Journal of Military; Transportation University), Vol. 17 No. 6 June 2015, pp. 11-13 and 40; Wang Chungang (王春刚) et al, "提高陆军 重装备公路运输力量运用效能的思考" ("Thoughts on Improving Use Efficiency of Army Heavy Equipment Road Transport Capacity"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 11 November 2019, pp. 5-8; a Chinese forum site posted an order of battle with over 60 motor transport regiments 77 Wang Xianfeng (王仙凤) and Wu Kehua (吴克华), "军民融合战略下车辆装备保障力量动员问题探析" ("Vehicle Equipment Support Force Mobilization Under Civil-military Integration Strategy"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 19 No. 5 May 2017, pp. 28-31 and 60; Li Qinzhen (李勤真) et al, "基于军民融合的重装备战略投送公路支援车队建设研究" ("Research on Construction of Heavy Equipment Strategic Delivery Highway Support Fleet Based on Civil Military Integration"), 物流科技 (Logistics Technology) No. 1 2019, pp. 152-155; Wang Chungang (王春刚) et al, "提高陆军重装备公路运输力量运用效能的思考" ("Thoughts on Improving Use Efficiency of Army Heavy Equipment Road Transport Capacity"), 军事交通学院学报 (Journal of Military Transportation University) Vol. 21 No. 11 November 2019, pp. 5-8; "磨砺能打胜仗的通途劲 旅" ("Thoroughfare Strong Brigade Grinding Can Win the War"), available from http://www.81.cn/jfjbmap/content/2019-09/02/content 242319.htm, accessed December 13, 2019; Ren Jie (任) et al, "军民融合履带式重装备公路运输力量建设" ("Construction of Road Transportation Force for Tracked Heavy Equipment in Conditions of Civil Military Integration"), 军事交通学院学报 (Journal of Military;

Logistics Weaknesses and Modernization Requirements

PLA theorists assess that overseas combat operations will have high consumption rates and strategic delivery requirements. These sources assess that the main direction will be maritime requiring a strong naval logistics support capability augmented by civilian mobilization. Military and civilian air strategic delivery will also be important for global operations, while road and rail movement can support operations along China's periphery.⁷⁸

The PLA recognizes deficiencies in logistics support that will adversely impact China's ability to conduct and sustain larger expeditionary operations, particularly combat operations. Current logistics problems supporting small peacekeeping units reinforces PLA analysis that logistics support is inadequate. The PLA plans to correct identified issues and develop capabilities commensurate with the intention to expand expeditionary operations. While it appears certain that China will establish a network of logistics support bases as part of the solution for overseas support, PLA sources recognize that bases can lead to negative international reactions and high financial costs. Proposals for creating artificial islands, floating bases, and maritime prepositioning could avoid some of the issues with bases on foreign soil. The PLA is analyzing foreign logistics and strategic delivery capabilities for solutions.⁷⁹

PLA sources asses both military and civilian logistics and maritime, air, road and rail transport resources are inadequate to support future expeditionary operations, especially combat actions. The National Defense Transportation Law provides for the mobilization of civilian assets and incorporation of military standards into civilian construction. However, civilian enterprises are not fully complying with the law, many civilian transportation assets do not meet military requirements, and PLA reporting highlights the need for revisions to the law. The mobilization system is complex and requires centralization. A problem stressed by multiple PLA sources is that civilian personnel are not adequately trained to support PLA missions, particularly combat actions. While civilian transportation assets do train with the active force, PLA sources assess the training and integration with the active force as inadequate, limited in scale and not routine.

Future modernization requirements to address logistics weaknesses revolve in part around new – or at least new to the PLA - technologies to improve precision logistics support in general. PLA logisticians believe these technologies will provide for a modern precision logistics system that can better support global operations. These technologies include the following: intelligent driving and autonomous vehicles; automatic identification technologies such as RFID chips and QR codes; data mining technology; the Internet of Things; Big Data; cloud computing; 5G mobile communications; and artificial intelligence technologies. The PLA believes intelligent logistics can provide timely decision making and enhanced precision logistics to include

⁷⁸ Liu Jiasheng (刘嘉生) et al, "基于国家安全需求的战略投送载运工具建设" ("Development of Carriers for Strategic Projection in Response to National Security Needs"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 21 No. 2 February 2019, p. 10

⁷⁹ Liu Jiasheng (刘嘉生) et al, "基于国家安全需求的战略投送载运工具建设" ("Development of Carriers for Strategic Projection in Response to National Security Needs"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 21 No. 2 February 2019, pp. 9-10

monitoring combat logistics requirements, casualties, warehouse allocation, sorting and packing, automatic loading and unloading, and rapid long-range delivery.⁸⁰

The PLA has identified specific areas requiring improvement for a logistics capability to support expanding overseas operations. These areas include the following: ⁸¹

- Establish a network of comprehensive logistics bases at key ports and airbases to enable timely support to overseas operations in peacetime and war.
- Prepositioning of equipment at bases, on ships, artificial islands or floating bases to support the rapid deployment of units.
- Expanded integration of military standards into civilian transportation construction
- Rapid and self-loading and unloading capabilities, including palletized and containerized systems
- Development of large strategic fast delivery ships and aircraft for long-distance rapid transport of military forces; development and deployment in large numbers of specialized military and civilian heavy equipment transports and large cargo vehicles
- Big data interconnected logistics command information system; construction of a military transportation command platform linking the CMC, theater (services) and units; improve precision logistics capabilities to track and identify material; self-monitoring, diagnosis and repair of transportation equipment; intelligent delivery decision-making system and autonomous logistics systems; Beidou satellite and geographic information system to accelerate and perfect the construction of dynamic monitoring system of military transportation
- Improved civilian strategic maritime delivery with high-speed RO/RO ships, oil tankers, and increased modern civilian shipping built to military standards; increased number of navy comprehensive supply ships and tankers that can maintain speed with warships; deepen civil-military integration to modernize and enlarge civilian logistics and transport systems by creating a strategic transport system with the military transport as the main body, the national transport system in support, and civil transport system as a supplement to support the military's expanding overseas missions
- Improved strategic air delivery including unmanned platforms, precision airdrop technology and hypersonic transport aircraft; construction of a large fleet of heavy Air Force transport aircraft
- Logistics equipment capable of operating in special and extreme environments

The PLA has a complex organizational structure coordinating strategic delivery of forces and material. The PLA has examined US overseas logistics and strategic delivery, as well as Russian

⁸⁰ Liu Xiaobao (刘晓宝) et al, "让军事物流建设紧扣时代脉搏" ("Let the construction of military logistics keep pace with the pulse of the times"), available from http://www.81.cn/jfjbmap/content/2019-11/28/content 248592.htm, accessed on January 29, 2020

⁸¹ Liu Jiasheng (刘嘉生) et al, "基于国家安全需求的战略投送载运工具建设" ("Development of Carriers for Strategic Projection in Response to National Security Needs"), 军事交通学院学报 (Journal of Military Transportation University), Vol. 21 No. 2 February 2019, pp. 10-13; Liu Baoxin (刘宝新) and Yuan Mu (袁沐), "基于SWOT 分析的军事装备水路集装箱运输发展策略研究" ("Research on the Development Countermeasures of Military Equipment in Waterway Container Transportation Based on SWOT Analysis Method"), 物流科技 (Logistics Sci-Tech) No.7, 2018, pp. 134-136

support for expeditionary operations in Syria. PLA writers discuss the US Navy's Military Sealift Command, and the US Air Force's Military Airlift Command and Civil Reserve Air Fleet as examples of centralized command of strategic delivery resources. The PLA could empower greater command responsibilities for strategic delivery to the CMC's Logistic Support Department's Transport and Delivery Bureau and the Joint Logistic Support Force to improve centralized command and coordination.⁸²

Conclusions

The PLA considers an overseas logistics support and strategic delivery capability as a critical capability to conduct expeditionary operations. PLA strategist also view strategic delivery as a strategic deterrent; an important factor in determining the outcome of a war; and an important means for gaining global influence. Civil-military integration in the logistics field allows the PLA to leverage the business sector to enhance joint logistics capabilities, although identified problems in civilian support require rectification. The National Defense Transportation Law provides the legal basis for mobilization of civilian transportation and incorporation of military standards into civilian construction. However, civilian enterprises are not fully complying with the law, standards for civilian construction require updating, as well as revisions to improve the law.

Numerous PLA sources assess that the current logistics system, even with augmentation by civilian assets, is not adequate to meet future requirements to support expeditionary operations. PLA researchers are examining methods to address logistics deficiencies. It appears certain that China will establish additional military or logistics support bases; although it appears likely China will take a measured approach adding future bases. This is in part due to the financial and material costs in establishing and maintaining overseas bases, and to allow a thorough strategic assessment as to base locations to optimally support national interests and potential military operations. It appears certain that the PLA will include prepositioning of supplies and equipment employing multiple methods – ships, bases on land, artificial islands and floating bases - to enable the rapid deployment and sustainment of expeditionary forces. Construction of Navy fast supply ships and tankers, heavy transport aircraft, heavy equipment transporters, and integration of military standards into civilian construction could dramatically improve logistics support to overseas operations. While current logistics support capabilities for expeditionary operations are inadequate, it appears likely these capabilities will improve in the mid-term.

Implications for the United States

While the PLA currently assesses its strategic delivery and logistics capabilities as weak, the future growth of these capabilities will increase its capability to operate globally during nonwar and combat actions. Current non-war military operations provide opportunities for the US

82 "俄海外军事行动后勤保障新启示" ("New Enlightenment of Logistics Support for Russian Overseas Military Operations"), available from http://news.sina.com.cn/o/2017-11-02/doc-ifynmvuq7839706.shtml, accessed January 30, 2020; "中美舰船对峙事件让美军海上补给司令部曝光" ("Sino-U.S. Ship Confrontation Exposes US Marine Supply Command [Military Sealift Command"), available from https://mil.huangiu.com/article/9CaKrnJIGgp, accessed January 30, 2020

military to work with the PLA in areas of mutual benefit such as peacekeeping and humanitarian assistance.

As China's global interests, military and logistics capabilities expand, Beijing could become more inclined to use force as it becomes confident of success. The PLA's improvements in the joint and service logistics systems will increase its capability to conduct and sustain combat overseas posing a threat to US forces and allies.

The PLA and civilian research institutes are conducting research in emerging technologies as part of civil-military integration. Advancements in these technologies can significantly enhance military and civilian logistics support and provide China with an edge in a future war if the US does not successfully compete in this technological race.

The PLA's widespread use of overseas civilian infrastructure, resources, and transportation during a conflict can make identification of military forces and targeting difficult for an opponent. These overseas civilian assets can also provide valuable intelligence and targeting information on US and allied forces.

Recommendations

Military-to-military contacts in the logistics area could provide greater insight on the Joint Logistic Support Force, its activities, and capabilities. This is a sensitive issue and would have to be accomplished with circumspection and on a completely reciprocal basis. Continued military contact on issues such as logistics support for humanitarian assistance and disaster relief can provide some conclusions on logistics capabilities for other missions.

Special attention should be placed on reviewing sales, technology transfer, and business relationships with Chinese civilian shipping and airline companies, as they are part of the reserve force to augment PLA operations globally. China's investments and operations of foreign ports provide potential bases, temporary bases, or replenishment sites for expeditionary operations. The US should develop a strategy to include a coordinated influence campaign with allies and friendly nations to counter this expansion Beijing's soft and hard power. Given the PLA logistical focus on civil-military integration the Committee on Foreign Investment in the United States (CFIUS) process should strongly examine logistics and transportation dual-use technologies to include the following areas the PLA has identified for logistics modernization efforts:

- Robotics and automation for production, warehousing and transportation
- Rapid loading, self-loading, and unloading equipment and technologies, including palletization and containerization
- Floating platform technology
- Technologies such as big data, cloud computing and artificial intelligence applicable to logistics and strategic delivery
- Precision airdrop technology
- Hypersonic aircraft

- POL/oil pipelines technologies and software that improve distribution, management of large stocks, and efficiency during peacetime; and provide resiliency during wartime
- Rapid prototyping/additive and subtractive automated manufacturing techniques to produce end-use materials in both small and high-volume production runs, including computer numerical control (CNC) automation of machine tools by means of computers executing pre-programmed sequences of machine control commands
- Supervisory control and data acquisition (SCADA) control system architecture to provide high-level process supervisory management

There are several PLA joint logistics research areas requiring additional detailed analysis. Future research areas include the following:

- Strategic delivery (air, sea and ground) requirements to sustain a PLA expeditionary force from a brigade to multiple brigades
- Navy at sea replenishment capabilities including civilian shipping augmentation
- Prepositioning plans and requirements
- Capability of civilian air, maritime and ground assets to augment PLA strategic delivery and sustainment requirements; analysis to determine the size and capability of the military and civilian HET and motor transport force
- PLA combat logistics requirements
- Capability of Russia to provide key resources, ports or airfields during a conflict.
- Logistics support to air and maritime blockade operations against Taiwan, including joint logistics requirements, and ability of the JLSF to sustain blockade forces
- PLA logistics capabilities to support an island landing campaign

OPENING STATEMENT OF ISAAC KARDON, PH.D., ASSISTANT PROFESSOR, STRATEGIC AND OPERATIONAL RESEARCH DEPARTMENT, U.S. NAVAL WAR COLLEGE

CHAIR WORTZEL: Thank you very much.

Dr. Kardon?

DR. KARDON: Thank you again to the Commissioners for having me back. I've been asked to speak on a number of topics, the first on where and how China is securing bases and other access points.

The notable exception of China's sole military base in Djibouti, the limited sea and airlift platforms discussed just now by my co-panelists are the PLA's only organic mode of projecting military power overseas.

Lacking a network of overseas bases in the short to medium term, the PLA must rely on a variety of commercial access points in order to operate beyond the first island chain. Because the PLA Navy is the service branch to which virtually all these missions fall, this testimony focuses on those port facilities.

The PLA Navy, like other navies, depends on commercial ports to support its operations overseas. The distinctive aspect of the PLAN's efforts to support a growing overseas presence, however, is its access to a large and growing number of ports partially owned and operated by PRC firms.

As of February 2020, PRC firms partially own or operate terminals at some 94 ports across the globe. A far larger number of ports, in the order of hundreds, Chinese firms have built port works, installed equipment, or dredged harbors.

Such contracted projects did not leave the Chinese firm in control of the operations of the port, and are thus excluded from analysis here of how Chinese commercial facilities may support military operations.

The organizational and geographic patterns of this ownership and operation are presented in Appendix A along with my written testimony. Geographically, the where of prospective PLAN access points can basically be read off a map, which is submitted as Appendix B.

The largest number of ports are on the Atlantic with 32, but their wide dispersal geographically on either side of that ocean and in the north means that the greatest concentration is, in fact, in the Indian Ocean and into the Eastern Med.

Ten of those are within a day's steaming distance from Malacca, eight from Hormuz, six from Suez, among others proximate to vital maritime choke points.

The how of securing control over the operations of a port and utilizing it is more complex. Concessions and investments the Chinese firms hold at these ports are commercial. The potential for close coordination between these firms and the PLA is considerable and indeed demonstrable, but the conditions under which it can occur not unlimited.

China's lack of alliances means that there are no standing legal commitments for military use from host countries. In peacetime, this may not be so problematic.

However, in the event of open conflicts, such permissions will not be easily granted and may drastically limit the PLAN's ability to secure supplies and safe harbor beyond its shores.

The state-owned enterprise versus private distinction doesn't necessarily tell us about the degree to which the firm will coordinate with the military of the state.

More significant than corporate ownership is the degree to which the firm itself controls the operations at the port. Physical capacity of the port to supply naval vessels, specific

conditions of its concession from the local port authority and the nature and scope of China's broader diplomatic and economic relations with the host country.

Majority or sole ownership of the port operators, a condition that best positions a firm to guarantee logistical support for naval operations.

In general, the terminal operator will have significant discretion in granting access for naval vessels seeking to call for warehousing and storage, bunkering as well as use of dry dock medical power and other terminal facilities.

Such arrangements are more feasible, of course, in friendly countries in which low transparency is the norm in contracting and in their governance more generally.

On the question of military-civil fusion and its improvement to the PLA's expeditionary and force projection capabilities note that central policy and law on military-civil fusion aims to forge a more substantial role for the military and the state in defining the conditions under which civilian assets and resources and resources are employed.

This is a component of a far more intense push under Xi Jinping to assert party control over aspects of commerce, society, and administration that current leadership has deemed insufficiently responsive to central authority.

The legislation, regulation, and reforms noted in my written testimony create a mechanism for the requisition of civil assets and resources with promises of reimbursement and reward for compliance as well as punishment for noncompliance.

There is a distinct call for a more integrated system in which civilian transport infrastructure and resources are built and maintained such that they can be utilized by the armed forces.

While there's no clear evidence of this practice in overseas facilities, which have been developed under commercial contracts from foreign governments, there are plausible ways that some facilities can be upgraded or maintained so as to facilitate better PLAN access.

We can summarize here by noting that the discussion among PLA logistics analysts is largely along the lines of what should be done to domestic facilities and is yet to be done adequately.

Challenges meanwhile of refueling, receiving power, munitions and meeting other specialized military needs at foreign ports are substantially greater abroad than they are in the mainland.

The PLA explicitly prefers to operate its own facilities, but because a robust network of such facilities is not in the offing in the short to medium term at least, leveraging overseas capacity is the best option facing China's logistics planners.

On the question of what China regards as the most important criteria for selecting future bases and access points for the PLA, the most significant criteria raised by military and civilian analysts in China are geographic proximity to perceived security threats, places in friendly, stable countries, places with suitable natural conditions at the port and places that are capable of adequate force protection.

An additional, more recent factor that's distinctive to the PLA is this advantage just discussed offered by the presence of Chinese enterprises on or near important port sites.

These geo-strategic considerations are typically the paramount ones for analysts. They focus on China's vulnerable lifeline through the South China Sea, Malacca, across the Indian Ocean through Hormuz, to the Gulf or through the Bab-el-Mandeb in Suez and onto the Mediterranean.

And they propose what they call "strategic strong points" stretching across the region

such that supply intervals between them are short enough to make one or more ports redundant in a crisis.

Some analysts argue that military access should adhere more closely to economic development-focused PRC foreign policy. Key nodes should straddle those places where the flows of people, capital goods, and resources are most concentrated.

This logic puts trade before the flag and suggests that locations suitable for military support should be determined by first order considerations pursuing China's commercial interests.

What we might call geo-economic and geo-strategic motivations here make different demands on priorities and resources, but they're not mutually exclusive. In fact, they dictate many of the same considerations for locating access points.

The key distinguishing criteria concern which ports have the ownership, management, and physical characteristics necessary for meaningful PLAN use and crucially, which countries have relationships with China that could support such militarization.

In response to questions on Chinese use of military diplomacy and a variety of other milto-mil engagements, I'll comment here on a narrow subset of this broad range of PLA activities.

PLAN vessels have visited at least 27 of the 94 ports under PRC operation or ownership. Perhaps more notable at 56 of the 94 PRC ports overseas, the PLAN has called it a different port in that same country.

And in 17 of those 56 unvisited ports, there was a PRC firm with a majority share and a terminal operation. This implies that diplomatic, rather than operational factors are determinative.

China either defers to the host country's preferences and seeks to downplay the military implications of its commercial enterprise's presence in that country or both.

It's also clear that many of these facilities are unsuited for military use or otherwise unable to host multiple vessels at commercial piers.

These are firm level factors that aren't directed by the PLA. As such, the data did not establish a definite link between PLA visits and the establishment of bases and access points.

Note that in other forms of military cooperation, which include training exercises, leadership visits, armed sales, et cetera facilitate greater institutional connections between the PLA and foreign militaries that showcase China's growing capabilities, confidence, and professionalism, which is of course a valuable impression to leave with foreign militaries who may consider affording greater access to more powerful PLA that may benefit their national security.

I'll close briefly with a couple implications and recommendations. First, an implication that over the long-term, PLA planners believe they will require a network of overseas bases.

For the short to medium-term, however, the dual use strong point model is ascendant. The model provides significant peacetime logistics capability and intelligence value with limited wartime utility.

Second, properly equipped commercial ports may perform valuable military functions, not only for the logistics but for intelligence and communications that do not require the establishment of formal PLA facilities and permissions.

As to recommendations, I note that there's no viable method yet identified for preventing Chinese firms' commercial entry into most foreign markets.

I think the U.S. failure to roll back the concession won by Shanghai International Port Group at the Israeli port of Haifa should be a cautionary tale. If a close security partner like

Israel is not persuaded that the security risks outweigh the commercial benefits, it is highly improbable that other states will forgo Chinese involvement in their critical infrastructure. This leads to another recommendation that more useful than insisting that other states refuse Chinese largesse would be empowering them to exploit it.

The U.S. firms and government agencies could provide anticipatory consultation with governments and businesses, engaging with PRC firms on port projects, providing legal and managerial advice on how best to retain control over important operational elements of their infrastructure.

Military instruments are of limited utility in tackling this problem. And finally, five, given the number and geographic distribution of ports under PRC full or partial ownership and operational control, each regional combatant commander should be tasked to specify to the Secretary of Defense which ports in their AOR are essential to the United States Joint Services in carrying out their assigned missions. Thank you.

PREPARED STATEMENT OF ISAAC KARDON, PH.D., ASSISTANT PROFESSOR, STRATEGIC AND OPERATIONAL RESEARCH DEPARTMENT, U.S. NAVAL WAR COLLEGE

February 20, 2020

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 Hearing: *Chinese Military Power Projection and U.S. National Interests*

Panel II: China's Development of Expeditionary Capabilities: "Bases and Access Points"

1. Where and how is China securing bases and other access points to preposition material and facilitate its expeditionary capabilities?

Previous testimony has addressed the various military logistics vessels and transport aircraft that supply People's Liberation Army (PLA) forces operating abroad. This method is costly, inefficient, and provides insufficient capacity to sustain longer and more complex military activities beyond the range of mainland logistics networks. Yet, with the notable exception of the sole military "support base" (baozhang jidi, 保障基地)¹ in Djibouti, these platforms are the PLA's only organic mode of "strategic delivery" (zhanliie tousong, 战略投送) to project military power overseas. Lacking a network of overseas bases in the short to medium term, the PLA must rely on a variety of commercial access points in order to operate beyond the first island chain. Because the PLA Navy (PLAN) is the service branch to which virtually all of these missions fall, this testimony focuses on port facilities.

The PLAN depends on commercial ports to support its growing operations overseas. Over the course of deploying 34 escort task forces (ETF) since 2008 to perform an anti-piracy mission in the Gulf of Aden, the PLAN has developed a pattern of procuring commercial husbanding services for fuel and supplies at hundreds of ports across the globe. All navies that operate abroad rely to some degree on such routine commercial arrangements. The distinctive aspect of the PLAN's efforts to support a growing overseas presence, however, is its access to a large and growing number of ports (partially) owned and operated by PRC firms. PLA officers and Chinese analysts tout a variety of possible dual-use functions at these ports, which are often dubbed China's overseas "strategic strongpoints" (zhanliie zhidian, 战略支点).²

How does the PLAN utilize these facilities? Where are the facilities located, who owns and operates them, and what, if any, military purposes do they serve? After summarizing the pattern of commercial activity, we will turn to the potential dual-use functions of Chinese-owned and -operated ports and the prospects for securing actual military bases.

China's Global Port Portfolio. Since the late 1990s, a handful of Chinese firms have seized considerable market share as international terminal operators. They have leveraged capital and expertise drawn from the extraordinary scale of China's own domestic port industry (which boasts 31 of the world's

¹ The facility is sometimes called a "logistics and supply base" (hougin buji jidi, 后勤补给基地), a "support base" (baozhang jidi, 保障基地), or simply a "military base" (junshi jidi, 军事基地), in both official and non-official sources. ² See Conor Kennedy. 2019. "Strategic Strongpoints and Chinese Naval Strategy." Jamestown China Brief, vol. 19, no. 6, https://jamestown.org/program/strategic-strong-points-and-chinese-naval-strategy/. PLA scholars from the Academy of Military Sciences have written on the subject; e.g., for a good example of civilian writing on the subject, see Liu Lin (刘琳). 2017. "Strategic Strongpoints along the 'Belt and Road' and Building Military Diplomacy ('一带一路'沿线战略支点与军事外交建设)." World Affairs (世界知识), no. 17: 62–64 [CMSI Translation]. Civilian scholars have also pursued the idea, e.g. Zhang Jie (张杰). 2015. "Sea Lane Security and the Construction of China's Strategic Strongpoints – Also, An Assessment of the Security of 21st Century Maritime Silk Road (海上通道安全与中国战略支点的构建——兼谈 21 世纪海上丝绸之路建设的安全考量)." International Security Research (国际安全研究), no. 6, available at http://www.globalview.cn/html/zhongguo/info 3755.html

^{*}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.

top 50 ports by total cargo tonnage, and 7 of the top 10 highest throughput container ports)³ to expand overseas. As of February 2020, PRC firms (partially) own or operate some 94 ports across the globe.⁴ At a far larger number of ports, on the order of hundreds, Chinese firms have built port works, upgraded equipment, or dredged harbors.⁵ However, such contracted projects do not leave a Chinese firm in control of the management or operations of the port and are thus excluded from analysis here of how Chinese commercial facilities may support military operations.

A few facts bear noting with regard to ownership:

- At 59 of these ports, one or more terminals is owned or operated by a state-owned enterprise (SOE). 56 of these terminals involve central SOEs supervised and administered directly by the PRC State Council, and 11 are local SOEs. Private firms own or operate 39.⁶
- A Chinese firm is the majority shareholder in the terminal operator (these are often joint ventures) in at least one terminal at 50 ports, and 100% shareholder in 20 of those.
- Three Chinese firms account for the vast majority of Chinese overseas ports:
 - o Hong Kong-based China Merchants Port Holdings (CMPort), a subsidiary of the central SOE China Merchants Group, has a stake at 31 foreign ports.
 - o The Shanghai-based central SOE China COSCO Shipping Company (COSCO) has 19 owned or operated overseas facilities.
 - o Privately-owned, Hong Kong-based CK Hutchison and its subsidiary Hutchison Port Holdings (Hutchison) operates in 36 international ports.

The geographic distribution is also instructive:

- By ocean: Atlantic: 32; Indian: 23; Pacific: 20; Mediterranean: 18
- By region: Europe 22; Middle East/North Africa (MENA): 20; Americas: 18; South/Southeast Asia: 17; sub-Saharan Africa: 10; Pacific Rim: 7
- Proximity to key maritime chokepoints:⁷
 - o Malacca Strait: 10; English Channel: 9; Hormuz Strait: 8; Suez Canal: 6; Panama Canal: 4; Gibraltar Strait: 4; Turkish Straits: 4; Bab al-Mandeb Strait: 1

Analysis. The "where" of prospective PLAN access points can basically be read off of a map (Appendix A). That spatial representation is more revealing, as a simple count does not show the wide geographic dispersion of Atlantic ports (10 in the west Atlantic, 11 in the east Atlantic, 11 in the north Atlantic). Because the Atlantic ports lie on different continents, the greater Indian Ocean region is actually the area of greatest concentration – and especially so if we include the 7 ports on the eastern Mediterranean, which serve vital roles for traffic moving through the Suez Canal into or out of the Indian Ocean. South and Southeast Asia also feature ports at key locations along major sea lines of communication and proximate to critical chokepoints.

_

³ Data from IHS Markit.

⁴ Proprietary database on file with author.

⁵ Data collection is incomplete on such construction projects, largely conducted by a small handful of central SOEs: China Communications Construction Corporation, its subsidiaries China Harbour Engineering Corporation and China Road and Bridge Corporation, and China State Construction Engineering Corporation.

⁶ NB – there are several instances of separate private and SOE terminals at the same port, thus the sum greater than 94

⁷ Defined as proximate enough to support logistics for aircraft and surface or subsurface vessels operating in and around the chokepoints, within 480 nautical miles (one day's travel steaming at 20 knots).

The "how" of securing control over the operations of a port and utilizing it is more complex. China's lack of alliances⁸ means that there are no standing legal commitments for military use (with the exception of Djibouti), and each such access agreement will be negotiated ad hoc – and likely out of public view. The fact pattern above shows a significant incidence of Chinese SOE ownership and operation at foreign port facilities, concentrated in a small handful of firms. On its face, this suggests the potential for a high degree of coordination between firms and the military for utilization of a network of commercial port facilities. This assumption bears further scrutiny, though, as there are several other characteristics of port operations that may be more decisive than corporate ownership. There are also a large number of ports in countries in which the PLA is unlikely to enjoy the political favor of the host government. Analysis of these characteristics allows us to winnow down the list to a handful of ports that should be considered most likely candidates for fuller dual-use development as PLAN access points in critical regions.

The dominance of the political over the commercial in firm behavior cannot be assumed based on ownership. More significant than corporate ownership is the degree to which the firm itself controls the operations of the port, the physical capacity of the port to supply naval vessels, the specific conditions of its concession from the local port authority (e.g., lease term, responsibilities of various partners to a venture), and the nature and scope of China's broader diplomatic and economic relations with the host country. In general, a terminal operator will have significant discretion in granting access for naval vessels seeking to call, warehousing and storage, bunkering, as well as use of dry dock, medical, power, and other terminal facilities. Majority or sole ownership of the port operator is the condition that best positions a firm to guarantee logistical support for naval operations. Such arrangements are more feasible in friendly countries in which low transparency is the norm in contracting (and governance generally), and where China accounts for a large proportion of their overall trade and investment.

Considering these factors at the firm level helps narrow the field. Of the 50 majority stakes held by Chinese firms, Hutchison holds 32 – including 16 of the 20 cases with 100% stakes. Nearly half (16) of their holdings are in advanced industrial democracies, and tend to be single terminals in much larger port complexes. This private firm's senior management is from Hong Kong, Europe, and Latin America and is incorporated in the Cayman Islands (with subsidiaries scattered across other jurisdictions, including the British Virgin Islands and Singapore). Its major operations can be found in the United Kingdom, the Netherlands, and Mexico, but it also operates several ports in and around the Persian Gulf (UAE, Iraq, Saudi Arabia, Pakistan), the eastern Mediterranean (Egypt), the Panama Canal, and East Africa (Tanzania) in which it holds majority or total ownership of one or

-

⁸ NB – A Chinese firm operates one port in erstwhile ally North Korea, which is a likely candidate for PLA utilization but according to a different set of political and economic factors than the rest of its port investments. See "China wins 30-year concession to use North Korean port (中国获朝港口 30 年使用权 韩媒称中国利用朝鲜)." *Global Times* (环球时报). 12 September 2012, https://world.huangiu.com/article/9CaKrn]x36]

⁹ While the designation "state-owned" implies a greater degree of state control over firm activities than might be expected in private firms, this is not always the case. In fact, there are reasons to think some large SOEs with politically-empowered managers and directors are able to act with greater autonomy than their private counterparts, which depend on the good will and patronage of the state and may be even more responsive to its requests. (The controversy over Huawei, a private firm, and its relationship to the state should be instructive here.) For a careful analysis of the state-owned vs. private distinction and its limitations, see Milhaupt, Curtis J., and Wentong Zheng. 2015. "Beyond Ownership: State Capitalism and the Chinese Firm." *Georgetown Law Journal*, vol. 103, no. 3, pp. 665–722.

more terminals. Hutchison's political and geographic distance from Beijing¹⁰ make it a less-likely candidate for the deep cooperation required to establish dual-use functions. Its governance is more transparent than that of SOEs. Diversion of corporate resources towards non-economic purposes would likely meet internal resistance and invite external scrutiny.

By contrast, COSCO is a central SOE that was formerly controlled directly by the PRC Ministry of Transport as the sole domestic and international shipping operator in China. It has undergone several rounds of corporate transformation and mergers to become a global transport and logistics behemoth. It is terminal-operating subsidiary, COSCO Shipping Ports, has taken a variety of notable positions in foreign ports, including majority control of the port authority at Piraeus, Greece, with a 100% ownership of development and operations at two of its terminals. Other notable projects include COSCO's first international greenfield port development, a 90% stake in the Khalifa port in Abu Dabi, UAE, to set up the largest freight station in the Middle East; a second greenfield investment, at Puerto Chancay in Peru, is also a majority stake (60%). Notably, COSCO's lack of transparency and appetite for loss-making ventures due to heavy subsidization and support from Beijing make it a most-likely candidate for facilitating military utilization of its port facilities (and its shipping, container, and general logistics capacity).

CMPort is also a central SOE, but with a political reputation and corporate strategy quite different from COSCO's. Firm representatives and industry executives note its independent origins as a Hong Kong trading house founded during the "self-strengthening movement" in opposition to British occupation, and have taken somewhat more conservative positions in overseas ports (with major exceptions at Hambantota and Djibouti). The bulk of CMPort's overseas ports, 22 of 31, are in fact portfolio investments: that is, minority stakes in a joint venture with the French firm CMA CGM's terminal operating subsidiary Terminal Link in which CMPort has no operational or managerial role. CMPort has sought to distinguish itself with slick marketing and appeals to foreign investors on the strength of its "Shekou Model" for comprehensive development of a port site into a trade

-

¹⁰ There has been some speculation about the degree to which the firm's owner, Hong Kong tycoon Li Ka-shing (李嘉诚), is cooperative with the PRC party-state For example, during hearings at the Senate Armed Services Committee after Hutchison acquired stakes in two ports on the Panama Canal. See "Hearing before the Committee on Armed Services." 1999. U.S. Senate, 106th Congress, 22 October, First Session, p. 40. Li's level of coordination with Beijing is not likely to be high, and his case is a likely example of the relative autonomy of some private firms. Mainland and Hong Kong media often cover his public disagreements with Beijing. See, for example, Eddie Lee. 2015. "Chinese state media continues tirade against Hong Kong tycoon Li Ka-shing in People's Daily." *South China Morning Post.* 21 September. https://www.scmp.com/news/china/economy/article/1860098/chinese-state-media-continues-tirade-against-hong-kong-tycoon-li. More recently, mainland media and social media have been criticizing Li for alleged support for Hong Kong democracy and protesters, e.g. He Dingding (何鼎鼎). "Hong Kong Cannot Wait Any Longer to Solve the Housing Problem (解决住房问题,香港不能再等了)."People's Daily (人民日报). 12 September 2019; see also "Li Ka-shing' Criticized By Name in the People's Daily!" (李嘉诚'被人民日报点名了!》 *Hulian Net* (互联网). 16 September 2019, https://www.sohu.com/a/341133277 100016235

¹¹ Yu Zheng and Chris Smith. 2017. "New Voyages in Search of Treasure: China Ocean Shipping Company (COSCO) in Europe." In *Chinese Investment in Europe: Corporate Strategies and Labour Relations*, edited by Jan Drahokoupil, pp. 231–50. Brussels: ETUI.

¹² Greg Knowler. 2018. "Boosted by Beijing subsidy, COSCO expects hefty 2017 profit. *JOC.com*. 310 January 2018, https://www.joc.com/maritime-news/helping-hand-beijing-cosco-heads-hefty-profit_20180130.html; Author interviews with industry executives in New York, Los Angeles, and Hong Kong.

¹³ China Merchants Port Holdings Company Limited, "History," http://www.cmport.com.hk/EN/about/History.aspx?from=6

¹⁴ These terminals include four in France, three in northern Europe, one in India, and two the U.S. (Houston and Miami).

and commerce hub, drawing favorable attention to their corporate strategy from the likes of Wharton and Harvard Business School. ¹⁵ Their executives are media savvy (at least relative to COSCO's) promoters who traffic in business jargon and explain their firm's interests as maximizing "synergies" with exposure to trade flows and key resources. ¹⁶ However, CMPort operates the port adjacent to the Djibouti base, where it has regularly devoted commercial pier space to PLAN surface combatants. ¹⁷ The comprehensive commercial ecosystem prescribed in their "Shekou Model" also establishes a large and diverse Chinese commercial presence as well as ashore transport, logistics, industry, and communications. While less easily persuaded to crowd out its commercial business than COSCO or local SOEs, CMPort is demonstrably willing to coordinate with the PLAN.

Beyond those big three players, other PRC firms operate or own only a small handful of ports worthy of close scrutiny. China Overseas Port Holdings is a state-owned firm that is the sole owner and operator of the Pakistani port of Gwadar. According to its Chairman, Zhang Baozhong, the firm was "specially-designed and purposely-built for the construction of the Gwadar Port by the Chinese government." One unnamed PLA officer reportedly said of China's military use as a base that "the food is already on the plate, we'll eat it whenever we want to." Pakistan stands out as a country where China's extraordinarily close political, military, and economic ties make it a prime candidate for expansion of PLAN operations. Provincial SOEs Guangxi Beibu Gulf International Port Group and Tianjin Union Development Corp. are developing port projects in Cambodia under an unusual land lease, and construction of a military-grade airfield and reported PLA activity in the area has raised hackles. Cambodia, like Pakistan and North Korea, is among the countries most likely to cooperate in non-public ways with Beijing to provide reliable military access to the PLA.

2. How do policies such as "military-civil fusion" and laws and regulations such as China's 2017 National Defense Transportation Law improve the PLA's expeditionary and force projection capabilities?

¹⁵ Rithmire, Meg, and Yihao Li. 2019. "Chinese Infrastructure Investments in Sri Lanka: A Pearl of a Teardrop on the Belt and Road." *Harvard Business School Case Study* N9-719–046; "Cruising Ahead: China Merchants Group's Shekou Prince Bay Project." 2019. *Knowledge@Wharton*. 18 February, https://knowledge.wharton.upenn.edu/article/cruising-ahead-china-merchants-groups-shekou-prince-bay-project/

¹⁶ Author interview with CMPort executive, Hong Kong, June 2019. A strong commercial position in coal imports, for example, is the commercial motivation for a 98-year CMPort lease at the Australian port of Newcastle. See "CMPort completes its acquisition of the Port of Newcastle in Australia Achieving a full coverage of the six continents." *China Merchants Port Holdings Company Ltd.* 14 June 2018,

http://www.cmport.com.hk/enTouch/news/Detail.aspx?id=10007652

¹⁷ NB - now that the naval pier appears complete on open source satellite imagery, it may cease to provide this service.

¹⁸ Yasir Habib Khan. 2019. "China Overseas Port Holding Company was made specifically to build the Gwdar port: chairman." *Geo.tv.* 14 May. https://www.geo.tv/latest/237251-our-company-was-made-specifically-to-build-the-gwadar-port

^{19 &}quot;...那已经是盘中的菜,想什么时候吃就什么时候吃." Jin Wu (金吴). 2016. "Djibouti: The PLA's First Overseas Base (吉布提: 人民解放军首个海外基地)." *Phoenix Military* (凤凰军事), 22 April, http://news.ifeng.com/a/20160411/48414276 0.shtml.

²⁰ See Liam Cochrane. 2020. "Chinese military officials made secret visit to Cambodia weeks before mysterious drone crashed." *ABC News.* 5 February. https://www.abc.net.au/news/2020-02-05/secret-chinese-delegation-visited-cambodian-naval-base/11928184; Jeremy Page, Gordon Lubold, and Rob Taylor. 2019. "Deal for Naval Outpost in Cambodia Furthers China's Quest for Military Network. *Wall Street Journal*. 22 July.

https://www.wsj.com/articles/secret-deal-for-chinese-naval-outpost-in-cambodia-raises-u-s-fears-of-beijings-ambitions-11563732482; Kenji Kawase. 2018. "Cambodia's biggest port sees China coveting Japan's dominant role. Nikkei Asian Review. 3 August. https://asia.nikkei.com/Business/Company-in-focus/Cambodia-s-biggest-port-sees-China-coveting-Japan-s-dominant-role

Beijing's energetic promotion of "military-civil fusion" (*junmin ronghe*, 军民融合) has created wide avenues for cooperation between the PLA and industry. Among the significant elements of this program for the military utilization of commercial port facilities are a series of reforms as well as laws and regulations obligating firms to actively prepare for and accommodate military requests. A National Defense Mobilization Law, a National Defense Transportation Law, and two newly formed and upgraded organs under the Central Military Commission (CMC), the National Defense Mobilization Department and Logistics Support Department, created under a major round of PLA reforms in 2016²⁴ stand out as key indications of the desired trajectory of more integrated dual use capabilities. Central policy is driving towards a more substantial role for the military and the state in defining the conditions under which civilian assets and resources are employed. ²⁵

The mobilization law guarantees fiscal reimbursement to central and local budgets (Art. 6) and further promises untold "rewards for citizens and organizations that have made outstanding contributions in national defense mobilization" (Art. 7). Certain key construction projects are to be built to military standards (Art. 23), designated jointly by the State Council and CMC (Art. 22), with the benefit of "subsidies or other preferential policies" (Art. 24). While the implementation of the law is left to lower-level authorities, the mandate is clear: "any organization or individual has the obligation to accept the expropriation of civil resources in accordance with the law" (Art. 55). The mobilization law also establishes a system for maintaining and transferring "strategic material reserves" (zhanliie wuzi chubei, 战略物资储备) from enterprises to the military (Arts. 33-36). While

²¹ See, for example Fang Yongzhi (房永智). 2014. How to Realize Deeper Military-Civilian Fusion in Infrastructure Construction (础设施建设如何实现深度军民融合.") *China Youth Daily* (中国青年报). 24 January 2014, http://theory.people.com.cn/n/2014/0124/c40531-24217713.html; Zhang Caibi (张才毕). 2005. "Accelerate National Defense Mobilization Preparation in Coastal Areas (加速推进沿海地区国防动员准备)." *National Defense* (国防), No. 1, pp. 29-31.

²² The National Defense Mobilization Law of the People's Republic of China (中华人民共和国国防动员法). 2010. 13th meeting of the Standing Committee of the 11th National People's Congress. 26 February, http://www.gov.cn/flfg/2010-02/26/content 1544415.htm

²³ The National Defense Transportation Law of the People's Republic of China (中华人民共和国国防交通法). 2016. 22nd Session of the Standing Committee of the Twelfth National People's Congress. 3 September. http://www.npc.gov.cn/zgrdw/npc/xinwen/2016-09/03/content 1996764.htm

²⁴ For PLA commentary on these developments, see Qu Baichun, Liao Pengfei, and Gao Zhiwen. 2016. "Military and Civilian Integration Accelerates the Development of Strategic Delivery Capabilities (军民融合加快推进战略投送能力 建设)," PLA Daily (解放军报). 5 September, http://www.81.cn/jfibmap/content/2016-09/05/content 155683.htm; "Former Deputy Director of the Military General Logistics Department Transportation Department Bai Zhongbin Appointed Director of Central Military Commission Logistics Support Department Transport and Projection Department(原总后军交运输部副部长白忠斌任军委后勤保障部运输投送局长.)") The Paper (澎拜新闻). 5 September 5, www.thepaper.cn/newsDetail_forward_1524277 17. See also wide-ranging analysis of this and other elements of the 2016 PLA reforms in Joel Wuthnow and Phillip C Saunders (eds.). 2017. "Chinese Military Reforms in the Age of Xi Jinping: Drivers, Challenges, and Implications." China Strategic Perspectives, no. 10. ²⁵ For a rich analysis of the transportation elements of this program, including discussion of the vehicles, ships, and industry-level organizations involved, see Conor Kennedy. 2019. "Civil Transport in PLA Power Projection." CMSI China Maritime Report, no. 4, December, p. 12, https://digital-commons.usnwc.edu/cmsi-maritime-reports/4/. ²⁶ Scholars from the PLA Army Transportation University suggest that these subsidies and incentives will be disbursed directly by the PLA, which will "establish an incentive mechanism for the requisition of overseas Chinese-funded enterprises, and fully mobilize the enthusiasm of relevant institutions and enterprises." Wang Tianze, Qi Wenzhe, Hai Jun (王天泽, 齐文哲, 海军). 2018. "An Exploration Into Logistical Support of Transportation and Projection for Military Bases Abroad (海外军事基地运输投送保障探讨)." Defense Transportation Engineering and Technology (国防交通 工程与技术), no. 1, p. 34

²⁷ The mobilization law further enumerates legal liabilities for failure to cooperate (Arts. 68-71).

administrative regulations are left to local military and civilian authorities (notably, the Transportation War Readiness Offices at the provincial level), those organs may task the enterprises with storing military supplies at overseas facilities. The prerogative to utilize civil transportation capacity – to include facilities at ports, airports, rail, and road – are expressly granted under standing defense mobilization regulations issued by the CMC and State Council.²⁸

Under what circumstances will enterprises will have capacity and willingness to build and maintain facilities, equipment, and supplies at military standards, diverting resources and space that otherwise might have commercial value? These considerations are closely held, so observable evidence of participation in other military-civilian fusion programs is probably the best indicator. COSCO and CMPort container and RO-RO vessels have participated in a number of military-civilian exercises, including transport of live ammunition and use of RO-RO vessels built to military specifications, so there is a basis for expecting cooperation on other matters. ²⁹ Making this integration systematic and reliable in the event of domestic crisis, however, is a challenge. A foreign crisis would be orders of magnitude more difficult, requiring them to overcome both distance and the acute political sensitivities of a host country that will likely prefer not being drawn into a conflict.

PLA analysts have studied aspects of this problem of integration, and have flagged various issues concerning the suitability of commercial facilities for military use. One 2019 study written by a member of the joint staff of the Eastern Theater Command with academics from Army Transportation Academy and Tsinghua argues that the relevant national defense requirements have not been properly implemented for port construction. Enterprises need to build "combat ready terminals" with RO-RO berths built at a higher standard than those for passenger automobiles, ensure minimum 10 meter berth depth, with assembly sites, storage facilities greater than 120,000 square meters, cold chain storage for overseas replenishment, and high quality roads serving the port that can bear heavy equipment. Commercial demand for these facilities is low, so better "top-level"

_

²⁸ See PRC State Council and PLA Central Military Commission. 2013. "Civilian Capacity Defense Mobilization Regulations (民用运力国防动员条例). 11 September. http://www.mod.gov.cn/regulatory/2016-02/17/content-4618058.htm; minor amendments were adopted in 2011 and 2019, see PRC State Council. 2019. "Decision of the State Council on Amending Certain Administrative Regulations." 2 March. http://www.gov.cn/zhengce/content/2019-03/18/content-5374723.htm

²⁹ See Kennedy "Civil Transport in PLA Power Projection," pp. 6-22 for detailed discussion on the extensive industry cooperation on transport capacity for strategic lift in the formation of "strategic projection support ship fleets" (zhanliie tousong zhiyuan chuandui, 战略投送 支援船队) organized into transport units of various sizes. These activities are supported by vessels from COSCO and CMPort shipping fleets, see esp. pp. 9 and 12.

³⁰ A good overview from authors at PLA Naval Aviation University is: Wang Ruiqi (王瑞奇), Gu Yuyuan (顾钧元), and Li Zhiqiang (李志强). 2018. "Research on Building Civil-Military Integration Systems in Port Logistics." *Discussion and Research (探讨与研究 港口物流军民融合体系构建研究)*, no. 10: 105–7.

³¹ RO-RO berths unsuitable for heavy wheeled and tracked equipment will need to own and configure heavy-duty loading and unloading machinery that meets military specifications. See Zhang Jing (张静), Zhang Zhihui (张智慧), Zhou Jiangshou (周江寿). 2019. "Comparison Between China and America in Implementation of National Defense Requirements in Port Construction (中美港口建设贯彻国防要求对标分析)." *Journal of Military Transportation University* (军事交通学院学报), vol. 21, no. 4, pp. 32-36.

³² At least 11 meter draught will be necessary, however, to accommodate the largest vessels in the PLAN surface fleet, the Type 001 and Type 002 carriers as well as the new Type 901 supply ship. See "China Navy." 2019. *IHS Jane's Fighting Ships online*.

design" and subsidies are necessary for enterprises to properly construct ports – even domestically – that can support military utilization.³³

Military analysts from the Navy Service College in Tianjin have attempted to model out how commercial cargo terminals can be used to provide emergency fuel and material support for the PLAN. Accepting that commercial piers and refueling facilities are typically not built to military standards, they address the complex protocol that would be required to safely conduct refueling using local power, fuel supplies, and military refueling vehicles that can provide the correct types and quantities of petroleum, oil, and lubricants for the varied classes of ships in the PLAN. Modelling processes for emergency wartime refueling at civilian piers, the paper tries to "accurately predict the emergency fuel support process that is in line with wartime naval vessels using civil port cargo terminals, fuel equipment types, and quantity requirements to meet the number of ships and refueling flow requirements." This effort seeks only to model one replenishment prior to the arrival of supply ships and tankers, not the sustained access to secure fuel and supplies that would be required in a protracted conflict. The degree of difficulty here should be taken as evidence of a recognition within the PLAN that they require a more reliable way to ensure adequate support for combat vessels than emergency use of non-specialized commercial ports.

The transaction for sourcing and procuring materials is also at issue. Authors from the Naval University of Engineering in Wuhan note that "since central state-owned enterprises' main responsibility is certainly not replenishing the Chinese military overseas, procurement channels are limited" and will lead to high costs and unsteady supply. They argue that options should be explored such that adequate "wartime prepositioned materials" (zhanbei wuzi chubei, 战备物资储备) can be brought to the fight. They propose three: (1) overseas bases directly operated by the PLA, (2) PLA cooperation with Chinese companies already engaged commercially in the local economy, and (3) that the PLA may deal directly with local governments to rent space and procure necessary supplies. 37

However desirable to PLA operators, ³⁸ such an extensive network of bases is not going to materialize in the near future. Therefore, the practical questions concern how to get the right supplies on time and at manageable prices. One article in the PLAN's official newspaper estimated that it took over 20 days to execute a purchase of supplies overseas, giving rise to an "emergency foreign purchase plan" that permitted the task force commander make the purchase directly from a

³³ Ibid., p. 33-35

³⁴ Shao Haiyong (邵海永), and Ma Longbang (马龙邦). 2019. "Prediction Model for Wartime Use of Civil Port Cargo Terminals to Realize Requirements for Emergency Fuel Supply and Material Support (展示海军舰艇利用民用港口货运码头实施应急游客保障装备需求预测模型)." *Military Operations Research and Systems Engineering (军事运筹与系统工程)*, no. 1, pp. 52–57.

³⁵ Ibid. p. 57

³⁶ Luo Zhaohui (罗朝晖), Wan Jie (万捷), and Li Hongyang (李弘扬). 2019. "Research on the Factors for Selecting Overseas Naval Bases." *Logistics Technology (军事物流)*, p. 142.

³⁷ Ibid., pp. 141-145

³⁸ Several authors from the PLAN's Naval Research Institute are highly critical of the progress to date in establishing this necessary support, arguing that "China's serious lack of strategic strongpoints and outposts in the Indian Ocean can be called a form of 'malnutrition.' The longstanding no-basing policy of the PRC has caused the navy's capacity to lag the expansion of national interests." Li Jian, Chen Wenwen, Jin Jing (李剑, 陈文文, 金晶). 2014. "Indian Ocean Seapower Structure and the Expansion of China's Sea Power 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, p. 74.

Chinese firm within two days.³⁹ PLA logistics officers argue that civilian firms' organic capabilities far exceed the PLA's own, and that port calls to their facilities "provide a platform for the military to rely on corporate strengths...use market economic means, and adopt commercial contract entrustment methods (*shangye hetong weituode fangshi*, 商业合同委托的方式) to give full play to the advantages of enterprises and realize resource sharing."⁴⁰ Whether these savings will be achieved because of "sweetheart" deals, longer-term wholesale contracts, or outright expropriation is unclear.

From an operational effectiveness standpoint, the PLA will much prefer to operate its own dedicated facilities. For broader political reasons, however, the opportunity costs of overtly militarizing facilities will likely continue to make this option less attractive to civilian leadership – especially when various functional needs of the PLA can be adequately serviced by commercial firms. ⁴¹ The military-civilian fusion program reflects and advances a clear leadership preference for leveraging growing overseas PRC commercial capacity.

3. In your view, what does China regard as the most important criteria for selecting future bases and access points for the PLA?

A burgeoning literature by Chinese military and civilian analysts on securing access to overseas bases and places provides insight into the several criteria that make for desirable overseas bases and access points. Most of these criteria are intuitive and long-standing: geographic proximity to perceived security threats, hosted by friendly, stable countries, with suitable natural conditions at the port (e.g., wide approach channels, deep harbors, unthreatening climate), and capable of adequate force protection. ⁴² An additional more recent factor, based on the commercial developments addressed above, is the advantage offered by the presence of Chinese enterprises on or near the site. ⁴³

_

³⁹ Yu Yonghua (余永华), "Lifting Warships Towards the Deep Blue: A Record of a Detachment's Shore Logistics Unit Exploring a Far-Ocean Logistics Guarantee Model" (托举战舰向深 蓝:某支队岸勤部探索远洋后勤保障模式纪事), Renmin Haijun (人 民海军), September 30, 2010 (page?)

⁴⁰ Liu Dalei (刘大雷), Hu Yongmin (于洪敏), and Zhang Hao (张浩). 2017. "Equipment Support in Overseas Military Actions" (我军海外军事行动装备保障问题研究). *Journal of Military Transportation Academy* (军事交通学院学报), vol. 19, no. 9, p. 25.

⁴¹ For elaboration of this argument, see author's prior testimony on this subject. Isaac Kardon, Testimony for the U.S. China Economic and Security Review Commission. 2019. "Bases, Places, and a "Security Guarantee" for the Belt and Road Initiative." Hearing on "A World-Class' Military: Assessing China's Global Military Ambitions." 20 June. https://www.uscc.gov/sites/default/files/Kardon_USCC%20Testimony_FINAL.pdf

^{**2} e.g., Liang Fang (梁芳). 2011. On Maritime Strategic Access (海上战略通道轮). Beijing: Fact Publishing (时事出版社); Zheng Chongwei (郑崇伟), et al. 2017. "Wind Climate Analysis Under the Demand of Reef Runway Construction (岛礁跑道设计中的风候特征分析)." Marine Forecasts (海洋预报), No. 4, Vol. 34, pp. 52-57; Xu Ke (许可). 2016. "On the Establishment of Strategic Fulcrums for the 21st Century Maritime Silk Road: A Reference of Diego Garcia Base for China (构建 '海上丝路' 上的战略支点)." Asia-Pacific Security and Maritime Affairs Research (亚太安全与海洋研究), No. 5, pp. 9-21.

⁴³ In 2010, the deputy chief of the PLAN Operations Department lamented the "uncertainties of foreign berthing facilities" as "limiting factors in the long term regularization of overseas operations" and looked to "Chinese enterprise facilities in overseas ports as the next step in building an 'overseas support system' (hainai baozhang tixi, 海外保障体系)." Wang Bin (王滨). 2010. "Thoughts on the Construction of Overseas Support Points for Escort Operations (护航行动海外保障点建设思考)" Navy Magazine (海军杂志), No. 12, p. 2. Cited and translated in Kennedy "Strategic Strong Points."

Naturally, geostrategic considerations are paramount. China's armed forces seek to build capability to defend vulnerable maritime sea lines of communication, especially at key chokepoints. The authoritative PLA Academy of Military Science's 2013 *Science of Military Strategy* states that: "we must build overseas strategic strongpoints that depend on the homeland, radiate into the periphery, and moves 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 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 mutual support." A staff officer and an academic from the PLA Navy Submarine Academy in Qingdao further posit that "[t]he line stretching from the Taiwan Strait through the South China Sea, Malacca Strait, Indian Ocean, and the Arabian Sea is China's 'maritime lifeline'." Most analysts focus on this vulnerable "lifeline" and propose strategic strongpoints stretching across the Indian Ocean region such that supply intervals between them are short enough to make one or more ports redundant in a crisis. A

Some analysts are willing to make concrete recommendations about preferred locations. Academics at the Army Transportation Academy propose that "to protect our ever-growing overseas interests, we will progressively establish a logistics network in Pakistan, United Arab Emirates, Sri Lanka, Burma, Singapore, Indonesia, Kenya and other countries based on various means – buying, renting, cooperating – to construct our overseas bases or overseas support strongpoints (haiwai baozhang zhichengdian, 海外保障支撑点)." A group of researchers from the PLA Naval Research Institute proposed that China needed to establish at least one strategic strongpoint in the Bay of Bengal, one in the Persian Gulf region, and one in the Suez-Red Sea-Gulf of Aden region. They suggest Sittwe in Burma, Gwadar in Pakistan, and Djibouti or the Seychelles, respectively. They argue that these are defensive positions to check India, but that a way to "further influence the entire Indian Ocean route and the African continent" would be to establish locations at Hambantota in Sri Lanka or Dar es Salaam in Tanzania. An Academy of Military Sciences analyst was also specific about locations, but struck a more cautious note that "India is extremely sensitive about China-Pakistan cooperation. Despite the fact that China has repeatedly emphasized that Gwadar port is a civilian project, India has long suspected that China will someday build Gwadar port into a military base." Other

⁴⁴ A military professor from the PLA National Defense University analyzes Malacca, Hormuz, Gibraltar, Suez, Panama, Mandeb, and Black Sea straits as the principal "strategic maritime corridors" (*haishang zhanliie tongdao*, 海上战略通道): Liang Fang "On Maritime Strategic Access, pp. 213-250.

⁴⁵ Shou Xiaosong (寿晓松). 2013. *Science of Military Strategy (战略学)*. Beijing: Military Science Publishing (军事科学出版社),p. 254.

⁴⁶ Hu Dongying, Huang Rui, and Cai Guangyou (胡冬英,黄锐,蔡广友). 2017. "Several Thoughts on Advancing the Submarine Force to Distant Oceans (推进潜艇兵力走向远洋的几点思考)." *Ship Electronic Engineering* (舰船电子工程), No. 1, p. 2.

⁴⁷ Zheng Chongwei (郑崇伟), et al. 2017. "The Strategy of Maritime Silk Road in the 21st Century: Construction of Integrated Application Platform (经略 21 世纪海上丝绸之路': 综合应用平台建设)." Ocean Development and Management (海洋开发与管理), No. 2, pp. 52-57; Zheng Chongwei (郑崇伟), et al.. 2016. "Strategy of the 21st Century Maritime Silk Road: On the Important Routes, Crucial Nodes and Characteristics of Ports (经略 21 世纪海上丝路: 重要航线、节点及港口特征)." Ocean Development and Management (海洋开发与管理), No. 1, pp. 4-13; Zhang Jie "Maritime Channels in Southeast Asia"

⁴⁸ Wang Tianze, et al. "An Exploration Into Support for Transportation and Projection," p. 32. A CASS researcher proposed Indonesia's Sumatra and Kalimantan as appropriate targets, see Zhang Jie "Safety of Maritime Passages". ⁴⁹ Li Jian, et al. "Indian Ocean Seapower Structure," pp. 74-75.

⁵⁰ Liu Lin (刘琳) "Strategic Strongpoints along the 'Belt and Road'," p. 64 [CMSI Translation]

proposed locations surrounding India (the Maldives, Seychelles, Bangladesh) pose similar geopolitical problems for China in terms of balancing from India, Japan, and the U.S.⁵¹

Some analysts argue that military access should adhere more closely to economic development-focused PRC foreign policy. The "key nodes" should be "places where the flow of people, logistics, capital, and information are highly concentrated....Reasonably determining and accelerating the construction of key nodes along strategic channels is of great practical significance...for improving out military's strategic delivery capability."⁵² Authoritative sources further stress the importance of non-combat military operations to protect Chinese citizens from terrorism, unrest, and natural disasters. ⁵³ This logic puts "trade before the flag" in suggesting that points suitable for military support should be determined by first-order considerations of securing China's commercial interests.

Still, both a geoeconomic and a geostrategic set of criteria dictate that various ports between Suez and the South China Sea should be priorities for military access. Points further afield are less attractive from either standpoint. Yet opportunism is a powerful motivation, and the chance to establish more substantial military access to a commercial port off of the major strategic SLOCs – in, say, the Gulf of Guinea or the south Pacific – also yields a certain operational logic. In addition to providing capacity to operate in distant theaters, such off-center sites might trigger less aggressive balancing from the U.S., India, and Japan than would a Chinese base in Sri Lanka or Pakistan.

4. How does China use military diplomacy, foreign assistance, military training, and military sales to secure agreements with other countries to provide the PLA with basing and other access rights?

PLA interactions with foreign governments and militaries are an important component of China's overall foreign policy.⁵⁴ China's military diplomacy has provided ample opportunities to call at ports owned or operated by PRC firms. PLAN vessels (including the hospital ship *Peace Ark*) have visited

52 Yuan Dechun (苑德春), Wu Yang (吴洋), Zhang Wei (张昕), "Thoughts on Strengthening the Construction of Key Nodes on Strategic Channels (加强战略通道关键节点建设的思考)," *Journal of Military Transportation University (军事交通学院学报)*, vol. 18, no. 2, 2016, p. 2

⁵¹ Xi Dugang (都笃刚), et al. 2018. "Geopolitical risks for the 'One Belt One Road' Construction in the Indian Ocean ('一带一路'建设在印度洋地区面临的地缘风险分析郗)." World Regional Studies (世界地理研究), Vol. 27, No. 6 pp. 14-23.

⁵³ The PLA National Defense University's 2015 Science of Military Strategy adopts the approach prescribed in the PRC's broader diplomacy, linking military presence to protection of "overseas interests" – that is, China's citizens and commercial assets abroad. "Under the new situation, with the in-depth development of economic globalization and the continuous advancement of China's reform and opening up policy, the pace of 'going out' of domestic enterprises has been accelerating, overseas investment has grown substantially, international trade has developed rapidly, and overseas interests have become more widespread. The scale is getting greater and greater, and it is still expanding to deeper and broader levels. At the same time, international terrorism has become increasingly rampant, conflicts in local areas have been raging, and social unrest has caused various security threats to overseas personnel, overseas assets, investment markets, resource supply sites, and maritime strategic channels. Therefore, there is a strong demand for China to send military forces to go overseas to safeguard national interests." Xiao Tianliang (肖天亮), ed. 2015. Beijing: Science of Military Strategy (战略学). Beijing: PLA National Defense University Press, p. 302

⁵⁴ For in-depth analysis of this phenomenon, see Kenneth Allen, Phillip C. Saunders, and John Chen. 2017. "Chinese Military Diplomacy, 2003–2016: Trends and Implications." *INSS China Strategic Perspectives*, no. 11 (Washington, DC: National Defense University Press); Saunders, Phillip and Jiunwei Shyy. 2019. "China's Military Diplomacy." In *China's Global Influence: Perspectives and Recommendations*, edited by Scott D. McDonald and Michael C. Burgoyne, pp. 207–27.

at least 27 of those 94 sites. ⁵⁵ Perhaps more notable, at 56 of the 94 PRC ports overseas, the PLAN has called at a different port in the same country. In 17 of those 56 unvisited ports, PRC firms held a majority share in a terminal operation. This implies that diplomatic rather than operational factors are determinative. China either defers to the host country's preferences, seeks to downplay the military implications of its commercial enterprises' presence in country, or both. It is also clear that many of these facilities are unsuited for military use, or otherwise unable to host multiple vessels at commercial piers; those are firm-level factors that are not directed by the PLA. As such, the data do not establish a definite link between PLA visits and the establishment of bases or access points.

Other components of military diplomacy like foreign assistance, military sales, and military training or education are consequential for forging relationships conducive to allowing Chinese military access to ports on foreign shores. Increasingly, senior-level leadership interactions and training are undertaken "off-site", in mainland China. ⁵⁶ Although foreign students report having very little interaction with their PLA counterparts (except with instructors in the classroom), ⁵⁷ this combined educational programming establishes personal ties among senior officers and forges institutional links between militaries. Functional exchanges on specialized subjects like logistics and military medicine are also a part of the PLA's outreach package to foreign militaries. These, like training and education, are an opportunity for China to showcase its growing capabilities, confidence, and professionalism – a valuable impression to leave with foreign militaries who may consider affording greater access to a powerful PLA deemed capable of benefitting their own national security.

Arms sales, typically paired with other military diplomacy, offer material benefits that can serve as further inducement for a foreign country's receptiveness to PLA access. They are disproportionately concentrated among South Asian states (Pakistan, Burma, and Bangladesh were the top three recipients of Chinese arms in the period 2008-2018, together accounting for 61% of PRC arms transfers). With growing sophistication of some of these exports (like submarines, surface combatants, and UAVs), they also invite ongoing Chinese technical assistance. China's sale of two Ming-class Type 035B diesel electric submarines to Bangladesh illustrates this process. While these affordable but obsolete submarines were not capable platforms, they came packaged with Chinese personnel to "supervise the construction" and PLAN crews to train the Bangladeshi submariners. PLAN vessels began calling in Bangladesh in 2016 once the submarines were delivered, and by 2019, Bangladesh was negotiating with China to build it a submarine base – though expressly denying that the PLA would use the facility.

_

⁵⁵ These visits occurred at one or more terminals at 14 of the 36 ports operated by Hutchison, 11 of the 31 ports owned or operated by CMPort, and 6 of the 19 owned or operated by COSCO. Author database, including data shared by the U.S. National Defense University's Center for the Study of Chinese Military Affairs.

⁵⁶ Saunders "China's Global Military-Security Interactions," pp. 195-200

⁵⁷ Author interviews with participants.

⁵⁸ Stockholm International Peace Research Institute. "Importer/Exporter TIV Tables." https://www.sipri.org/databases/armstransfers

⁵⁹ US Department of Defense. 2018. Assessment on US Defense Implications of China's Expanding Global Access, p. 5, https://media.defense.gov/2019/Jan/14/2002079292/-1/-1/1/EXPANDING-GLOBAL-ACCESS-REPORT-FINAL-PDF

^{60 &}quot;Why China's Submarine Deal With Bangladesh Matters." *The Diplomat.* 20 January 2017. https://thediplomat.com/2017/01/why-chinas-submarine-deal-with-bangladesh-matters/61 Jbid

⁶² Kamran Reza Chowdhury. 2019. "China To Help Bangladesh Build Submarine Base, Senior Official Says." Benar News. 12 September. https://www.benarnews.org/english/news/bengali/submarine-base-09122019155029.html

China's military diplomacy repertoire has grown, and by virtue of the PLA's increasing capability, presents China as a more attractive partner to many states. Yet to date, only Djibouti has provided anything recognizable as a secure basing arrangement. This is not necessarily a sign of the failure of the program, but rather, of its more incremental and unpublicized nature. According to one researcher at the Academy of Military Science's Foreign Military Studies Institute, the relationship between military diplomacy and establishment of access may be the reverse: "Military diplomacy must obey and serve overall national diplomacy. Therefore, in the process of building strategic strongpoints China should not over-emphasize the role of military diplomacy. Military diplomacy should play a supporting role. Moreover, it should place civil affairs and economics front and center. It should mix the military among the civilians (yujun yumin, 于军于民) to conceal the military (yumin yan jun, 以民掩军)." Observation of military diplomacy, especially PLAN port calls, may be a lagging indicator of the practical military support afforded by China's growing portfolio of overseas ports.

Implications & Recommendations

While it is premature to claim that PLA logistics arrangements overseas rely on PRC firms, there is a growing body of evidence that the commercial facilities owned or operated by those firms are a key component of Chinese efforts to project power abroad. A few further implications and recommendations flow from this conclusion:

- 1. Over the long term, PLA planners believe they will require network of overseas bases. ⁶⁴ For the short to medium term, however, the dual use "strategic strongpoint" model is ascendant. This model provides significant peacetime logistics capability and intelligence value. However, unless and until China establishes alliances or security agreements that assure reliable military access in a conflict, the wartime utility of these facilities will be limited.
- 2. Properly equipped and utilized, commercial ports may perform valuable military functions not only for logistics, but for intelligence and communications that do not require establishment of formal PLA facilities and permissions. As such, further research and analysis of the characteristics of China's commercial port facilities and activities is necessary.
- 3. Economic influence is the leading instrument of Chinese efforts to achieve security abroad. The Chinese firms building and operating infrastructure overseas are on the front lines of a nascent great power competition. There is no viable method for preventing their commercial entry into most foreign markets. U.S. failure to roll back the concession won by Shanghai International Port Group at the port of Haifa in Israel should be a cautionary tale. 65 If a close security partner

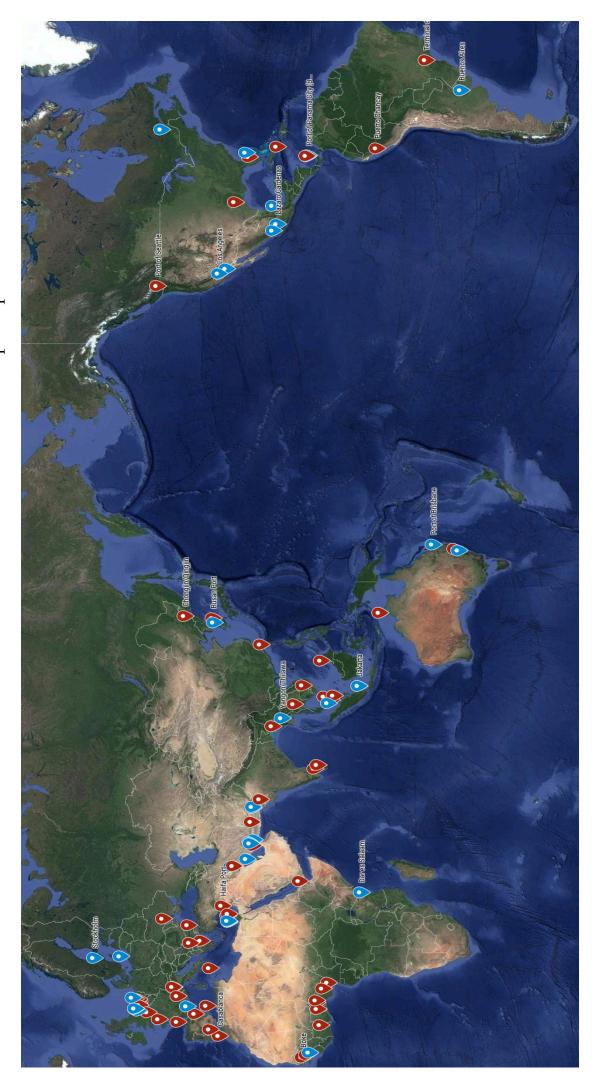
63 Liu Lin (刘琳) "Strategic Strongpoints along the 'Belt and Road'," p. 64. [CMSI Translation]

⁶⁴ Liu Jiasheng, Sun Datong, and Peng Fubing (刘嘉生, 孙大同, 彭富兵). 2019. "Development of Carriers for Strategic Projection in Response to National Security Needs (基于国家安全需求的战略投送载运工具建设)." *Journal of Military Transportation University* (*军事交通学院学报*), no. 2, pp. 9-13.

^{65 &}quot;Israeli government approves Haifa Port privatization." *Container Management*, 27 January 2020, https://container-mag.com/2020/01/27/israeli-government-approves-haifa-port-privatisation/; Ron Kampeas. 2019. Michael Wilner. 2019. "Treasury joins White House, Pentagon in warning Israel over Chinese encroachment. *Jerusalem Post.* 16 January, https://www.ipost.com/Israel-News/Treasury-joins-White-House-Pentagon-in-warning-Israel-over-Chinese-encroachment-577638; "US Senate warns Israel against letting China run Haifa port. *The Times of Israel.* 19 June, https://www.timesofisrael.com/us-senate-warns-israel-against-letting-china-run-haifa-port/

- like Israel is not persuaded that the security risks outweigh the commercial benefits, it is highly improbable that other states will forego Chinese involvement in their critical infrastructure.⁶⁶
- 4. Neither US firms nor the US government are prepared to offer direct substitutes for Chinese firms building, financing, or operating ports and other transport infrastructure. More useful than insisting that other states refuse Chinese largesse is empowering them to exploit it. US firms and government agencies could provide anticipatory consultation with governments and businesses engaging with PRC firms on port projects, providing legal and managerial advice on how best to retain control over important operational elements and rights to their infrastructure. Helping other states maintain open bidding and non-discriminatory commercial access to Chinese projects will limit prospective harms to U.S. national security.
- 5. Given the number and geographic distribution of ports under PRC full or partial ownership and operational control, each regional combatant commander should be tasked to specify to the Secretary of Defense which ports are essential to United States joint forces in carrying out assigned missions in their areas of responsibility. When there are Chinese facilities at these ports, robust risk-mitigation measures must be adopted.

⁶⁶ For analysis of this issue by retired senior U.S. and Israeli military and defense leaders, see Admiral Shaul Chorev, Douglas J. Feith, et al., "The Eastern Mediterranean in the New Era of Major-Power Competition: Prospects for U.S.-Israeli Cooperation," *Hudson Institute*, September 2019, pp. 20-24, http://hms.haifa.ac.il/images/publications/HUDSON/EasternMed_in_New_Era.pdf



Red pins: SOEs Blue pins: private firms

PANEL II QUESTION AND ANSWER

CHAIR WORTZEL: Thank you. I appreciate that very much. I was interested in comments on operations-enabling capabilities and also on the whole idea of reach and on-time logistics.

And specifically, I'm very interested in whether you have seen ground-based facilities or discussions of how space enables command and control, how space would enable on-time logistics and how dependent they would be on space as they get out and away from their near seas.

In other words, I don't think they're going to do this on HF. If they're on a ship or an aircraft, they're probably not. If they're on a port or a strong point, yeah, they might be able to use cyber, which is important in itself as an enabling capability.

So, and then finally, have you seen anything in discussions in PLA literature or training that involves preplanned, time-phased force deployment, TPFDs? Those are very necessary if you're going to do amphibious operations or force projection.

Any of you in any order, but we might as well start in the order that you went.

MR. PELTIER: Sure. I'll start off by saying that I think that PLA investment in all sorts of what we would term emerging technologies, including space and cyber capabilities, particularly for command and control, their investment is pretty massive.

And I think it's only going to continue to grow. I think that a lot of PLA and associated academics believe that these kind of capabilities and their investments will allow the PLA to kind of leapfrog or to evolve more quickly in terms of their overall military and expeditionary capabilities.

So I think that's where I would start off with. However, I would say that besides the pure capabilities themselves, I think we have to acknowledge the fact that in terms of both doctrine and actual experience with command and control, with space assets, PLA is extremely limited at this point.

And so that's going to be a determining factor even after the capabilities themselves are developed.

CHAIR WORTZEL: Mr. McCauley?

MR. McCAULEY: Yes. I haven't seen specifically information on using space based assets in support of logistics.

Although, often the logistics does rely on the Beidou communication system for their logistics communications and communicating with units and also they use the Beidou to -- when they're trying to provide just in time logistics to a unit to understand where that unit is so that the transporting unit can provide logistics to the supported unit.

So they do use a space-based systems, in particular Beidou, to support logistics support. And I would think as they move overseas, they would have to rely to a much greater extent on space-based communication systems.

And like I said, they seem to have quite a bit of experience working internally in China using those systems.

CO-CHAIR WORTZEL: Thank you. And as we turn to you, Mr. Kardon, you specifically use some very good commercial imagery. In addition to anything you might want to answer, have you seen ground-based space equipment?

DR. KARDON: Looking at open-source imagery, I haven't identified anything at any of the commercial port sites. I guess it's worth noting the single PLA space station down in

Argentina.

And I suspect looking for a proliferation of facilities like those rather than nesting them into commercial facilities is more likely.

I think the commercial operators rely on normal commercial communications and whatever satellites are available and sort of reinforces the claim that it's a very significant peacetime capability that has liabilities in a wartime context.

CO-CHAIR WORTZEL: Thank you. Commissioner Cleveland?

CHAIRMAN CLEVELAND: Thank you all for appearing and adding to our understanding. I have three very separate questions for each of you. Mr. Peltier, you mentioned in your opening statement, and I'm not sure I got it quite right, so I'd like you to elaborate, the role of unmanned assets and expeditionary forces and likened it to Marine lab, which I wasn't -- that's not important, but I'm really interested in your understanding of the role of unmanned assets and autonomous capability. When it comes to expeditionary forces, how do you see that evolving?

Mr. McCauley, on page 31 of your statement, you identified multiple areas for improvement the PLA has identified, including referencing Beidou.

I'm curious what role you see the so-called civilian sector, sort of the private sector playing in addressing the specific areas of military capability.

So I'm interested in that civil-military fusion in terms of specific examples of the role that the civilian side would play. And Mr. Kardon, I share Commissioner Wortzel's view of your extraordinarily good imagery.

Admiral Blair said this morning that he thought Kyaukphyu in Burma and Gwadar in Pakistan were sort of the two focal points for Chinese control of the region.

And he saw the region, if I understood him correctly, as really the focus of Chinese interests. And if we can maintain our position in that region, we will have to worry less in terms of global competition.

Nobody so far has mentioned Chinese activities in Cambodia. You mentioned it, Dr. Kardon, in your prepared testimony. I'm very interested in the Chinese, I think, colonization is the fair statement of Cambodia, and in particular the port and air field that they have under way.

And I'm interested in your assessment of where are they in that process and how it fits into Admiral Blair's assessment that Burma and Pakistan are the valued military assets as opposed to the role that Cambodia might play.

We could talk for the next hour about those three questions, but please, Mr. Peltier.

MR. PELTIER: Sure. So on the issue of unmanned assets and expeditionary operations, I would say that in part that is to some degree speculation on my part, but it is informed by some of the writings that I've seen on the -- that come from PLA academic journals on military transportation.

And some of these academics have discussed the importance of unmanned and autonomous assets at the point of delivery overseas. So they wish to automate how -- at the very end of a supply chain and in terms of fielding overseas forces to automate that final step.

So that's one pretty critical part that I think that they're looking into. I think that, though, more broadly we should view their pursuit of unmanned systems as a natural extension of their overall interest in autonomous systems more generally.

So their interest and development of artificial intelligence and autonomous and unmanned systems I think is pretty all-encompassing so that we should expect that in their expeditionary capabilities as well. I use the example --

CHAIRMAN CLEVELAND: Expect, or have we seen sort of -- this is much more my colleague's area of expertise, but we tend to see doctrine first, and then we see the introduction of whatever the capability is.

So when you say expected, or have we seen the deployment of drones and unmanned assets in the context of power projection?

MR. PELTIER: As far as I've seen, at least, I have not noticed any actual deployments of these unmanned assets in terms of the autonomous logistics systems.

However, they have experimented with something called the Marine Lizard, which is an unmanned amphibious assault vehicle, which is fairly similar to a Type 05 amphibious vehicle.

So I think just the fact that has been tested should be somewhat revelatory. Thank you.

MR. McCAULEY: On the issue of UAVs, the PLA Air Force has been experimenting with using the UAVs to supply units in remote areas. And so I think that's very applicable to forces overseas, especially if they're going to be supplied from a ship to shore or units from remote or difficult areas.

On the issue of civil-military integration in the civilian sector, a lot of the emerging technologies and even some of the older technologies that are new technologies to the PLA are being integrated to provide not only precision logistics, which they're working for, but now the PLA is talking about intelligent logistics, so they're trying to incorporate intelligent technology into the logistic system.

And units and some of the joint logistic support centers apparently are already developing intelligent monitoring systems within their theater so that they can not only monitor what they have on supply but they can monitor the delivery and also monitor unit requirements.

What supplies do they need? What supplies are they using? What casualties do they have so they can provide medical support and that sort of thing?

So they are really getting into different types of systems in different areas that will enable increased precision logistics support and increasingly what they're talking about as intelligent logistics support.

But they're looking into, I mean robotics and automation for not only production but warehousing and transportation, rapid loading and self-loading, unloading equipment and technologies, palletization and containerization.

Many of these are things that are developed for the civilian businesses and enterprises, but they're being incorporated into the PLA to make their logistics capabilities much improved.

So I think there is a lot of that the PLA is gaining from civil-military integration and incorporating civilian technologies and practices into the military for increased capabilities.

CHAIRMAN CLEVELAND: Thank you. And Dr. Kardon?

DR. KARDON: So on the question of Burma and Pakistan and ports that Admiral Blair noted, Kyaukphyu, Gwadar, those are actually the focus of the handful of case studies that we've been doing up in Newport and have thought quite a lot about both the port facilities as well as the broader commercial projects that they're connected to.

And I think Admiral Blair also pointed out the salient feature of them, which is that these are countries that are contiguous to China. And the idea is that you would have some type of uninterrupted road rail pipeline, maybe fiber optic connections to China.

So there are reasons why that's tremendously attractive, and I think it feeds into an interest among Chinese defense planners in a model that I think differs quite remarkably from the way the United States thinks about overseas basing in the sense that these are interior lines.

This isn't, you know, external lines plucked up in the middle of the ocean, but there's a

sort of robust, organic connection to China. That said, I don't think that either of those two particular ports are necessarily unique or irreplaceable.

And I do think that the strength of the strong point idea, as evidenced in the many different suggestions that come out from Chinese authors on where might be suitable, which countries, which places is that, you know, that they're designed to function in a networked way and to be redundant in some ways.

And so I think that if, for example, sensitivities about India make China hesitant to overtly militarize Gwadar, whether India's potential reactions or Pakistan's reluctance to do it or any number of other factors, there are other alternatives, and each individual point, strong point doesn't need to have the full panoply of military capabilities. I think the idea from a logistic planning standpoint is that you can do refueling somewhere.

You've got a good dry dock somewhere else. You can figure out how to pre-position some munitions somewhere else. And if you are able to integrate that, and that's a big if and would require quite a lot of sophisticated planning, then you can do it.

So placing Cambodia into that equation, I think it's a little bit of apples and oranges. I view Cambodia as off this main SLOC and the maritime lifeline moving through South China Sea to Malacca.

And obviously, Gulf of Thailand is not so distant from it, but at the same time, the establishment of pretty significant facilities at the Spratlys, makes that area not, probably not as high a priority.

And I would tend to think about the development of, I guess there's evidently a lease of about 20 percent of the Cambodian coastline along a military length runway and active discussions about building two separate deep water port projects, which I'd note in that case as well as in Kyaukphyu and Burma, there is no operational port there yet, and there have been announcements about it for years and years. These are some of the complexities of operating countries that are unstable and prone to bad governance.

And there are reasons why China is the only bidder on these projects. But, you know, I would tend to think of that area in the Gulf of Thailand as being much more focused on that region and China's ability to project power into Southeast Asia and to shape its relationships with those states as opposed to part of the broader logistical network.

I think they are sort of within striking distance of the Spratly ports and of the Hainan base as such that that seems like it's not part of this model, frankly.

CHAIRMAN CLEVELAND: Thank you.

CHAIR WORTZEL: I am going to -- Senator Talent sends his regrets, but he left a related question to Chairman Cleveland. He was also very interested in the mention of unmanned assets.

And specifically, he wanted to know whether these were sort of long range, unmanned aerial vehicles, like we operate out of Nellis and Langley or the shorter range things that operate off ships, whether it be UUV or UAVs.

So he wanted that in the record. MR. PELTIER: I'll note from the beginning that much of my research so far has focused on unmanned surface vessels that China is currently developing.

They've tested several of them. Some of them are more focused on kind of autonomous river patrol and coastal patrol and these sorts of things.

So they may be armed assets, but they're not necessarily what I would call really built for expeditionary capabilities. I would imagine that something of an easy win in terms of Chinese

unmanned capability development is to take existing manned assets and to replace the internals to convert them into unmanned capabilities as with the Marine Lizard.

So my sense is that in the short to medium-term over the next five to 10 years, that's the kind of thing that we might expect. I will note that Jane's more broadly has heard reports of operators of Chinese-created UAVs, particularly their medium-altitude long-endurance (MALE) UAVs and have heard what I would describe as kind of poor reports of their capabilities.

In fact, some of the countries that operate them in the Middle East and in Africa are reportedly trying to find other users for their capabilities. So I think that there are some degrees about some kind of concern about the quality, I guess of existing Chinese-produced capabilities.

Of course, these were created specifically for export though. So we would expect that PLA capabilities are of course at the higher quality.

CO-CHAIR WORTZEL: Commissioner Fiedler?

CO-CHAIR FIEDLER: I need a little bit of education here. I'm going to assume for the moment that we're talking about 2,000 Chinese Marines.

So, and they can supply them for two weeks, and then they have a problem. How many containers of replenished supplies are necessarily for 2,000 Marines to continue to operate, physically, on the container side? Anybody got a guess?

Well, this gets to the -- I mean where I'm going with this is pre-positioning replenishment supplies in anticipation of operations in a commercial port that has sufficient warehousing and/or cold storage capacity in Africa and/or say South America that could deal with the unpredictability of the operation lasting more than two weeks.

And you testified that the Chinese intended to have 100 commercial ships prepared to support them, right? I need to know physically if -- are those discernible when they're at sea.

In other words, can I tell from a satellite that that commercial ship is one that can replenish Chinese military? Anybody know that? So, in other words, if they sent three ships to the -- to Eastern Africa that were capable of that, then maybe I think something is going to happen.

MR. McCAULEY: Well, I mean that's the problem with --

CHAIR FIEDLER: Move closer to the microphone.

MR. McCAULEY: -- using civilian ships is that you're not really sure what the mission of those civilian ships is, especially since they seemed to want to go towards using containerization because they believe it's a way of more rapidly loading and unloading equipment, including they're talking about using containers, transport, armored vehicles and heavy equipment.

But I'm not sure how you could tell a civilian ship that's being used to support or transport military supplies as opposed to shoes and umbrellas and that sort of thing.

CHAIR FIEDLER: Which is why I was asking the question on a number of containers because the containers are sitting around in piles in every port in the world, largely from China.

And so, what's in them becomes important and getting them there, no, the commercial ship -- my understanding of the commercial ship is that it is going to replenish a PLA Navy ship.

And therefore, it requires some unloading capacity that is different from a commercial ship. That's why I was asking the question about recognition from a satellite, right. So can I tell? I mean, we better start tracking these hundred ships if, in fact, they're trackable.

DR. KARDON: I suspect that's the sort of thing that's very difficult to tell from satellite imagery, but I would call you to at least one point of my testimony and also of a China Maritime Studies Institute report that my colleague, Conor Kennedy, wrote about civil transport for

military power projection that's up on our website where you can actually see the sort of enthusiastic reporting about the various things that COSCO and China Merchants, in particular, have done in exercises in the Mainland and in building or retrofitting certain vessels, for example, a China Merchants RO-RO ship that meets military specifications.

And so I, you know, with cargo like that, it's probably easier to identify tanks or other heavy equipment whereas if it's containerized, I think that's sort of part of the -- that's part of the beauty of the containerization system.

They're all identical boxes, and yeah, there's nothing preventing pre-positioning of containerized materials. I guess just the thing to add to that is that that's not everything that the military is going to need to sustain an operation over the long-term.

And unless and until you really have a full up base with all the things they need, you're going to --

CHAIR FIEDLER: Well, I think that was Admiral Blair's point. I mean -- his point specifically was he's not concerned about ports for real long-term, high intensity conflict. Okay?

What my question was all built around is sort of not necessarily reacting to a crisis of 18 Chinese oil workers are, you know, captured by somebody but a foreign policy objective that involves military force in a friendly state or client state and having the ability before they have the long-term ability for high intensity conflict to act.

And you're describing to me with ports and civilian ships the desire to create a capacity. And so, I'm a little more curious about what that capacity in fact has to be in order to keep people, 2,000 Marines.

I mean they didn't create 30,000 or 40,000 Marines today because they have no intention of using them, right? I mean and -- or only using them in the South China Sea area or the near seas.

So they have to come up with, it seemed to me, and why I'm interested in all the civilian stuff, is they have to come up with an interim solution to real expeditionary capability.

MR. McCAULEY: Yes, in part, I think to address your question --

CHAIR FIEDLER: Closer.

MR. McCAULEY: The PLA does have norms for what they expect expenditures for different units to be in combat. Unfortunately, I don't know what those norms are, but they're used for planning.

So based on those norms and what they might expect as far as operations, I mean they know and could pre-position those amounts of supplies and yes, they could probably, you know, supply them to enterprises to maintain in warehouses or that sort of thing to use as pre-positioning for operations.

But again, I mean it also depends on the intensity of the fighting, what those requirements are for supplies and ammunition and medical support and that sort of thing.

But the PLA knows what that is, and so planners can hopefully if they're planning right, anticipate what those operations are and then pre-position those supplies or do whatever planning they need.

Put them in friendly countries or whatever so that they could provide support to those units if they got into combat.

CHAIR FIEDLER: Thank you.

CHAIR WORTZEL: Vice Chairman Bartholomew?

VICE CHAIRMAN BARTHOLOMEW: Thanks very much, and thank you to our witnesses. I have two questions, one of which might be not fair to ask you guys.

But I'll ask you the second one. But the first one is there's been lots of talk about limited capability. And wonder, I mean limited compared to what, right?

As far as I understand, the Chinese have basically the second largest capability in the world. So what are the limitations? I mean, what are we talking about when we talk about limitations?

That's for any of you, and let me tell you what the second question is. This is where it's a little unfair. We asked you to come up here and talk about Chinese capabilities.

But when we think about a wartime context of course, we have to think about U.S. capabilities, too. And the Center for Strategic and Budgetary Assessments just put out a report on Valentine's Day expressing serious concern about the state of our ability to carry out sea lift operations.

We have a dramatically dwindling Merchant Marine Corps, ships, a limited number of ships that we could use. We'd have to turn to foreign flagged, foreign-owned ships, foreign crude ships.

That's not exactly the best circumstances for us, and you know, can you imagine a circumstance in which the Chinese government would ever put themselves in a position like that? All right.

MR. PELTIER: So I suppose I'll start with your first question on what do we mean by limited capabilities.

While it's definitely true that relative to the United States and the rest of the world, Chinese capabilities are rapidly expanding and getting closer to the United States, I think one of the major things is that when we look at overseas operations in particular, there are relatively limited number of and different types of operations that the PLA has undertaken period, right.

So much of the data that we can use to make assessments here is based on the Gulf of Aden deployments, non-combatant evacuation operations and other kind of humanitarian and disaster response missions.

And so, I think to some degree a lot of our projections about limited capabilities are based on those kinds of missions that China has performed to various levels in the past.

And we just have limited data to go on in terms for projecting their ability to sustain other kinds of operations.

But besides that, I would also mention that just with -- as I mentioned in my testimony, the pure number of replenishment assets that the PLA currently has and the PLAN, in particular, really limits their ability to sustain operations.

They have no experience with the forced packages that would be necessary for -- on any kind of amphibious assault, for instance. And when I mentioned the possibility of a Marine Expeditionary Unit, a kind of amphibious assault, they're severely limited particularly in their air assets, so in their helicopters, in particular.

Even with the introduction of the landing helicopter dock, there are -- it appears to be that the PLAN and Marine Corps are fighting for helicopter production with the rest of the Armed Forces.

One of the reasons for this is because we have limited indications that they're pursuing the vertical replenishment between ships that the U.S. uses.

If they had kind of tested this style of replenishment at sea, then that might be an indication that they have the helicopters necessary to conduct an amphibious operation.

So in that sense, if they wanted to do some kind of amphibious assault maybe on a site that was under siege following a terrorist event or some kind of other non-state actor, we don't

have a lot of evidence that they have the replenishment assets or the actual offensive assets necessary to conduct that kind of operation for a long period of time at all.

VICE CHAIRMAN BARTHOLOMEW: Anybody else?

MR. McCAULEY: Yes. As far as the limitations as far as logistics go, I think the focus has been on mostly so far on developing a regional capability and especially a joint capability for the theaters but again on a sort of regional context.

And they really are only now looking at projecting forces and supplying forces over longer distances. And that seems to be the real issue.

And I think that's why many of the logistics articles on supporting projection forces are focused on strategic delivery because that's I think one of the real weak links for them logistically is just getting stuff at a long distance because as we've heard, their air force and naval capabilities are somewhat limited now.

But even the civilian, integration of civilian assets to support these operations are -- even though they have a large civilian air force and a large civilian shipping enterprise, many of the ships, even though the laws say they're supposed to be built to military specifications, they're not.

And many of the sources I looked at were complaining that many of the ships, many of the aircraft were not suitable for supporting military operations. This is based on their construction.

And for example, they have a large civilian cargo transport fleet, but a source from 2019 said that only 143 of them were capable of supporting military operations.

The other limitation as far as civilian ships and aircraft go is the training of the crews. Sort of ironically, several PLA sources complain that the civilian enterprises were more interested in making money than supporting the military.

And so they aren't really spending time on having the crews trained to support the military, and this is especially so to support combat type operations.

They don't have the training that you would need to operate under combat conditions. Also, the civilian ships need to have military communications deployed to them.

They have to have some military personnel deployed to them, and so living spaces have to be made available to support those military personnel or deploy the ships.

And these things just aren't being done. I mean a number of sources I looked at complain that even though the new transportation mobilization law was issued in 2017, they're already saying it needs to be revised.

They didn't say specifically how, but I think it's the enforcement angle of it that the civilian enterprises are simply not complying with the law and either constructing their aircraft and ships that meet military standards or training their crews to support the military. And so this is a big limiting factor in the area of logistics.

DR. KARDON: I would just reinforce that these comments of my co-panelists on the various dimensions of those limitations and add even, at least anecdotally, you can see in Chinese reporting the types of exercises they are trying to do to exploit that civilian capacity and the types of complaints they have about the standing legislation and regulation allows them to do it.

They, I think, either last year or the year before, I had a first instance of having a COSCO vessel move live ammunition out to a Navy ship in the East Sea, I believe. But I think watching -- watching these developments gives you a sense of the -- certainly the ambition to use these civilian adjuncts, but also a sort of the long road towards doing it and I think, that's the latest assessment I saw too about which ships are suitable for these purposes.

And, yeah, just to foot stomp on the point about, that Admiral Blair made, and that I'm trying to deliver through looking at the commercial ports is that, you know, they are able to provide a lot of this civilian-style supplies that are, of course necessary, but when you start thinking about higher end combat operations to sustaining them, it is not obvious that that model is going to be sufficient for it. It's not to say that it is not possible in the long term that they would develop those facilities far out of area that would allow them to sustain it.

I guess the strategic factor to add into this consideration about why there is a limitation, that one of the reasons that the United States operates so widely around the globe is because of relative security of our near-abroad and that is going to be a persistent vulnerability for China out into the long term, frankly, and so in terms of the -- there is going to be a question of scarcity of resources, there is going to be a question of whether they want to have that type of engagement far away from China in this context and I think that is going to continuously be a drag on overseas or expeditionary operations.

On your harder question, certainly wouldn't weigh in on the U.S. domestic politics of it, but Admiral McDevitt reminds me that there is some 51 hundred Chinese-owned, not flagged, merchant vessels out there, so in terms of their military sea lift capability, that can be requisitioned under existing law and regulation. That is pretty significant. And we have some retired U.S. Military Sealift Command up in Newport who have lamented this and I think you would probably hear it on the Hill a lot, why this hasn't been prioritized as a strategic industry.

In the case of China, just thinking about the way that a firm like COSCO or China Merchants is organized, those large industrial conglomerates that have vertical integration across the whole transport sector and able to make, sort of, loss-leader decisions about certain lines of business that I think are really challenging in the U.S. context. I don't think that trying to conduct Chinese-style industrial policy here in Washington is a winning bet, but it certainly should call our attention to the fact to that, sort of, lack of capacity in the event we really needed to lean on merchant shipping. That is something the Chinese are very explicit about thinking of as strategic asset that is meaningful.

CHAIRMAN CLEVELAND: Thanks very much.

CO-CHAIR WORTZEL: Uh, Senator Goodwin.

COMMISSIONER GOODWIN: Thank you, Mr. Chairman, and thank you, gentlemen, for your time today. I'm going to follow my colleague's lead and ask a bit of an unfair question outside of your alls' respective bailiwicks. And I will dive into domestic politics just a bit.

And my question is prompted by your testimony, Mr. McCauley. You talk about the need, the necessity, to pay special attention to the efforts of the Chinese in entering into these technology transfers and business relationships with American companies and companies around the world. And the need for the U.S. to develop a strategy to educate and influence our allies about some of the consequences of these relationships. While at the same time, giving the civil-military integration.

Here at home, CFIUS should strongly examine certain sales, dual-use technology, logistic sales, in certain areas and he lists several. And the one that jumped out at me was oil pipeline technology and software distribution and the like.

And that is interesting because it may seem to some, less obvious than investment in hypersonic aircraft or AI or big data, but certainly important. And the reason it jumps out at me, in my home state, a Chinese state-owned enterprise has announced an 80 billion dollar investment in some oil and gas infrastructure where they would plan, at least announced, they

plan to build electricity generating facilities, an ethylene cracker facility and a huge underground storage hub, to store the natural gas. With the stated goal of develop -- investing in this infrastructure, extracting raw materials, and sending a lot of it, along with expertise learned along the way, back to China.

Suffice it to say, the assumption has been that that has run into some difficulties with -- anticipated difficulties -- obtaining CFIUS approval. So, today there is a piece of legislation pending in my state legislature that would establish an investment fund to allow this state-owned enterprise to invest in the fund, as opposed to a direct investment, with the stated objective of hopefully avoiding concerns and difficulties with CFIUS.

So, my question is, in addition to influence and education efforts abroad, do we need to have some influence in education efforts at home?

And to be fair, there are pressures on the other side too. I mean, for governors, mayors, local economic development officials, they want to attract investment and they want to create jobs and most, certainly in my home state, are not in a position to very frequently turn down an announcement of an 80 billion dollar investment.

So, how do we educate about the risk involved with these sorts of investments? MR. McCAULEY: Yes, sir. I do agree with you.

I think that -- I think there is some education going on as far as civil-military integration in China and the impact on purchases here with Huawei and what not. I think more needs to be done.

I also think, you know, influence abroad to try to counter the Chinese Belt and Road Initiative and some of the methods they're using to -- which are sort of driving this move to be able to operate overseas -- needs to be countered to limit the development of ports and access points overseas.

But, yes, I think internally it needs to be done too. They have to realize that these civilian companies are going to mobilize reserve forces to support the military and I'm not sure a lot of people really understand that.

And yes, there are hard questions that have to be made, obviously we want to do business, but the pluses of that -- the pros and cons -- need to be addressed as far as whether selling, you know, heavy and medium Boeing transports to China is better to support a U.S. company making sales or do we want to risk supporting the PLA strategic delivery capability, which it would do. I mean, ironically, many of those 143 aircraft the PLA identified as being able to support their operations were in fact, different types of Boeing cargo aircraft.

So, you know, people above my pay grade need to look at that and make a decision on the pros and cons.

COMMISSIONER GOODWIN: Anybody else? DR. KARDON: I'll weigh in on this and maybe take it out of the United States and think about, sort of, what are the lessons that your state is learning from this and what are the particular areas of critical infrastructure that have decided are vulnerable or shouldn't be easily open to foreign investment, and then that may provide a useful template for other states where we have concerns about their security. And I've been thinking about this in an integrated way, you know, one of the recommendations I make is I don't think there is a viable way to deny China commercial access to most countries in the world, if not all, and I gave the example of Israel. You could easily think about UK or Germany with 5G technology. And these are -- these I think are examples of the limits of China to put a stopper in it.

And I think a more appropriate strategy has to do with exploiting it. You know, there is a

lot of Chinese capital floating around, some of it very carefully, strategically directed and some of it, not so much. And I think the real pay off -- and maybe we could learn that by looking at ourselves and thinking about what are the things that we really care about and maybe that would help us think about other states, how do we structure these contracts in ways maybe more sophisticated than just creating a fund to launder the money, as it were, and actually thinking about, well what are the areas of this infrastructure that genuinely pose a security risk? What are things that we can do to mitigate it and I can't speak to power infrastructure, but certainly from a port standpoint you can just identify the ways that it can be utilized by the military and make sure that your local port authority has control over it.

I believe Admiral Blair pointed out that, you know, absent some very clear legal restrictions, it seems like it would be awfully easy for a host state to just say, okay, we're taking over this warehouse because we have had reports of this, that or the other thing. And this is one of the downsides of dealing with countries that have high levels of corruption or lack of transparency.

I would point out that, as you will see in Appendix A, that I've submitted, there are Chinese ownership stakes, rather than operating leases, for a number of ports in the United States. As you've gone through the CFIUS processes this has been something that has been on the radar in the U.S. for quite a long time. You will probably recall the Dubai Ports World saga, I think in 2005, and you know, I'm not in the position to say whether or not people are fully satisfied that the critical infrastructure has been secured, but I suspect they have thought through the specific aspects of it and have structured deals in a way that they feel like they're essentially getting, you know, the better end of the deal -- they are getting a lot of capital and are able to operate infrastructure that is important for the United States. So, I think being a little bit more fine tuned about it is to our advantage and I think also feeds into a package that we can offer other states who are confronting similar questions.

CHAIR WORTZEL: Thank you. Commissioner Kamphausen.

MR. MCCAULEY: Wait, I just wanted to mention, sort of in relation to your question about influences. I find the Chinese government is actively -- has active influence campaigns globally to support their positions and I think the U.S. should consider developing a unified, you know, concept and plan to not only counter the Chinese influence globally, but also, as you've said, educate organizations and businesses locally.

I mean, during the Soviet era, there was a centralized information office to both analyze and respond to Soviet disinformation in active measures and maybe considerations toward developing a centralized office to have a more coherent and consistent message provided globally and internally would be a recommendation.

MR. PELTIER: I would just like to quickly add ---

CHAIR WORTZEL: Move along to Commissioner Kamphausen.

COMMISSIONER KAMPHAUSEN: With respect to my colleagues, I thought I would actually ask a couple of questions about your testimony.

(Laughter.)

COMMISSIONER KAMPHAUSEN: It was supposed to get a laugh, it is 2:10.

Mr. Peltier, on page seven of your written testimony, you say that PLA is likely currently capable of supporting two MEU-like ship packages at once for roughly six month deployments. Are there roughly two MEU-like ship packages to be supported?

MR. PELTIER: Not currently. So, currently, I would imagine that such a package would include the landing helicopter docks, but those currently are not -- there are not enough in service

that would fill out such a package. So, I think that is still far in the future.

COMMISSIONER KAMPHAUSEN: What does that suggest to you about the intent to develop the supporting capability before the actual operational capability?

I'm not -- I'm really interested, I'm not, this isn't a leading question.

MR. PELTIER: No, no, not at all. I -- that is a very interesting question, in part, because you look at the number of just Type 903As that have been produced -- seven over the last seven years, and you think, you know, that is actually probably more than is necessary for any operations that the PLAN is currently undertaking, so, in -- as you add in the Type 901s, which again, are more focused on carrier group operations, you start to see there are significant numbers of replenishment assets that the PLAN didn't have before, but are more than they currently need, as you mentioned.

COMMISSIONER KAMPHAUSEN: So, I read your page two of your testimony, when it talks about Type 903As, to suggest that the plan is interested in supporting more Gulf of Adenlike operations; so dry stock, fuel, not so much emphasis on ordinance. And that when we see more 901s that that is when we need to be more concerned.

MR. PELTIER: Well, my guess is that the Type 901 production would be pretty dependent on the introduction of new carriers, because that is their primary purpose. I would imagine that you would want to have one to two Type 901s for each additional carrier. We haven't seen too much use of the Type 901s with other assets yet, but I would imagine that, particularly over the next -- after 2030, or so -- that would be the primary replenishment ship. Period.

COMMISSIONER KAMPHAUSEN: Okay. And that -- and then on page three you say by 2035 -- and you list the type of capabilities that would comprise your estimate of what the PLA Navy would have in expeditionary combat capabilities.

I think that is helpful for giving us a context. It is interesting though, if right now they are capable of supporting two MEUs but don't have the ships to comprise the MEUs, might we see that pattern continue where the support ships would proceed the larger formations of amphib capabilities?

MR. PELTIER: I think so. I also think that, as the other panelists have noted, that the extensive use of civilian ships for those same types of missions ---

COMMISSIONER KAMPHAUSEN: I see, okay.

MR. PELTIER: -- are what we would expect in the short term to medium term.

COMMISSIONER KAMPHAUSEN: Okay.

And then, Dr. Kardon, it is a treat that we get to have you twice in a year and so a lot of your testimony today really builds on what you talked to us about last June.

This is a very unsophisticated question I am about to ask. Appendix A. What is the question you want us to ask about Appendix A? You start your paper -- your testimony -- with a brief overview, but you don't address the implications. What is the question that you want us to ask? And then I'm going to ask you to answer it, so you can frame it however you like.

DR. KARDON: I was promised there would be only unsophisticated questions. I am very happy to field that.

So, Appendix A is excerpted from a much bigger and heavier data set that covers all the relevant characteristics of these commercial ports. And we are in the process of doing some more sophisticated analysis of it to try and winnow down to a list of facilities that, in terms of both their physical characteristics, in terms of the host country and political and diplomatic

relations, and their ownership structures seem like most likely cases. So that is sort of the question that I would -- that is the output that is going to come out of it. Even make some tentative judgements about it now and some of them in those cases that have repeatedly come up and you didn't need to necessarily do all the analysis to say, hey, Gwadar is awfully interesting and unusual, as I note in the testimony, that is a state-owned enterprise that has no other activity anywhere else on the globe that we are able to identify. Which isn't unusual, but I think it -- I wanted to give you and your staff both sort of a bit of descriptive background to support the claims.

And I hope this will encourage some other researchers to dig in and try and use this for their purposes. For my purposes again, it is going to be about kind of ranking and stratifying the different types of facilities and the different capabilities that can be got out of them.

COMMISSIONER KAMPHAUSEN: And later you make ---

CHAIR WORTZEL: I'm going to move along to the next commissioner.

Commissioner Lewis, please.

COMMISSIONER LEWIS: Thank you for helping educate us. I've two questions. One relates to the ports and one relates to the South China Sea.

As far as the ports go, have you discovered -- when we learned that the Chinese government or Chinese companies control ports, is this public information or do you have to dig it out? And secondly, have you analyzed the ports that the Chinese companies or government has leases, control of, or owns -- are there certain characteristics of these ports that are common? For example, the port in Haifa is very near a U.S. submarine base. Have you analyzed what the characteristics are of the ports that the Chinese want to have operations in?

And as far as the South China Sea goes, my question there is, what have the Chinese announced as the reasons why they're doing what they are doing in the South China Sea and what should the U.S. do to deter them from doing more of it?

I ask all three of you that question.

DR. KARDON: I will take a swing at the first part.

So, the concessions for ports and the investments -- sort of portfolio investments -- in ports, are publically available. In a lot of cases it was through commercial data that we had bought. But essentially it is all in open sources, some of them you know, for example, its bauxite terminal in West Africa and you know, there are not a lot of reporting that is not high on the list of industry news and that just sort of requires some scraping through Chinese sources and basically identifying the firms that are actually engaged in terminal operations is a start to doing it, but it is pretty labor intensive.

In terms of the characteristics, so that's one of the things that will come out of the broader study that is in the works now and you know, the proximity to choke points is one of the descriptive characteristics that I brought out. In this testimony, certainly proximity to U.S. places and bases is another one of the variables that we are going to test these data against. You know, --

COMMISSIONER LEWIS: Like the one in Haifa, for example.

DR. KARDON: Like the one in Haifa, and yeah, that one really stands out as, you know, that is where the submarines operating on the Med like to go. The United States has explicitly said as much to Israel and I believe both the White House and the Senate and probably many others have been talking to the Israelis about it and they reviewed it and decided to go ahead with the deal. And so I think it is a -- it's an instructive case on the limits of persuasiveness on this and worth paying close attention to -- what were those arguments and why didn't they -- why

didn't they work?

And the South China Sea is a big question. I better punt on that for my colleagues unless there is a small piece of it I -- you'd like me to pick up.

COMMISSIONER LEWIS: Go ahead.

MR. PELTIER: I'll also say that I will punt to some degree on the South China Sea question.

However, the one thing that I would note is that while the freedom of movement operations obviously have some value, I do believe that there is still increased potential for the United States to leverage additional non-military assets and strategies in the South China Sea, particularly through the use of various international organizations, and economic ties with other interested parties in the region.

I'm not sure that those relationships -- I think that the U.S. could better leverage those relationships in addition to purely military means.

CHAIR WORTZEL: I want to thank the panel. We are near -- well actually we are at the end of this. I mean it -- to try and sum up, at least, what I'm hearing and I think it was absolutely superb research and it was very well written.

A lot of the capabilities that might come into play remain aspirational. And to a certain extent, experimental at this point in time. So, with that I want to thank you very much and we will take another ten minutes and be back for the final panel.

(Whereupon, the above-entitled matter went off the record at 2:22 p.m. and resumed at 2:34 p.m.)

PANEL III INTRODUCTION BY COMMISSIONER JEFFREY FIEDLER

CHAIR FIEDLER: Good evening. Our final panel today will examine how China's growing military presence and influence in South and Southeast Asia and Africa furthers development of expeditionary capabilities.

We will start with Greg Poling. Mr. Poling is the director of Asia Maritime Transparency Initiative at the Center for Strategic and International Studies.

He overseas research on U.S. foreign policy in the Asia Pacific with a particular focus on the maritime domain and the countries of Southeast Asia.

He's the author of *South China Sea in Focus: Clarifying the Limits of Maritime Dispute* and co-authored multiple other works.

So Mr. Poling will focus on China's activities in South and Southeast Asia. Next we'll hear from Paul Nantulya. Am I pronouncing it?

MR. NANTULYA: Nantulya, sir. CHAIR FIEDLER: Nantulya. MR. NANTULYA: Thank you.

CHAIR FIEDLER: Research associate at the African Center for Strategic Studies at the National Defense University.

Mr. Nantulya is an expert on China-Africa relations, partnerships between Africa and East Asia, and African security issues. His forthcoming book manuscript examines the influence of traditional Chinese strategic culture on China's military strategy and statecraft in the Western Pacific.

He also has a forthcoming book chapter on China's expanding influence in Africa. He will testify on China's military activities in Africa.

Mr. Poling, will we start?

OPENING STATEMENT OF GREG POLING, DIRECTOR, ASIA MARITIME TRANSPARENCY INITIATIVE, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

MR. POLING: Thank you, Sir. And thank you to the Commission, it's a real pleasure to be here.

So I was asked to speak about China's power of projection, specifically in South and Southeast Asia. And to do that, I think it's useful to break Chinese capabilities and China's efforts into different categories. Because when we're talking about Chinese basing and Chinese expeditionary capabilities we're not talking about the same things.

Within Southeast Asia, the most important way that China projects power right now is from China's own military facilities, built at the heart of Southeast Asia, which is the South China Sea.

Over the last five years, China's ability to project power has moved south by about 1,000 nautical miles. And that is a big deal.

It has radically altered the status quo in Southeast Asia. Certainly altered the balance of power vis-à-vis the U.S. And got a lot of partners and allies thinking in ways they didn't just a few years ago.

The second is China's overseas facilities in foreign countries. And in this category I think we're really only talking about two for the time being.

We're talking about the Chinese Naval base in Djibouti and we're talking about an unspecified amount of Chinese access to Cambodian naval and air facilities, which bears watching, but is not entirely transparent at the moment.

And then we have a much bigger, more amorphous categorywhich I think was discussed a bit in the last panel, which is China's civilian port and airport infrastructure.

In my talk, we'll talk about Southeast and South Asia, where there's no direct evidence yet of a Chinese military presence. But one must assume that China can leverage those facilities for at least logistics support as dual-use facilities in a future conflict.

And all of these bear watching. But we have to be clear that the first, in particular, is an immediate military concern.

The last two are tied up very closely with China's economic and political strategy in the region in ways that we can't disentangle. So they're not purely military problems.

So when it comes to Category 1, the South China Sea, the way that I think we should think about this is, Beijing has moved through its militarization process in the South China Sea quite quickly, in a very clear ordered manner through a series of phases.

The first was the building of artificial islands. Of artificial islands, apologies.

In the course of about 18 months, China constructed 3,200 acres of new land in the Spratly Islands starting at the end of 2013. It added hundreds of more acres to its existing bases in the Paracels.

By the middle of 2016, that phase was largely done. Island building was over. There has been no new landfill work or dredging in the South China Sea since middle of 2017.

China then moved into Phase 2. And that was the construction of military infrastructure. If you look at 2017 alone, the time period when the world largely stopped watching the South China Sea as closely, China constructed 120 acres of purely military facilities.

We're talking about 72 fighter jet hangers, a dozen hardened shelters for military bombers or transport aircraft, buried facilities to house weapons, ammunition and fuel, large signals

intelligence and radar facilities, and all the port and harbor facilities it needed to enable a PLAN and a Coast Guard presence throughout the entirety of the South China.

It then moved into Phase 3 around the end of 2017, which was the deployment of highend Military platforms.

At the end of 2017 we saw the first deployment of military patrol aircraft to Mischief Reef and Subi Reef. We had already seen one at Fiery Cross Reef, so by the end of 2017 all three of China's airbases were operational.

We saw a serious increase in the number and sizes of PLA Navy and Coast Guard, as well as the maritime militia deployments, in the Spratly Islands.

We saw high end jamming platforms deployed to Mischief Reef and Fiery Cross Reef. We saw anti-ship cruise missiles and surface-to-air missiles sent to all three of those.

China landed the first bomber in the Paracels. It increased the rate of rotations of its J-11 aircraft on Woody Island in the Paracels.

All of this suggests that China had prepared the ground for a rapid deployment of, say, ground-based aircraft if it ever decided to, in case of a conflict. This has radically altered the status quo.

And the most visible part of this is what we're seeing now. The current phase is persistent, continuous, deployment of Chinese military force short of actual kinetic capabilities.

So what we are seeing is the number of maritime militia vessels China deploys in the Spratly's has increased to about 300 on any given day. About a threefold increase in the course of a year.

China is preventing any new oil and gas work by any of the Southeast Asian states. China is able to see and monitor anything that moves on, above, and probably most things that move below the South China Sea.

China is deploying its own fishing fleets to fish in its neighbors' waters and preventing them from doing the same. And all of this undermines the American claim to be the defender of regional order.

Because for Southeast Asian parties they look at us and say, your FONOPs are very nice, but how does it help my fisherman, how does it help my oil and gas operators? That is the primary way that China, right now, is projecting power in Southeast Asia, by undermining the credibility of the U.S. as the supporter of regional order.

Now, beyond the first island chain, beyond the South China Sea, we're looking at those other two categories I mentioned. Chinese access to military bases right now starts and ends with Djibouti and Cambodia.

I'm not going to say a whole lot about Djibouti. I think everybody on the Commission is familiar with the facilities, the harassment of the nearby U.S. air facilities.

But in Cambodia, I get increasingly worried. Because we have no transparency on what the PLA is doing.

We had reports from U.S. officials to the *Wall Street Journal* last summer more or less confirming that the PLA Navy has secured access to Ream Naval Base on the Cambodian Coast.

We've long suspected that the Dara Sakor Air Base in Koh Kong Province is being built by the Chinese for military purposes. It's a far too long for a civilian airport in that area. The turnabouts are clearly meant for fighter jets.

This has real implications. I worry less about the naval base than the air base. If you imagine Chinese fighter jets flying out of Cambodia, suddenly China is able to contest control of the air over the Strait of Malacca and into the eastern Indian Ocean. That's a radical change.

Beyond those two we move into this amorphous dual-use facility discussion, where we're talking about Hambantota in Sri Lanka and Gwadar in Pakistan. And all of these could turn into Chinese naval facilities at some point in the future, if, because of the over alliance of these states on Chinese debt, they feel they have no choice.

More likely though we're going to see the PLA Navy use them for rest and replenishment. A lot of these facilities, if you look at a place like Hambantota, have no commercial rationale. They will never turn a profit.

And if the PLAN is the only one offering to pay for berthing rights, they're going to take the money. We have to accept that the PLAN is going to develop a blue water navy. They are going to have logistic facilities around the world.

We just have to make sure that states aren't arm-twisted into it against their will because of an over reliance on bad Chinese capital. And I will end my testimony there.

PREPARED STATEMENT OF GREG POLING, DIRECTOR, ASIA MARITIME TRANSPARENCY INITIATIVE, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

Statement before the

U.S. - China Economic and Security Review Commission

"China's Military Power Projection and U.S. National Interests"

A Testimony by:

Gregory B. Poling

Director, Asia Maritime Transparency Initiative, and Fellow, Southeast
Asia Program, CSIS

February 20, 2020 2118 Rayburn House Office Building China's military is rapidly developing a truly global blue-water navy along with expeditionary air capabilities. For the time being, these efforts are focused on breaking out of the "first-island chain," which in the People's Liberation Army-Navy's (PLAN) strategic thinking separates its near waters of the South and East Seas from the wider Pacific and Indian Oceans. The PLAN and to a lesser degree the People's Liberation Army-Air Force (PLAAF) are operating with greater regularity in the Indian and Pacific Oceans but lack the logistics networks to support frequent or large-scale expeditionary deployments. Addressing that gap is a clear goal of the PLA, though its successes have so far been mixed. Beyond the Pacific and Indian Oceans, China's military reach remains largely symbolic, restricted to ship visits, modest intelligence collection, and rare joint exercises.

In thinking about Beijing's efforts to develop military facilities and logistics hubs to support expeditionary capabilities farther afield, it is helpful to place such efforts in a series of categories, from most to least impactful. This is necessarily a loose and imperfect categorization but has considerable explanatory power when it comes to China's presence in Southeast and South Asia (as well as the Pacific Islands).

The first category, and the most significant at present, is China's own major air and naval bases constructed at the heart of Southeast Asia—the South China Sea. The second is Chinese military facilities or significant access arrangements in partner-nations, which at present applies only to Djibouti and Cambodia. Third is Chinese civilian port or air infrastructure projects which could provide important logistics support to PLA deployments in the future. All three of these types of facilities could play significant roles in China's development of expeditionary capabilities across the Indo-Pacific, but each much be viewed in very different lights. In addition to military concerns, the latter two categories are tightly wrapped up in Chinese political and economic influence in host countries.

China's South China Sea Bases

China's build-up of military capabilities from its artificial islands in the South China Sea has radically altered its power projection capabilities across Southeast Asia. A decade ago Beijing was effectively blind to anything that happened more than a few miles south of the Paracel Islands and its presence in the southern half of the South China Sea was largely restricted to patriotic cruises and intelligence collection. Today the PLAN, China Coast Guard (CCG), and maritime militia operate through every inch of the South China Sea on a persistent basis. China is able to effectively monitor anything that moves on or above (and likely a great deal that moves beneath) the South China Sea. It also has considerable ability to defend these facilities, making their neutralization by even the United States a costly undertaking.

China's militarization campaign in the Spratly Islands began in late 2013 and proceeded in four phases. First, Chinese dredgers and earth moving equipment created the islands themselves. China piled 3,200 acres of new land on top of its seven reefs in the Spratlys and several hundred more acres to expand its outposts in the Paracels. The three largest of its Spratly outposts—Fiery Cross, Subi, and Mischief Reefs—also had their lagoons dredged and turned into major ports. Those three saw the construction of 3,000-meter airstrips and basic infrastructure, including

housing, fuel and water storage, point defenses, air traffic control, and more. This phase was largely completed by 2016 and the last documented dredging or landfill work took place in the Paracel Islands in mid-2017.

The second phase of China's militarization campaign involved the construction of military infrastructure on the islands, particularly at Fiery Cross, Subi, and Mischief Reefs. Much of this build-up was undertaken in clear imitation of facilities already built at Woody Island, the largest of China's outposts in the Paracels, which sports its own air base, two ports, and considerable military and civilian infrastructure. By the end of 2017, China had largely completed the buildout of infrastructure at the three major Spratly Islands. This included a combined 72 hangars for combat aircraft and another dozen hardened hangars for larger planes like maritime patrol and heavy transport aircraft (and possibly bombers). China also built helipads, harbor facilities, buried fuel and ammunition storage, radar and sensor arrays, and hardened missile shelters during this time.³ There has been no other major construction in the South China Sea in the years since, with the exception of Beijing's development and deployment of new unmanned "Ocean E-Stations" which serve to extend its maritime domain awareness and communications capabilities without requiring the escalation and expense of building new manned outposts. One of these platforms, developed by China Electronics Technology Group Corporation—was installed on Bombay Reef in the Paracels in mid-2018.⁴ Several others have been deployed off Hainan, and it seems likely that they will eventually find their way to the Spratlys and perhaps beyond.

The next stage in China's militarization of the South China Sea kicked into high gear from 2017 through 2018 with the deployment of high-end military platforms to Fiery Cross, Mischief, and Subi Reefs. This included the first landings of military patrol and transport aircraft at Subi and Mischief Reefs, the deployment of jamming platforms to Mischief and Fiery Cross, and surface-to-air and anti-ship cruise missiles sent to all three. At the same time, Woody Island in the Paracels saw more frequent deployments of J-11 fighter jets, the first landing of an H-6K bomber, and an increase in the numbers of anti-air and anti-ship missiles deployed to the island. The completion of port and other supporting infrastructure in the Spratlys also coincided with a sharp increase in the presence of the PLAN and CCG throughout the South China Sea. Nearly every modern class of vessel in the navy and coast guard began calling regularly at the ports in

¹ See "Occupation and Island Building," Asia Maritime Transparency Initiative (AMTI), accessed February 12, 2020, https://amti.csis.org/island-tracker/.

² "China's Continuing Reclamation in the Paracels," AMTI, updated August 9, 2017, https://amti.csis.org/paracels-beijings-other-buildup/.

³ "A Constructive Year for Chinese Base Building," AMTI, December 14, 2017, https://amti.csis.org/constructive-year-chinese-building/.

⁴ "China Quietly Upgrades and Remote Reef," AMTI, November 20, 2018, https://amti.csis.org/china-quietly-upgrades-bombay-reef/.

the Spratlys.⁵ Meanwhile the number of militia ships loitering at Mischief and Subi Reefs increased from no more than 100 at any given time in 2017 to about 300 in August 2018.⁶

The infrastructure buildup and deployments to the Spratlys has radically altered China's power projection capabilities in the southern reaches of the South China Sea, leading to a new phase of persistent coercion below the level of military conflict. The CCG and militia now spend weeks or even months deployed in waters off the Philippines, Malaysia, Brunei, Indonesia, and Vietnam, sometimes asserting China's own conception of "historic rights" to oil and fish, at other times interfering with those states' own economic activities. These deployments are made possible by the ability of Chinese vessels to rest and resupply at the newly-built outposts in the Spratlys rather than needing to travel all the way back to Hainan or Guangzhou on the Chinese coast.

The most consistent deployments of Chinese power are now at a handful of largely submerged but highly symbolic (at least to Beijing) reefs around the South China Sea. Between September 2018 and September 2019, at least one CCG ship was patrolling Luconia Shoals off the Malaysian coast for 258 out of 365 days. At Second Thomas Shoal, where the Philippines maintains a small military garrison aboard the intentionally-grounded *Sierra Madre*, CCG ships were on-station 215 out of 365 days. In May 2018 and again in May 2019, CCG vessels harassed civilian boats from the Philippines seeking to resupply the *Sierra Madre*.

But the most provocative Chinese power projection is now aimed at preventing any new oil and gas exploration without its consent anywhere in the South China Sea. This includes even new drilling or exploration in blocks that have been producing oil and natural gas for many years. In May 2019, a CCG ship spent two weeks harassing a rig contracted by a Royal Dutch Shell subsidiary off the coast of Malaysia. That same ship then headed to an area off the coast of Vietnam where Russia's Rosneft was engaged in drilling new production wells in a block the company had been exploiting for years. The harassment of the rig kicked off a four-month standoff from late June through October in which China sent its own survey vessel to operate in Vietnamese waters. Both sides eventually deployed dozens of law enforcement and militia boats

⁵ See Frances G. Mangosing, "China Military Planes Land on PH Reef," *Philippine Daily Inquirer*, April 18, 2018, https://globalnation.inquirer.net/165824/china-military-planes-land-ph-reef; Michael R. Gordon and Jeremy Page, "China Installed Military Jamming Equipment on Spratly Islands, U.S. Says," *Wall Street Journal*, April 9, 2018, https://www.msj.com/articles/china-installed-military-jamming-equipment-on-spratly-islands-u-s-says-1523266320; Amanda Macias, "China Quietly Installed Missile Systems on Strategic Spratly Islands in Hotly Contested South China Sea," CNBC, May 2, 2018, https://www.cnbc.com/2018/05/02/china-added-missile-systems-on-spratly-islands-in-south-china-sea.html; "An Accounting of China's Deployments to the Spratly Islands," AMTI, May 9, 2018, https://amti.csis.org/accounting-chinas-deployments-spratly-islands/; People's Daily, China (@PDChina) Twitter account, May 18, 2018, https://amti.csis.org/china-lands-first-bomber-south-china-sea-island/; "Exercises Bring New Weapons to the Paracels," AMTI, May 24, 2018, https://amti.csis.org/china-lands-first-bomber-south-china-sea-island/; "Exercises Bring New Weapons to the

⁶ Gregory B. Poling, "Illuminating the South China Sea's Dark Fishing Fleets," CSIS Stephenson Ocean Security Project, January 9, 2019, https://ocean.csis.org/spotlights/illuminating-the-south-china-seas-dark-fishing-fleets/. ⁷ "Signaling Sovereignty: Chinese Patrols at Contested Reefs," AMTI, September 26, 2019, https://amti.csis.org/signaling-sovereignty-chinese-patrols-at-contested-reefs/.

⁸ Paterno Esmaquel II, "China Chopper Harasses PH Rubber Boat in Ayungin Shoal – Lawmaker," *Rappler*, Updated May 31, 2018, https://www.rappler.com/nation/203720-chinese-helicopter-harass-rubber-boat-ayungin-shoal-spratly-islands; Patricia Lourdes Viray, "China Coast Guard Blocked Resupply Mission to Ayungin Shoal – DND," *Philippine Star*, September 19, 2019, https://www.philstar.com/headlines/2019/09/19/1953204/china-coast-guard-blocked-resupply-mission-ayungin-shoal-dnd">https://www.philstar.com/headlines/2019/09/19/1953204/china-coast-guard-blocked-resupply-mission-ayungin-shoal-dnd.

on both sides. This harassment of oil and gas operations seems to be aimed at creating unacceptable risk to the civilian vessels that are necessary for any successful exploration and drilling by Southeast Asian claimants. CCG vessels navigate dangerously close to offshore supply ships and play chicken with regional law enforcement, creating risks of collision that make it prohibitively difficult for commercial operators to continue their work. As a result, Beijing seems to believe, states will eventually find no commercial partners willing to engage in operations in the South China Sea, leaving them no choice but to turn to China.

Another important component of Chinese power projection worth discussing here is the militia, which has seen its role grow over the last few years now that many of its boats appear to spend long stretches at Mischief and Subi Reefs waiting to be called up to action. The most worrying of those deployments, which remains ongoing, came in response to Manila's decision in December 2018 to finally start long-delayed repair and upgrade work at Thitu Island, the largest of the Spratlys occupied by the Philippines. Almost immediately, about 100 Chinese militia boats poured out of nearby Subi Reef, backed by CCG and PLAN vessels, and dropped anchor between 2 and 5 nautical miles of Thitu. The Armed Forces of the Philippines confirmed that it monitored 275 Chinese vessels around the island between January and March 2019. The ships pulled back briefly in June but returned within a month and are surrounding the island to this day. As a result, the Philippines has been unable to make any real headway on the repair effort due to difficulties bringing in necessary supplies.

Foreign Military Basing

China's bases in the Spratlys allow it to project naval, law enforcement, and paramilitary force throughout maritime Southeast Asia. They also place most littoral states' capitals within unrefueled range of Chinese air power. And given the considerable distances from the nearest U.S. ground-based air assets in the region (on Okinawa and Guam), they likely guarantee China air dominance over the South China Sea for at least the opening stages of any potential conflict. They thereby further China's goal of eventually dominating the waters within the first island chain and provide a stepping stone to project power beyond it. But for real expeditionary operations beyond its near waters, China must develop basing and logistics hubs farther afield.

⁹ "China Risks Flare-Up Over Malaysian, Vietnamese Gas Resources," AMTI, July 16, 2019, https://amti.csis.org/china-risks-flare-up-over-malaysian-vietnamese-gas-resources/; East Pendulum (@HenriKenhmann) Twitter account, June 30, 2019, https://twitter.com/HenriKenhmann/status/1145338072818544641.

^{10 &}quot;Under Pressure: Philippine Construction Provokes a Paramilitary Response," AMTI, February 6, 2019, https://amti.csis.org/under-pressure-philippine-construction-paramilitary-response/.

¹¹ Jim Gomez, "Manila Protests 'Swarming' Chinese Boats Near Island," Associated Press, April 1, 2019, https://www.navytimes.com/news/your-navy/2019/04/01/manila-protests-swarming-chinese-boats-near-island/.

¹² Frances Mangosing, "Chinese Militia Vessels Start Pull Out Near Pag-asa Island – Mon Tulfo," *Philippine Daily Inquirer*, June 6, 2019, https://globalnation.inquirer.net/176005/chinese-militia-vessels-start-pull-out-near-pag-asa-island-mon-tulfo.

¹³ See "Chinese Power Projection Capabilities in the South China Sea," AMTI, accessed February 12, 2020, https://amti.csis.org/chinese-power-projection/.

¹⁴ See Gregory B. Poling, "The Conventional Wisdom on China's Island Bases Is Dangerously Wrong," *War on the Rocks*, January 10, 2020, https://warontherocks.com/2020/01/the-conventional-wisdom-on-chinas-island-bases-is-dangerously-wrong/.

So far it seems that Beijing has only found two states willing to provide it basing rights or considerable military access: Djibouti and Cambodia.

China officially opened its first overseas military base, in Djibouti, in August 2017. The naval base sits next to the Doraleh Port, the largest in Africa, which has been financed and built by China and largely services Chinese ships. It is also very close to Camp Lemonnier, where the United States has 4,000 troops stationed, and the Chabelly airfield from which it launches drone operations. Is Japan and France also maintain small bases nearby. The reason for this clustering is two-fold: the country is strategically located for operations over the Gulf of Aden and the Red Sea, and Djibouti's government has been uniquely open to foreign basing as a means of monetizing that geostrategic location. In many ways, China's choice of Djibouti for its first overseas base was the natural result of its decade-long counterpiracy mission in the Gulf of Aden and its economic interests in trade around the Horn of Africa and the northwest Indian Ocean more broadly. The proximity of the base to Camp Lemonnier has led to some heartburn in Washington about China's long-term intentions, especially following a series of incidents in which Chinese forces allegedly used high-powered lasers fired from the base to blind U.S. airmen. In the control of the base to blind U.S. airmen.

Djibouti remains China's only confirmed overseas military base. But it is increasingly apparent that China has also gained a significant degree of military access in Cambodia, despite denials from the government in Phnom Penh. In July 2019, U.S. officials told the *Wall Street Journal* that Cambodia and China had inked a secret deal granting the PLA exclusive access to part of Cambodia's Ream naval base on the Gulf of Thailand. This followed about a year of rumors, which had sparked Vice president Mike Pence to write a letter to Cambodian Prime Minister Hun Sen in November 2018 expressing U.S. concerns. Hun Sen dismissed the accusations as "fake news." But the evidence has only piled up. In early February 2020, the Australian Broadcasting Corporation obtained a document showing that in December 2019 a military surveying delegation from China visited Ream and several other facilities including a "satellite navigation and positioning reference station" in Siem Reap Province. The latter should be particularly attractive to China due to Cambodia's position close to the equator. A satellite tracking station there would be very useful as Beijing rapidly builds out its Beidou navigation system and a large constellation of optical imaging, radar, and other maritime domain awareness satellites.

19

¹⁵ Max Bearak, "In Strategic Djibouti, a Microcosm of China's Growing Foothold in Africa," *Washington Post*, December 30, 2019, https://www.washingtonpost.com/world/africa/in-strategic-djibouti-a-microcosm-of-chinas-growing-foothold-in-africa/2019/12/29/a6e664ea-beab-11e9-a8b0-7ed8a0d5dc5d_story.html.

¹⁶ Paul Sonne, "U.S. Accuses China of Directing Blinding Lasers at American Military Aircraft in Djibouti," *Washington Post*, May 4, 2018, https://www.washingtonpost.com/news/checkpoint/wp/2018/05/03/u-s-accuses-china-of-directing-blinding-lasers-at-american-military-aircraft-in-djibouti/.

¹⁷ Hanna Ellis-Peterson, "China Reportedly Signs Secret Deal to Station Troops in Cambodia," *Guardian*, July 22, 2019, https://www.theguardian.com/world/2019/jul/22/china-signs-secret-deal-to-station-troops-at-cambodia-naval-base.

¹⁸ Prashanth Parameswaran, "New Revelation of China-Cambodia Secret Visit Heightens Military Links Fears," *Diplomat*, February 6, 2020, https://thediplomat.com/2020/02/new-revelation-of-china-cambodia-secret-visit-heightens-military-links-fears/.

¹⁹ Liu Zhen, "String of Chinese Satellites to Keep Real-Time Watch on South China Sea to 'Reinforce National Sovereignty," *South China Morning Post*, August 16, 2018, https://www.scmp.com/news/china/diplomacy-defence/article/2159891/string-chinese-satellites-keep-real-time-watch-south.

Even more worrying than China's shadowy access to Ream and potentially other Cambodian military facilities is what appears to be a military airbase it is constructing at nearby Dara Sakor. That project is officially an international airport servicing the Koh Kong resort that Chinese investors control along the nearby coastline. But the civilian rationale doesn't stand up to scrutiny. The airstrip is 3,400 meters long, which is bigger than the Phnom Penh International Airport's and defies explanation given that the resort has been unable to attract much business in the first place. It has also been argued that, based on satellite imagery, the aircraft turning bays being built at Dara Sakor are too small for commercial airliners and appear to be intended for fighter jets.²⁰ In the end, this should be more worrying for the United States and regional partners than the better-reported Ream naval base deal. PLAN access to Ream would not seriously improve Chinese naval power projection capabilities given how much it has already constructed in the Spratlys. But an air base in Cambodia would allow it to project power over southern Vietnam, Bangkok, the Gulf of Thailand, the Strait of Malacca, and the eastern Indian Ocean.

Djibouti and Cambodia both provide clear examples of the worrying links between Chinese economic influence and military access in developing states. By constructing and controlling Doraleh Port, China has placed Djibouti's government in a considerable position of economic dependency. This is especially true because most of the vessels that use the port are carrying goods to and from China, so it is not clear that diversion away from China would be feasible much less easy. And this is just the most visible of many Chinese investment projects in the country. Altogether, China holds over 70 percent of Djibouti's debt.²¹ That is a very large bill that Beijing can threaten to call in, which gives it considerable leverage over the government of Djibouti.

Cambodia is an equally stark story of economic dependency. China is the number one investor in the country and pours money into the coffers of Prime Minister Hun Sen and his network of cronies. This provides the regime with a lifeline that has become ever more important in recent years as the United States and European countries have scaled back relations due to the country's democratic freefall. China's largesse is not without strings, as its diplomats have sometimes made painfully clear. In August 2016, just a month after the Philippines won a landmark case against China's claims in the South China Sea, China's ambassador to Cambodia took time out of a ribbon cutting ceremony for a Chinese-funded road project to thank Phnom Penh for its support for Beijing's position that the ruling was invalid. A short time before, China had extended \$600 million in aid and loans to Cambodia right after it sabotaged an ASEAN statement on the South China Sea. ²² Given the Hun Sen regime's now-overwhelming dependence on Chinese largesse, it is hardly surprising that Phnom Penh feels compelled to open its doors to a PLA presence.

Potential Dual-Use Facilities

²⁰ Jamie Seidel, "Scary Reality: China's Secret Cambodian Military Base," *News.com.au*, February 8, 2020, https://www.news.com.au/technology/innovation/military/scary-reality-chinas-secret-cambodian-military-base/news-story/59908e35b8865375e6ca7a55c20fea0c.

²¹ Bearak, "In Strategic Djibouti."

²² David Hutt, "How China Came to Dominate Cambodia," *Diplomat*, September 1, 2016, https://thediplomat.com/2016/09/how-china-came-to-dominate-cambodia/.

China's massive Belt and Road Initiative has led to billions of dollars in port and airport infrastructure across the Indo-Pacific. Many of these projects are of questionable commercial value. This has led to understandable speculation that many of them must, therefore, be meant for military rather than business purposes. It is impossible to entirely disprove this claim, but todate the evidence is rather sparse. Far more likely is that many of these projects are the result of poor policy and even worse oversight. Beijing created a policy environment that encouraged irresponsible lending and white elephant projects under the patriotic banner of the Belt and Road Initiative. As a result, commercially nonviable projects like the Hambantota port and airport in Sri Lanka or the Luganville Wharf in Vanuatu cropped up, causing trouble for both the investing and host countries. In others, like the Kyaukpyu port in Myanmar, an otherwise viable project ballooned to absurd proportions.

In many of these cases, there is the possibility that commercial ports could have a secondary use for the PLAN in the future. This is especially true for projects that are unlikely to turn a commercial profit, in which case host countries might see little choice but to accept PLAN visits as the only paying customers. In others, overleveraged host governments might feel compelled to accept Chinese political demands, including future PLAN access, in much the same way Cambodia has. But all of that remains highly speculative. What is clear is that the PLAN is an increasingly global navy and it will inevitably develop a network of logistics hubs around the world, likely based on a combination of military and commercial ports, just as the United States, Russia, and every other blue-water navy has.

An examination of a few of the more often-discussed Chinese-funded ports in the region helps draw out some of these dynamics. The project most-often rumored to be a Chinese naval base in the making is the Gwadar port in Pakistan. This massive project is strategically located and makes a lot of sense as a future PLAN logistics hub. And given the increasingly close China-Pakistan relationship, it is entirely possible to see the country fall into a level of dependency that would make saying "no" to Beijing extremely difficult. These are good reasons to assume that the PLAN will have *some* access to berth and resupply in Gwadar. But whether the port will offer more than that and follow Djibouti as a Chinese base is far less clear. In fact, for the time being there appears to be no evidence in the open source to back up that conclusion.²³ But the project certainly bears watching.

Another oft-remarked project is the Hambantota port and airport on Sri Lanka's southern coast. From the start it seemed the project, which coast in the hundreds of millions of dollars, had little commercial rationale. It would have to compete with the country's main port of Colombo, which handled roughly 95 percent of its trade and was already well integrated into global trade routes. The international airport made even less sense and still sits empty. In December 2017, when it was clear the project would not be turning a profit soon and the government needed to get out from under its debt burden, it transferred a controlling stake in the port to a Chinese company on a 99-year lease. But there is no evidence that this was planned well in advance by the Chinese lenders or states. Rather the explanation seems to be that Chinese banks were all too happy to make bad loans for a project with little commercial rationale, while the government of then-

²³ See Krzysztof Iwanek, "No, Pakistan's Gwadar Is Not a Chinese Naval Base (Just Yet)," *Diplomat*, November 19, 2019, https://thediplomat.com/2019/11/no-pakistans-gwadar-port-is-not-a-chinese-naval-base-just-yet/.

President Mahinda Rajapaksa was glad to take on unsustainable debt to buy support from his hometown constituents (including putting his name on the project). Once Rajapaksa was ousted, and his government's overreliance on China became an issue in the election, a new government did what it felt necessary to get out from under a bad deal. The project speaks more to the early failings of the Belt and Road Initiative than it does to an intentional strategy by China to build logistics hubs abroad. That does not mean, of course, that Sri Lanka might not be open to eventual Chinese use of the port, especially with a Chinese company controlling it and little hope that it will become a major commercial success. The Rajapaksas are also back in power now, which creates a likelihood that the Sri Lanka-China relationship could enter a renaissance. But even then, there is a big difference between PLAN access for resupply and repairs at a Chinese-controlled port and a Chinese military base.

Policy Recommendations

To counter Chinese aggression against partners and threats to freedom of the seas in the South China Sea, the United States should reinvigorate its diplomacy on this issue by placing it back on the top of the agenda at regional forums as it was in 2015-2016. Since then it has fallen far behind other issued like North Korea and trade spats, undermining U.S. efforts to rally international support on the issue and impose reputational costs on China for bad behavior. The United States should also consider an international campaign to identify illegal Chinese actors, particularly the maritime militia, modeled on its multilateral effort to detect and report on North Korean sanctions violations at sea in the Yellow Sea. This could in turn lead to a targeted campaign of economic sanctions against Chinese illegal actors. Meanwhile the United States must strengthen its deterrent posture in the South China Sea, especially with regards to dissuading Chinese aggression against the Philippines. The only way to do that effectively is with the rotational deployment of U.S. combat aircraft and ground-based fires in the Philippines through the Enhanced Defense Cooperation Agreement (EDCA) signed in 2014. That has become far more uncertain with President Rodrigo Duterte's recent decision to abrogate the U.S.-Philippines Visiting Forces Agreement (VFA), suggesting that the United States might have to prioritize saving what it can of its alliance for the next two years before attempting to revive the VFA and EDCA once Duterte leaves office in 2022.

More broadly, the United States must work with partners like Australia, Japan, and the European Union to offer more alternatives to Chinese loans and infrastructure investments. Efforts like the passage of the BUILD Act and announcement of the Blue Dot Network could be a start on this path, though their implementation remains to be seen. The United States does not, and cannot, compete dollar for dollar with China. But simply providing technical advice on contracts and standards, along with holding out the possibility of competing bids, has proven to help regional states like Myanmar negotiate better terms with the Chinese. This in turn reduces the leverage that Beijing has over them. Additionally, in the Indian Ocean in particular, the United States

²⁴ See Jonathan Hillman, "Game of Loans: How China Bought Hambantota," in *China's Maritime Silk Road*, ed. Nicholas Szechenyi (Washington, DC: CSIS, 2018), https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180404 Szechenyi ChinaMaritimeSilkRoad.pdf?yZSpudmFyARwcHuJnNx3metxXnEksVX3.

needs to continue to tighten its maritime cooperation with India and encourage continued regional leadership by Delhi on maritime security and domain awareness.²⁵

²⁵ For a summary of India's efforts on this front, see "Ports and Partnerships: Delhi Invests in Indian Ocean Leadership," AMTI, December 5, 2019, https://amti.csis.org/ports-and-partnerships-delhi-invests-in-indian-ocean-leadership/.

OPENING STATEMENT OF PAUL NANTULYA, RESEARCH ASSOCIATE, AFRICA CENTER FOR STRATEGIC STUDIES, NATIONAL DEFENSE UNIVERSITY

CHAIR FIEDLER: Thank you. Mr. Nantulya.

MR. NANTULYA: Commissioners, Chairman Cleveland, Commissioner Fiedler, Commissioners of the U.S. China Economic and Security Review Commission, thank you for this honor.

I will talk about the People's Republic of China's military power projection and influence in Africa. A comprehensive report is contained in my written submission.

Every January a high-ranking Chinese official, no lower than a state councilor, visits no less than six African countries to mark China's first overseas visit, a tradition that started in 2000.

A state councilor ranks above a cabinet minister and is one level lower than the vice premier. Africa is of paramount importance to China's global ambitions.

60,000 Africans study annually in China, surpassing the U.S. and the U.K. as the most popular destination for English-speaking African students.

African professionals and students receive 100,000 scholarships, 50,000 academic and 50,000 for skills development each year.

Two thousand additional training slots go to emerging political leaders under 35 years. Three hundred to media professionals, 200 to local government personnel and around 2,000 to security professionals each year, set to increase to between three and five thousand in 2021.

Meeting every three years, the Forum for China-Africa Cooperation, or FOCAC, gathers more African leaders than the U.N. General Assembly. In-between summits, a secretariat staffed by officials across 33 Chinese agencies oversees the day-to-day implementation of FOCAC programs.

In Africa, cabinet level officials under the presidency coordinate implementation on the ground, including security and defense.

In 2019, a China-Africa institute was launched to facilitate policy synergy and develop new models and learning between China and its African partners.

Africa is fully integrated into the community of common destiny and the One Belt One Road strategy, both written into the party and state constitutions as strategic priorities for the new era. The community of common destiny is framed as a critique of Western models. It is a vision of a world order reflecting Chinese norms and models of security, governance, and regional connectivity.

While it provides broad theoretical guidance, One Belt One Road, China's ambitious program to connect two-thirds of the world's population, including 1.2 billion Africans, is the means by which China hopes to make it a practical reality. China wants to shape tomorrow's geopolitical landscape.

Africa's strategic blueprints on governance incorporate several different aspects of China's governance model, cementing the Sino-Africa community of common destiny that China and its African partners pledged to build in 2018.

Examples include Kenya's Vision 2030, Rwanda's Vision 2050, Uganda's Vision 2040 and South-Africa's national development plan 2030. All of these align with China's white papers on development, foreign aid, human rights, and China's role in the world.

China has signed an agreement with the African Union to align One Belt One Road with the African Union's Agenda 2063 and its program for the development of strategic infrastructure.

This tight Sino-Africa partnership means that there is sufficient political will on the

ground if China chooses to establish a military presence or additional basing options beyond Djibouti.

My testimony explains that China's patterns of behavior, doctrine, and ideological orientation predispose Beijing to replicating the dual-use model it uses in Djibouti.

Future basing partners will ideally meet three Chinese criteria: their level of importance in China's partnership rankings, their ideological affinity, and their ability to mobilize regional and continental support behind Chinese positions.

Thirteen African countries fit these criteria. All but two are maritime states. All 13 have major Chinese civilian, dual-use and military assets in place. Nine have robust space programs with China. Four have been the largest destinations of Chinese FDI into Africa.

An additional 46 nations host a range of planned or existing Chinese investments in ports from Sudan to South Africa and from Kenya across to Senegal. China employees an indirect approach to force projection: multilaterally, bilateral, unilaterally.

U.N. and AU mandated piece operations top the list. They are international and therefore less politically sensitive for Beijing. And they also project China as a responsible big power, an image that China is keen to cultivate on the continent.

Through peacekeeping operations China has learned to operate in hostile environments and improve intelligence and surveillance. China's counter-piracy operations develop its maritime power projection and support several tasks from evacuation to military diplomacy.

China invests heavily in the African standby force and the regional standby brigades, hoping they will provide force projection once fully operational. Beijing meanwhile has placed its own 8,000 strong standby force at the U.N.'s disposal for use in crisis situations.

Bilaterally, China works with partners to develop intelligence, surveillance, and law enforcement capacities. Indeed, African countries have borrowed about \$3.5 billion for these efforts between 2003 and 2017.

Unilaterally, China uses private security companies in a bid to increase its security mix. Over 3,000 mainly ex-PLA and ex-PAP personnel are deployed globally, protecting Belt and Road investments around the world, and in Africa.

They do face legal constraints as they are not allowed to bear arms in the Chinese or African law, yet they do. This was highlighted recently in Zimbabwe when a Chinese guard was jailed for shooting and wounding the son of a high-level ZANU-PF official. This is the ruling party in Zimbabwe.

In conclusion, I argue that we should recognize that China's Africa strategy is part of a broader effort to realign global governance and implement alternative political, economic, and security models that challenge Western ones.

Therefore, we should also pursue a values-driven strategy, identifying niche American competencies, forging common values with African partners, and responding to African challenges as defined by them.

This should account for the multifaceted, comprehensive and multilayered nature of Chinese security engagement in Africa, recognizing that they reinforce other tools of statecraft.

Finally, we should develop contingencies to ensure continued and assured American operational access on the continent. I thank you.

PREPARED STATEMENT OF PAUL NANTULYA, RESEARCH ASSOCIATE, AFRICA CENTER FOR STRATEGIC STUDIES, NATIONAL DEFENSE UNIVERSITY

Testimony Before the U.S.-China Economic and Security Review Commission Hearing on: "China's Military Power Projection and U.S. National Interests"

February 20, 2020

Paul Nantulya, Research Associate, Africa Center for Strategic Studies, National Defense University

Chairman Cleveland, Commissioner Fiedler, Commissioners of the U.S.-China Economic and Security Review Commission. Thank you for giving me the great honor of testifying before you today. I will discuss the People's Republic of China's (PRC) military power projection and influence in Africa.

At the 2018 Forum for China Africa Cooperation (FOCAC), China and Africa pledged to build a Sino-Africa Community of Common Destiny by expanding the One Belt One Road strategy. This would lay the foundations for a Community of Common Destiny, China's vision of a world order that reflects its norms and models. Such a system is seen by China's leaders as conducive to their longstanding quest to restore China as a great power. The vision is linked to China's "two centenary goals" of achieving a "moderately prosperous society" by 2021, and a "modern, socialist, prosperous, powerful, culturally advanced, and harmonious country" by 2049. The Community of Common Destiny and One Belt One Road were written into the state and party constitutions in 2017 as "strategic priorities for the new era" to quote China's foreign policy chief, Yang Jiechi. While the Community of Common Destiny provides broad theoretical guidance, One Belt One Road, China's ambitious program to connect itself to the globe through crisscrossing ports, railways, oil and gas pipelines, power plants, and digital infrastructure, is the means by which China hopes to make it a practical reality.

The assumption is that as countries become more connected with each other—through Chinese architectures—they will be supportive of China's norms and models and even participate in accomplishing them. Africa and China took a step in this direction in April 2019 by co-launching the China-Africa Institute in Beijing. It is tasked with two interrelated missions: to "develop new models and mutual learning in governance and development" and to "facilitate policy synergy between the African Union's (AU) Agenda 2063: The Africa We Want and FOCAC." At the launch, General Secretary Xi Jinping said that China would work through this institute to help African countries "choose their own governance models." China's involvement in actively shaping the African governance environment represents a continuing shift from "non-interference" to an approach that affects how Africa's political systems operate, including the security sector. African countries on the other hand are demanding greater Chinese involvement in improving their national security, as well as in closing their infrastructure gaps and achieving economic growth.

Domestically, China feels prosperous and stable enough to pursue an ambitious foreign policy. In 2019, the Africa Center for Strategic Studies participated in a strategic review of Chinese influence around the world conducted by the five Department of Defense Regional Centers for Strategic Studies. Its survey found that China-Africa relations grew during periods of domestic stability and slumped when turmoil set in.⁵ The first high point was during the Tang dynasty (618-907 AD), when the first African contacts with China were recorded. After these collapsed due to turmoil caused by the Huang Chao rebellion, the next high point came during the Ming Dynasty (1338-1644), which extended the Silk Road to East African coast and Sofala in Mozambique, and was followed by another slump when intrigue in the Ming court led to the burning of its entire maritime fleet. This ebb and flow continued through the collapse of the Qing dynasty in 1912. Relations rebounded in the 1950s when China stepped in to mentor Africa's anticolonial movements before receding in the 1990s.

The current upward trajectory started under Jiang Zemin's Going Out policy that facilitated the expansion of Chinese companies to developing and emerging markets. This trend continues under Xi Jinping's One Belt One Road, signifying a break with Deng Xiaoping's cautious policy of "biding our time, never claiming leadership, and keeping a low profile," or *taoguang yanghui*.⁶

Africa in China's Global Ambitions

China's Africa policy is anchored on the principle that "big powers are the key; China's periphery is the priority; developing countries are the foundation; and multilateral platforms are the stage." Indeed, China's 2015 Africa Policy underscores Africa's role as a foundation of China's quest to build a Community of Common Destiny to achieve "comprehensive reform of the current international system." In 2018, State Councilor and Foreign Minister Wang Yi said that China and Africa were "natural allies" in this quest due to shared grievances over the current global power structures. This sentiment, according to him, is reinforced by common experiences of colonialism. Africa's position on international system reform is set forth in the AU's 2005 Ezulwini Consensus. My While it is much narrower than the vision of the Community of Common Destiny, the AU supports China's ideological views on international relations and at the global level. This was recently evident in July 2019, when the 43-member Africa Group at the World Trade Organization joined China en masse in a crucial vote that saw 114 countries voting to cancel the U.S. veto over appointments to the World Trade Organization's trade court.

At the United Nations Human Rights Council in Geneva, African members supported China's introduction of a record 65 formal interventions between 2014 and 2015. China introduced its first-ever resolutions in 2017 and 2018 that enshrine language from the Community of Common Destiny on human security, human rights, and governance into UN texts for the first time. Both resolutions passed easily with near-unanimous African support despite U.S. opposition. In the past decade, the African Group at the UN General Assembly has played a major role in helping Chinese nationals secure leadership of four of the 15 UN specialized agencies (American nationals head only one). Through African backing, Chinese nationals also hold the Deputy Force Commander post in the UN Mission in South Sudan; the deputy heads of the International Court of Justice and International Monetary Fund; and the Secretary General's Special Envoy to the African Great Lakes Region. And since 2007, the UN Undersecretary General for Economic and Social Affairs, a powerful office that coordinates international development, has gone to a Chinese national. African countries unanimously supported.

On the ground, many African countries have incorporated Chinese development, security, governance, and economic growth models into their strategic blueprints, giving practical effect to the *Sino-Africa Community of Destiny* and legitimizing China's quest to promote alternative models around the world. Some of these blueprints include Kenya's Vision 2030, Rwanda's Vision 2050, Uganda's Vision 2040, and South Africa's National Development Plan 2030. They all prioritize special economic zones, strong state-led development, rapid expansion of public works and infrastructure, and trade connectivity. These policies align with China's white papers on foreign aid (2014), human rights (2019), and China's role in the world (2019). The AU's Agenda 2063 and its Program for Infrastructure Development in Africa envision Chinese inputs and models as key catalysts. In 2017, China and the AU signed an agreement to direct Chinese development assistance and One Belt One Road projects to priorities laid out in these two documents.

China's Military Presence

China's deepened engagements with Africa have generated sufficient political will on the continent for the establishment of a Chinese military presence should Beijing choose to do so. African countries called for more Chinese involvement in their security sectors at the inaugural China-Africa Security and Defense Forum in July 2018 and the inaugural China-Africa Peace and Security Forum in July 2019.

The question as to what kind of basing arrangements China will choose can be deduced from its operational patterns of behavior and ideological orientation.

The Chinese presence in Djibouti is an attractive precedent in this regard. It started with the construction of a commercial port. Later on, dual-use facilities were set up to support China's peacekeeping, humanitarian, and maritime security operations. China, through this strategy, reinforced its image as a "responsible great power" (*zeren daguo*), while downplaying its geostrategic intentions. It therefore has a strong incentive to replicate this model elsewhere if need arises. China's 2019 Defense White Paper makes it clear that China is at pains not to be seen using Western models. China, it claims, will "never seek hegemony or spheres of influence." Furthermore, the People's Liberation Army (PLA) "will be strengthened in the Chinese way" and will "serve the goal of building a community of common destiny." A dual-use model is more consistent with this outlook.

With respect to where additional bases could be located, here are three strategic criteria:

Level of Importance in China's Partnership Rankings

China will likely opt for partners with whom it enjoys the highest strategic-level relations. Beijing uses five tiers to rank its partnerships. The highest three levels are comprehensive strategic cooperative partnership, comprehensive strategic partnership, and strategic partnership relations. Thirteen African countries enjoy partnership relations with China across these levels. Ethiopia, Guinea, Kenya, Mozambique, Namibia, Tanzania, and Zimbabwe are in the first category; Algeria, Egypt, Nigeria, and South Africa are in the second; and Angola and Sudan are in the third. With the exception of Ethiopia and Zimbabwe, these countries are all maritime states, a key criteria given that One Belt One Road runs along a maritime belt. All 13 countries play host to major Chinese investments in ports and other critical infrastructure that support dual-use purposes. In addition, China has space programs in nine countries—Angola, Algeria, Ethiopia, Egypt, Namibia, Mozambique, Nigeria, South Africa, and Sudan, —from which it launches their satellites, trains their space agencies, and, in the case of Kenya and Namibia, manages their ground-based satellite tracking stations. China is building a continental satellite data receiver station in Ethiopia and ground facilities in Egypt as part of a wider effort to integrate Africa into the Belt and Road Space Information Corridor.¹⁸

In 2015, rumors surfaced in the Namibian press suggesting that the state-of-the-art Walvis Bay Expansion Project, one of China's most sophisticated port projects in the developing world, would pave way for a dual-use military logistics facility along the lines of Djibouti. This was refuted by the authorities. Tanzania has also routinely captured media attention as a potential basing partner. In 2014, it hosted a month-long naval exercise with the PLA Navy, the first of its kind in Africa. The two countries enjoy deep and multifaceted military relations. In 2018, Tanzania inaugurated a large Chinese-built military training base in Bagamoyo a few miles from the site of the proposed Bagamoyo Megaport Project. The suggestion that Tanzania and Namibia might offer basing options is not far-fetched, despite the lack of hard evidence. Both have high-value Chinese civilian, military, and dual-use assets. In Namibia, the Chinese-built Swakopmund satellite ground station has been operated by the Xi'an Satellite Control Center in Shaanxi since 2000.²²

Tanzania's Bagamoyo port will be the biggest deep water port in Africa when completed. Chinese firms also built Tanzania's Defense Headquarters, its Military Academy at Monduli, and the National Defense College in Dar es Salaam. Besides Namibia and Tanzania, China has planned or existing investments in ports and other dual-use infrastructure in 46 other locations, including Angola, Cameroon, Cabo Verde, Côte d'Ivoire, Djibouti, Ghana, Guinea, Mauritania, Mozambique, Nigeria, Togo, Sudan, and South Africa, giving it a wide choice of potential basing partners.

Ideological Affinities

Ideological affinities will likely play an important role in future discussions about basing. Although China has a wide range of African partners, its most enduring and reliable ones are the leftist movements it mentored and trained from inception. They include the Former Liberation Movements of Southern Africa (FLMSA), a regional grouping of ruling movements from Angola, Mozambique, Namibia, South Africa, Tanzania, and Zimbabwe.²³ Their Maoist heritage and shared traditions offer China familiarity, predictability, and dependability on which it can craft strategically focused relations. Moreover, all of them occupy the highest levels in China's partnership rankings and their ruling parties have been in power since independence. China has strong incentives to help keep them in office.

In 2018, the Communist Party's International Liaison Office cemented these ties by extending a \$45-million grant toward building the Mwalimu Nyerere Leadership Academy in Tanzania, an ideological school that will train around 400 civilian and military leaders and cadres from the FLMSA countries annually.²⁴ China has used these ideological ties to expand its influence in other areas. In Angola for instance, Chinese state-owned firms are constructing a \$600-million deep-sea port in Cabinda on the Atlantic coast to link Angola and Namibia to Chinese port clusters from Cameroon to Guinea. In Mozambique, Chinese firms are constructing road networks connecting the port city of Beira to land-locked Malawi, Zambia, and Zimbabwe.²⁵

On the political side, the Communist Party School has maintained robust technical and institutional exchanges with FLMSA members since the 1950s, contributing significantly to their political governance, and the evolution of their militaries. Such deep engagements are not restricted to FLMSA. Ruling parties from Cabo Verde to Uganda, and South Sudan to Ethiopia all have extensive political and ideological exchanges with China. China moreover extends governance and leadership training to politically neutral groups and even opposition parties. Around 1,000 leaders across the party divides in Africa participate in these programs annually at China's various political schools.

On the military side, China's African partners train at three levels of China's Professional Military Education (PME) system. First are the regional academies for cadets and junior officers, including Nanjing Military Academy, Dalian Naval Academy, and the PLA Air Force Aviation University. Next, the command and staff colleges, including Army Command College in Nanjing and the Command and Staff Colleges of the PLA's service branches, train mid-career officers. Senior officers train at China's National Defense University, National University of Defense Technology, and the International College for Defense Studies and National Security. China's PME combines military and technical subjects with ideological and political training. By extension, African students receive instruction at the PLA's ideological colleges such as Pudong Cadres College, Nanjing Cadre College, and Kunming National Cadre Academy. The PLA's Political Work Department, through the Chinese Peoples Friendship Association with Foreign Countries, supports several political party schools, including Uganda's National Political School in Kyankwanzi and the Oliver Tambo Leadership School in Kaweweeta; Ethiopia's Political School in Tatek; Namibia's ruling Swapo Party School in Windhoek; and South Africa's planned African National Congress Party School in Venterskroon.

In 2018, China offered 50,000 new training opportunities to Africa over and above the 10,000 scholarships issued annually for Belt and Road countries. This represents a 66 percent increase from its 2015 commitments. Of these, up to 5,000 are likely to be offered to African military professionals annually—a 150 percent increase from FOCAC's 2015 commitments.²⁷ This is part of China's commitment to increase its intake of military students, including training 2,000 peacekeepers by 2020.

These expanded training opportunities have deepened China's involvement in African security sectors. Indeed, in June 2018, China's State Administration for Science, Technology and Industry for National Defence reported that Beijing had defense industry, science, and technology ties with 45 African countries.²⁸ These strong military foundations mean that China is unlikely to elicit controversy if it decides to develop additional basing arrangements.

Regional Clout

China's most important strategic partners in Africa tend to wield wider regional influence in their respective regional organizations and in the AU. Algeria, Egypt, Ethiopia, Kenya, Nigeria, and South Africa, all of whom have strategic partnerships with China, come to mind. \Algeria, Kenya, Nigeria, and South Africa play major roles in Africa's security landscape. Algeria has held the AU Peace and Security Commissioner post since its inception, while Kenya, Nigeria, and South Africa hold sway in the AU's administrative, political, and peacekeeping organs. China sends only its best diplomats to serve in their capitals. For instance, China's ambassadors to Ethiopia, Egypt, and South Africa are at the Director-General level. The Chinese ambassador to the AU is at the Vice-Ministerial level, the same ranking as his counterpart in Washington—China's most important posting. Such countries have the capacity and clout to mobilize broader African support behind Chinese positions in Africa and the global level. They are all likely to play a role in Beijing's future strategic moves in Africa, including basing arrangements.

How Does China Orchestrate Its Military Diplomacy?

China pursues a comprehensive approach that combines different tools of statecraft while downplaying its military engagements. This is evident in how China uses its military diplomacy. The PLA's first ever exercise with Economic Community of West African States (ECOWAS) navies in May 2018, coincided with an agreement by China to build the ECOWAS headquarters in Nigeria.²⁹ The following month, the PLA Navy's 27th and 28th Anti-Piracy Task Forces visited Cameroon, Ghana, and Nigeria shortly after they joined the Belt and Road.³⁰ The first ever China-Russia-South Africa naval exercises were held in South Africa in November 2019, one month after China and South Africa agreed to elevate their relations to the "comprehensive strategic cooperative relations" level. The prior month, a senior ANC team visited China on a political and ideological exchange program.³¹ China uses its cooperation platforms in similar ways. In 2017, it established the China-Africa Peace and Security Fund to deepen its commitment to the Africa Standby Force (ASF). The following year it disbursed \$25 million from this fund to equip the ASF's logistics base in Cameroon weeks before the PLA Navy visited Cameroon, Gabon, Ghana, and Nigeria. A separate agreement to build a logistics base in Botswana for the Southern African Standby Force coincided with visits around Southern Africa by the PLA Navy hospital ship, the Peace Ark, providing free on-shore medical services.³²

How Does China Approach Force Projection?

China largely takes an indirect approach on three levels: multilateral, bilateral, and unilateral. UN-mandated peacekeeping operations are at the top of China's force projection options. China initially viewed peacekeeping as an extension of western security strategies.

Today, peacekeeping operations closely align with its political, ideological, and strategic goals. Peacekeeping operations are multilateral and therefore less politically sensitive for Beijing. They also bestow Chinese troop activities with international legitimacy, reinforce China's image as a provider of public goods, and support China's national interests without creating the impression that Beijing throws its weight around in Africa. All these factors support China's ideological narratives and strategic messages.

China's peacekeeping capabilities have evolved in the past two decades from small, mainly non-combat contributions to more troop contributions than all its peers on the UN Security Council combined. China is also the second largest contributor to UN peacekeeping budget and the overall UN budget. Chinese peacekeepers serve in Darfur, Democratic Republic of the Congo, Mali, and South Sudan. Through these missions, PLA troops have gained experience in hostile environments, in line with the policy on "training under realistic conditions." This is something that goes to the heart of the Chinese Communist Party's worries about the PLA's capabilities, as China has not engaged in combat operations since 1979.

Peacekeeping contributions also improve the PLA's intelligence, surveillance, and situational awareness through troop rotations and lessons learned. With this experience, China hopes to modify established peacekeeping doctrine and introduce new concepts that meet Chinese interests. Accordingly, China combines its troop contributions with an active effort to influence peacekeeping mandates and rules to shape the environment in which Chinese troops could be deployed. For instance, the mandates given to PLA forces in the Democratic Republic of Congo, South Sudan, Sudan, and Mali—where China has significant commercial investments—include protecting Chinese citizens, assets, and critical infrastructure, thereby indirectly supporting Chinese security interests.

China's counterpiracy patrols in the Gulf of Aden, its first deployments outside the Western Pacific, evolved in a similar fashion. They grew over the past two decades from one naval task force in 2008, to two task forces most of the time consisting of advanced warships equipped with helicopters, Special Forces, and supply ships. While these are UN-sanctioned missions, they are conducted directly by the PLA, helping it pursue military, commercial, political, and diplomatic goals as its leaders see fit. These operations have deepened China's military engagements in Africa and increased its overseas power projection in line with the PLA Navy's "near seas, far seas" strategy and "new historic missions." China's naval deployments played a major role in supporting the PLA's first major combined arms exercise in Djibouti in November 2018. In terms of soft power, the PLA Navy has developed several capabilities, from evacuating 35,000 Chinese citizens in Libya in 2011 and 240 from Yemen in 2015, to supporting year-round medical and good will visits to various African countries.

Africa has offered China a path of least resistance in amplifying Beijing's influence in global security because not only do 78 percent of all UN peacekeepers serve in Africa, but nearly half are African. With this increased clout, China has set its sights on leading the UN Department of Peacekeeping Operations.³⁶ This is an important objective for China because UN forces constitute the world's second largest expeditionary force of more than 100,000. China wants a greater say on where and how they are deployed. This ambition received a further boost in 2018 when China placed an 8,000-strong Standby Force at the disposal of the UN to respond to crisis situations, a move that would have been unthinkable even 10 years ago.³⁷

At the continent level, China is investing heavily in the African Standby Force and its regional Standby Brigades. China hopes these capabilities will contribute to its mix of security options once fully operational. At the bilateral level, China works with local partners to improve their ability to collect intelligence, monitor, and proactively defend Chinese interests.

Fifty new security programs focused on this were established in 2018 through the China-Africa Peace and Security Forum and the China-Africa Law Enforcement and Security Forum. In 2019, Uganda became the first African country under these new arrangements to deploy its military to protect Chinese interests throughout the country after a series of attacks on Chinese assets. In Kenya, China's People's Armed Police (PAP) trained an elite Kenyan police unit to protect the Mombasa-Nairobi railway. ³⁸

African countries signed loans worth \$3.56 billion for policing, law and order, and dual-use (civilian and military) purposes from China between 2003 and 2017, according to the China Africa Research Initiative. This includes aircraft, military facilities, national security telecoms, patrol ships, closed circuit television systems, and artificial intelligence.³⁹ The activities of Chinese telecom giant Huawei are particularly relevant in this regard. Algeria, Botswana, Kenya, Mauritania, Nigeria, Sudan, Uganda, and South Africa currently use its artificial intelligence capabilities. In June 2019, Huawei signed a three-year memorandum of understanding with the AU covering several areas, including artificial intelligence and 5G networks. Over half of the continent's 4G systems run on the Huawei network.⁴⁰

At the unilateral level, China is increasingly employing private security contractors. Since 2013, private Chinese firms like DeWe Security, China Overseas Protection Group, and Frontier Services Group have proliferated, eager to seize business opportunities created by One Belt One Road. Over 3,000 mostly demobilized PLA and PAP personnel are employed by such firms globally in places like Angola, Ethiopia, Ghana, Nigeria, South Sudan, Sudan, Zambia, Zimbabwe, and more recently, Somalia. They face significant controversies as they are not allowed to bear arms under Chinese and African laws, yet they do. This was highlighted in October 2018 when two Chinese security guards were jailed in Zimbabwe for shooting and injuring the son of a former high-ranking member of the ruling party. Since 2007, China has had a robust legal assistance program that harmonizes Chinese and African laws in investment and dispute resolution. This is coordinated through the China Law Society and its African counterparts, the Ministry of Commerce, and bodies like the China-Africa Legal Cooperation Forum and the Africa Young Legal Professionals Exchange Program. It is still unclear whether these programs will be used to push for laws that regularize the activities of Chinese private security firms.

Implications and Recommendations

China is employing a multifaceted strategy that seeks to shape the environment in which Africa's security sectors and governance systems are unfolding, something that goes to the heart of how the African state operates. The aim is to secure Africa as a firm foundation on which China can realign global governance across several dimensions including politics, security, development, and economics. China wants a conductive environment for its resurgence as a great power, and Africa, for ideological reasons, is seen as a natural ally in this quest. As such, China-Africa engagements form part of the alternative structures China is building around the world, and the norms, models, and values that go with them. China frames its ideas on world order in opposition to Western ideas and values. It is this, not Communist ideology, that represents China's ideological challenge to the West at this stage. It is unclear whether China's massive investments in civilian, military, and dual-use assets in over 40 African countries might one day deny the U.S. access in Africa. What is clear is that Africa plays an increasingly important role in China's grand strategy and this will have global ramifications in the decades ahead.

Recommendations:

Recognize that China's Africa strategy is part of a broader effort to realign global governance, and implement alternative political, economic, and security models that challenge Western systems.

Pursue a values-driven strategy, identifying niche U.S. competencies, forging common values with African partners, and responding to African challenges as defined by them.

Account for the multifaceted, comprehensive and multi-layered nature of Chinese security engagements in Africa, recognizing that they reinforce other instruments of statecraft.

Develop contingencies to ensure continued and assured American operational access on the continent.

¹ Ministry of Foreign Affairs, "Beijing Declaration-Toward an Even Stronger China-Africa Community with a Shared Future," September 5, 2018, https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t1593686.shtml Accessed February 5, 2020.

² CPC: What are the two Centennial Goals and why do they Matter?" Xinhua, October 10, 2017, http://www.xinhuanet.com/english/2017-10/17/c 136686770.htm

³ Liza Tobin, "Xi's Vision for Transforming Global Governance: A Strategic Challenge for Washington and Its Allies," (Texas National Security Review, The Strategist, Volume II, Issue I) November 2018.

⁴ Ministry of Foreign Affairs, "The China-Africa Institute Established in Beijing: Yang Jiechi Reads the Congratulatory Message from President Xi Jinping and Delivers a Speech" Statement, April 4, 2019, https://www.fmprc.gov.cn/mfa eng/zxxx 662805/t1654342.shtml Accessed February 4, 2020

⁵ Amb. Phillip Carter III, Dr. Raymond Gilpin, and Paul Nantulya, "China in Africa: Opportunities, Challenges, and Options," in Scot D M Mc Donald and Michael C Burgoyne, China's Global Influence: Perspectives and Recommendations (Daniel K Inouye Asia Pacific Center for Strategic Studies) September 2019.

⁶ Ibid

⁷ The Habari Network, China's Belt and Road Initiative and Africa – An Interview with Paul Nantulya, Accessed October 5, 2019, http://www.thehabarinetwork.com/chinas-belt-and-road-initiative-and-africa

⁸ Full Text: China's Second Africa Policy Paper, Xinhua,

https://www.chinadaily.com.cn/world/XiattendsParisclimateconference/2015-12/05/content 22632874.htm Accessed February 15, 2020

⁹ Oki Nagai, "China Pledges Another \$60bn to Africa in Bid to Win Allies" September 4, 2018, Nikkei Asian Review, https://asia.nikkei.com/Politics/International-relations/China-pledges-another-60bn-to-Africa-in-bid-to-win-allies, Accessed February 5, 2020.

¹⁰ African Union Commission, The Common African Position on the Proposed Reform of the United Nations: The Ezulwini Consensus, March 2005, https://www.un.org/en/africa/osaa/pdf/au/cap screform 2005.pdf Accessed February 5, 2020.

¹¹ Tom Miles, "African Nations Join Majority in Opposing U.S. Blockage at WTO," June 26, 2019, Reuters, https://www.reuters.com/article/us-usa-trade-wto-africa/african-nations-join-majority-in-opposing-u-s-blockage-at-wto-idUSKCN1TR1WH, Accessed February 5, 2020

¹²Ted Piccone, China's Long Game at the United Nations (Washington DC: Brookings Institution, September 2018) ¹³ Laura Zhou, "Which Chinese Hold Top Jobs at Key International Bodies?" October 8, 2018, South China Morning Post (https://www.scmp.com/news/china/diplomacy/article/2167522/which-chinese-hold-top-jobs-key-international-bodies) Accessed February 1, 2020.

¹⁴ Ibid

¹⁵ Paul Nantulya, "Strategic Application of the Tao 道 of Soft Power: The Key to Understanding China's Expanding Influence in Africa," (Forthcoming, Special Edition of the Journal of the African Review, University of Daresalaam Press)

¹⁶ For a discussion on China's 2014 White Paper on Foreign Aid see Yun Sun, "Africa in China's Foreign Aid," (Washington DC: Brookings Institution, July 16, 2014). To access other White Papers in English, consult the State Council website at http://english.www.gov.cn/archive/whitepaper.

¹⁷ Xinhua, Full Text: China's National Defense in the New Era, Accessed October 2, 2019, http://www.xinhuanet.com/english/2019-07/24/c 138253389.htm

¹⁸ Eric Olander, "China's Role in Africa's Rapidly Growing Space Market" November 19, 2019, The China Africa Podcast, https://chinaafricaproject.com/podcasts/chinas-role-in-africas-rapidly-growing-space-market/ Accessed February 13, 2020.

¹⁹ "China Planning Namibia Navy Base?" News 24 Archives, https://www.news24.com/Africa/News/China-planning-Namibia-navy-base-20150122 Accessed February 13, 2020

- ²⁰ Ryan Faith, "China Joins Tanzania In Naval Exercise as the Indian Ocean Region Goes Nuts," October 24, 2014, https://www.vice.com/en_us/article/gyn99j/china-joins-tanzania-in-naval-exercise-as-the-indian-ocean-region-goes-nuts Accessed February 13, 2020
- ²¹ "Chinese-built Military Training Centre Opens in Tanzania," Defenseweb, Februarey 13, 2018, https://www.defenceweb.co.za/land/land-land/chinese-built-military-training-centre-opens-in-tanzania/ Accessed February 13, 2020
- ²² "China-Namibia Relationship On Space Is One Of The Best In Africa Chinese Ambassador To Namibia" September 3, 2019, Space in Africa, https://africanews.space/china-namibia-relationship-on-space-is-one-of-the-best-in-africa-chinese-ambassador-to-namibia/ Accessed February 13, 2020
- ²³ "Leadership School for Six African Countries Launched in Tanzania," Xinhua, July 17, 2018, http://www.xinhuanet.com/english/2018-07/17/c_137329281.htm
- ²⁴ Xinhua, "Leadership school for six African countries launched in Tanzania," July 17, 2018, http://www.xinhuanet.com/english/2018-07/17/c 137329281.htm Accessed February 12, 2020.
- ²⁵ Paul Nantulya, "Implications for Africa from China's One Belt One Road Strategy," March 22, 2019, Africa Center for Strategic Studies, https://africacenter.org/spotlight/implications-for-africa-china-one-belt-one-road-strategy/ Accessed February 5, 2020.
- ²⁶ Paul Nantulya, "Grand Strategy and China's Soft Power Push in Africa," Africa Center for Strategic Studies, Spotlight, August 30, 2018. https://africacenter.org/spotlight/grand-strategy-and-chinas-soft-power-push-in-africa/ Accessed February 12, 2020.
- ²⁷ Gladys Muniu, "Scholarships Help Cultivate Future Leaders of Africa, "China Daily, November 3, 2019, https://www.chinadaily.com.cn/a/201903/11/WS5c89b9cea3106c65c34ee951.html Accessed February 15, 2020
- ²⁸ Op cit, Paul Nantulya, "Implications for Africa from China's One Belt One Road Strategy,"
- ²⁹ Paul Nantulya, "Chinese Hard Power Supports Its Growing Strategic Interests in Africa," January 17, 2019, https://africacenter.org/spotlight/chinese-hard-power-supports-its-growing-strategic-interests-in-africa/ Accessed February 14, 2020.
- ³⁰ Op Cit, Paul Nantulya "Chinese Hard Power Supports Its Growing Strategic Interests in Africa,"
- ³¹ Ankit Panda, "Chinese, Russian, South African Navies Conduct Trilateral Naval Exercises," November 27, 2019, The Diplomat, https://thediplomat.com/2019/11/chinese-russian-south-african-navies-conduct-trilateral-naval-exercises/ Accessed February 14, 2020.
- ³² Op cit, Paul Nantulya, "Chinese Hard Power Supports Its Growing Strategic Interests in Africa,"
- ³³ Joel Wuthnow and Phillip C. Saunders, Chairman Xi Remakes the PLA (Washington DC: National Defense University Press, 2019):25-36.
- ³⁴ Op cit, Ted Piccone, China's Long Game at the United Nations: 35
- ³⁵ You Ji, "Naval Humanitarian Assistance Operations Anchored in Military Operations Other Than War," paper presented at Chinese and American Approaches to Non-Traditional Security: Implications for the Maritime Domain, U.S. Naval War College, Newport, RI, May 4–5, 2010
- ³⁶ Op cit, Ted Piccone, China's Long Game at the United Nations:40
- Op Cit, Paul Nantulya, "Chinese Hard Power Supports Its Growing Strategic Interests in Africa"Ibid
- ³⁹ Jordan Link, "Chinese Lending to Africa for Military and Domestic Security Purposes," April 9, 2019, The China Africa Research Initiative Blog, http://www.chinaafricarealstory.com/2019/04/chinese-lending-to-africa-for-military.html Accessed November 14, 2020
- ⁴⁰ "Africa Embraces Huawei Despite Security Concerns" The East African, December 24, 2018. https://www.theeastafrican.co.ke/business/Africa-embraces-Huawei-despite-security-concerns/2560-4908166-15t6impz/index.html Accessed February 14, 2020.
- ⁴¹ Op cit, Paul Nantulya, "Strategic Application of the Tao 道 of Soft Power: 11
- ⁴² "Chinese Pair Jailed 42 Months for Shooting ex-Zanu PF MP Son," October 11, 2018, Newsday, https://www.newsday.co.zw/2018/10/chinese-pair-jailed-42-months-for-shooting-ex-zanu-pf-mp-son/ Accessed February 14, 2020.
- ⁴³ Samuli Seppänen, "Chinese Legal Development Assistance: Which Rule of Law? Whose Pragmatism?" Venderbilt Journal of Transnational Law, No 51, 2008.

OPENING STATEMENT OF CYNTHIA WATSON, PH.D., DEAN OF FACULTY AND ACADEMIC AFFAIRS, NATIONAL WAR COLLEGE, NATIONAL DEFENSE UNIVERSITY

CHAIR FIEDLER: Thank you very much. And now we'll hear from Dr. Cynthia Watson who is the dean of faculty and academic programs at the National War College of the National Defense University.

She's been studying Latin America for almost two decades. And we will ask her to focus on what she thinks about China and Latin America today. Thank you.

DR. WATSON: Thank you very much for this opportunity. I appreciate the interest that is being shown today in Latin America. I appreciate each of the Commissioners taking time to consider this.

I think we'll find that Latin America is in a considerably less important position for the PLA than my colleagues have described so far.

I have to start by saying, these are my personal remarks and should not be construed as any form of U.S. Government policy, the policy of the National War College, or any part of the Defense Department.

China's engagement in Latin America dates back roughly 20 years in its height. Certainly, the transfer of diplomatic relations from Taiwan to the mainland began in 1970. But the real emphasis for China in its role in Latin America begins after the new millennium starts.

Having said that, China's interests are primarily in, I would argue rank order: Natural resources, energy, and food, which Latin America is important in providing.

Secondarily, providing an area where greater emphasis on the same type of approach to the international system, an approach that respects the role of sovereignty, is very important in Latin America and offers China an opening to this region as the idea of shared partnership.

Third, this is a part of the world where Taiwan still does have a small number of states, a decreasing number of states, that respect Taipei as the capital of China, and Beijing would like to reverse that.

And then finally, this is yet another part of the world, as has been discussed already, considering the Belt and Road initiative, where China simply wants to play, if not the dominant role as an external partner, certainly a dominant role.

What I did not say in that list of four things is I do not see, at present, Latin America as a place where China intends to have a very large PLA presence. And I think that there are two primary reasons for that, and neither of those should be particularly surprising to anyone.

First, this is still the region -- and the Chinese do read history, even though I'm not sure we read history sometimes -- the role of the Monroe Doctrine and the declared policy of the United States that this is a region where the United States will have a predominance is something that I think Beijing even today is still acutely aware of.

And that has led them to be considerably more cautious in terms of using the PLA in a very overt or in a very aggressive way for fear of alienating the United States and creating potential problems in other aspects of the bilateral U.S.-Chinese relationship.

But secondly, geography matters. The United States is simply much, much closer to Latin America than is China.

Historically, before the mid-20th century, there had rarely been any ties between China and Latin America, with the notable exception of immigrants who came to build the railroads in Latin America, as was true in the United States.

But that geographic imperative makes it such that it gives Beijing pause in considering whether the possible pain of exciting the United States or creating tension is worth the benefits that they will get out of PLA involvement.

That is not to say that the PLA is not involved. But what I would reiterate is, that they are not as heavily involved as they certainly are in the South China Sea or as we have seen in other areas of the periphery around China, and increasingly we are seeing the potential for in Africa.

Instead I would argue that what we see with a PLA is it is a means to advance Chinese interest, but it is not currently an end in and of itself.

With that let me stop. I submit my remarks for your record and I look forward to your questions. Thank you.

PREPARED STATEMENT OF CYNTHIA WATSON, PH.D., DEAN OF FACULTY AND ACADEMIC AFFAIRS, NATIONAL WAR COLLEGE, NATIONAL DEFENSE UNIVERSITY

REMARKS BEFORE U.S-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

CYNTHIA WATSON, PHD, DEAN OF FACULTY & ACADEMIC PROGRAMS, NATIONAL WAR COLLEGE, NDU

20 FEBRUARY 2020

'CHINA'S MILITARY POWER PROJECTION AND U.S. NATIONAL INTERESTS'

Good afternoon. Thank you for the opportunity to discuss China's military interests in Latin America as part of this day long hearing on the People's Liberation Army (PLA) expanded activity globally. Please let me begin by reminding you these are my personal assessments and should not be interpreted as the official policy of the Department of Defense, National Defense University, National War College, or any agency of the U.S. Government.

As I noted in my contribution to the Chinese Strategic Intentions: A Deep Dive into China's Worldwide Activities (December 2019), I attribute China's interests in the Latin American region as 1. "guaranteeing long-term access to energy, natural resources, and food; 2. Increasing diplomatic links to support China's emergent role as a global leader; 3. Eradicating the remaining diplomatic recognition of Taiwan; and 4. Furthering China's ambition to replace the United States as the dominant external country for long-term relations".1

The goals of the People's Liberation Army (PLA) fall under these overarching goals for the Chinese Communist Party (CCP) because the PLA is an organ of the CCP rather than an instrument of

¹ SMA Chinese Strategic Intentions White Paper FINAL 01 Nov.pdf see "Chapter 20. China's Creeping Interests in Latin America: Challenging the Monroe Doctrine", p. 146.

overall Chinese foreign policy. The focus of this discussion is PLA influence overseas but I would stress that evidence for China using a much wider array of instruments than some countries is compelling.

China's focus is on expanding its long term relations with the states of the region under the auspices of four objectives noted above. As such, the PLA strives to strengthen China's role across the board in this region rather than creating simply a dominant PLA role in Latin America. This is an important point because the PLA represents power projection but is being used by Beijing not for that power projection but as part of a broader attempt to build long-term relationships.

Uses of military-military ties with Latin America

The PLA uses all of the instruments at its disposal to expand its role across Latin America. One of the most important things for Latin America is China's welcome of officers to professional military education (P.M.E.) programs. Long important for militaries not welcomed to U.S. P.M.E. programs, the PLA offers its "international course" for militaries to hear about China's military role around the world. Located across town from the main PLA National Defense University northeast of central Beijing, this program allows especially Venezuelan, Ecuadoran, and Bolivian officers to learn from their Chinese counterparts in an environment with other foreign officers. They are not, however, fully integrated into courses with Chinese counterparts. These foreign militaries instead study about China's interests, hear Beijing's perspective on the international system, and overall reinforce what is currently a predisposition against the United States in these militaries which have now been excluded from the U.S. P.M.E. system for at least two decades.

The Chinese and Latin American armed forces have exchanged visits to provide evidence of their interest in stronger ties. These meetings occur alternatively in Beijing as well as the capitals of Latin America. Relatively light in substance, the meetings generally provide photographic evidence for each side of the meeting occurring rather than allowing substantial outcomes because the PLA is not a locus

for negotiating within the Chinese system. Discussions appear to focus on basic accords to facilitate better cooperation, donation of equipment, or the low level of arms sales Beijing offers.

Bases in Latin America: not so much

Latin American states value protecting their sovereignty as highly as does China. It is highly unlikely that this region would welcome PLA establishment of bases to mirror the one built in Djibouti. Remarks by PLA Lieutenant General He Lei a year ago indicated that *China* desired two different conditions to allow it to develop comparable bases to Djibouti: a welcome from a host nation and an opportunity to improve a peace-keeping mission in this relevant country. Latin American states do not generally welcome foreign military basing because of the centrality of protecting sovereignty in the region's culture. This sensitivity to sovereignty resulted from decades of foreign intervention in their history. Interestingly, Latin American states historically had considerable engagement in blue helmet operations, seen by some as violating sovereignty, but Latin American armed forces appear less involved in those efforts today. China is not offering peace keepers in the Latin American region at present.

Concern about Hutchinson Whampoa operation of the Panama Canal Zone spans to the 1990s. China did not, however, immediately establish a PLA presence in the Central American isthmus with a curious reality that Panama did not shift diplomatic relations from Taiwan to the mainland until 2017. Other commercial port ties exist in El Salvador, for example, but there does not appear a dramatic increase in PLA operations there.

The 2011 visit by the PLA hospital ship, *Peace Ark*, represented an attempt to replicate the "soft power" of medical medicine that the Chinese have learned from decades of similar U.S. visits around the globe. The PLAN does not currently circumnavigate the globe nearly as often as does the U.S. Navy with

3

² Alidad Vassigh, "Gauging China's Military Intervention in Latin America", worldcrunch.com, 2019.

Peace Ark's visits to Latin American ports similarly far less frequent than U.S.N.S. Comfort or U.S.N.S. Mercy.

At present, while U.S. Southern Command does offer the opportunity for military-to-military exercises between U.S. and Latin militaries, this is not yet a frequent behavior between PLA and Latin American militaries. The deepening of ties between China and any of the Latin American nations could lead to this type of interaction but at present the focus of PLA activities remain largely domestic. China remains far from this form of coordination for the foreseeable future.

Arms Sales, 'ALBA', and Argen

China uses arms a manner of enhancing longer-term ties with the region rather than to create conditions for inter-operability as the United States often does. Chinese arms are far less expensive than U.S. sales, an important issue for most Latin American states which cannot come anywhere near the level of defense spending of NATO partners or Japan. These are less sophisticated arms but also require smaller maintenance packages which again benefit the states' defense budgets in the region.

Foci of PLA arms expanding penetration include Venezuela, Ecuador, Bolivia (often called ALBA states by the late Venezuelan Hugo Chávez Frías) and Argentina, all states where China's overall relationship is deeper because of strong anti-U.S. sentiments. Coincidentally, these are states where U.S. military (and political) ties are weakest in the region. These are also the countries where the PLA is able to offer arms that are the less sophisticated and cheaper than those offered by the United States or Europe. These arms sales are most often linked to needs of the police and internal security since there are few international points of friction in Latin America. These are not arms that substantially increase China's prowess in Latin America but provide bonds of military-to-military respect from the PLA towards the underfunded armed forces of these states.

China's overall military engagement in this region is deeper than it has ever been but is still relatively weak compared with U.S. ties. As regimes exit or enter power, China poses a potential interlocutor but generally not a highly desired long-term link because the PLA does not offer the same approach of cooperation and coordination as does U.S. Southern Command and the individual services in longer-term links to the militaries in this region.

Conclusions

China's overall presence in Latin America is significantly greater than it was when Hu Jintao visited several South American countries in November 2004 after an APEC meeting. The bulk of the engagement, however, remains financial, trade, and diplomatic rather than military. Latin America is a region where the armed forces' role in societies decreased in the post-Cold War world. At least one analyst argued in February 2020 that the stressed democracies of this region may be reconsidering the role of the military which could open the door to better access for Beijing but we are a long way from that point at present.³ PLA officers currently have weak ties with Latin American peers, though a greater role by Latin Americans in protecting the *patria* could stimulate Beijing's interest but this does not appear true right now.

U.S. engagement with Latin America is the key to not only Washington's role in the region but also Beijing's. The primary instrument of U.S. policy for decades has been U.S. Southern Command with the combatant commander arguably the single best known U.S. figure in the region.⁴ Latin American militaries historically (1982 in Argentina, 1980s in Nicaragua, post 1999 in Venezuela as notable exceptions) welcomed strong ties with the U.S. armed forces, often ties much deeper than any other type of relations between our two regions.

³Washington Post, 12 February 2020.

⁴ Part of the reason for this is the repeated history of U.S. administrations not operating with ambassadors in place, a phenomenon irritating Latin American counterpart regimes.

Recent U.S. domestic rhetoric excoriating Mexican and Central American immigration seriously undermine this state of affairs. Latin Americans from Argentina and Chile north to the Mexico-U.S. border increasingly fear that the United States no longer cares seeks positive, sustained relations with this part of the world. The hostility developing along this path reinforces those inflammatory, nationalist anti-U.S. sentiments advocated by the late Hugo Chávez Frías and Nicolás Maduro Moros in Caracas or Bolivian Evo Morales.

By extension, this may open the door to Latin American regimes reconsidering the benefits of stronger involvement by PLA in these countries across the region if they believe China offers a better partner for the future than does the United States. This is not an inconsequential possibility. China remains cautious about its military engagement in this region because of a two hundred year history of the Monroe Doctrine (1823). The shifting international perspectives do NOT guarantee that this region, long determined to chart a course best for its future, will reject Beijing's overtures, including PLA-Latin American military ties. The power for this decision lays with the United States far more than it does with China or the PLA.

PANEL III QUESTION AND ANSWER

CHAIR FIEDLER: Thank you very much. And we'll start with Commissioner Wortzel. CHAIR WORTZEL: I have two questions at this point. The first for Mr. Nantulya. I notice in your testimony on Page 3 that China is managing ground satellite tracking stations in Kenya and Namibia, and that the personnel that are doing that are from the Xi'an Satellite Control Center.

It turns out that the Xi'an Satellite Control Center is PLA, People's Liberation Army support force, Strategic Support Force Base 26. So, do you know whether these are actually PLA personnel? And then, I'm assuming they are.

And then for Mr. Poling. You talk about illegal maritime militia activities and a campaign to detect and report on them. Wouldn't it take some kind of a U.N. sanction before those activities could be designated illegal and be acted on?

MR. NANTULYA: Thank you. Thank you, Commissioner Wortzel.

Yes. From what is available in the Namibian press -- and thank God the Namibian press is one of those very active and robust and professional presses, media, on the continent, and also do a lot of investigative reporting -- so according to those press reports, yes, these are PLA personnel, PLA affiliated personnel.

And that makes sense. It makes sense in the sense that Namibia and China do have a very, very, close relationship. I mean, the ruling party, SWAPO, from inception, was trained by the Communist Party of China, and they share doctrine and traditions.

But I would also say that it might reflect a larger pattern because if we look at the organizations that provide support to the political schools around the continent, those associations are closely affiliated with the PLA. And I discuss one of them in the, in my testimony. So yes, it might also be a pattern.

MR. POLING: Thank you, Sir. We already have, I think, more than enough standing law to say that the actions of trans-maritime militia are illegal.

Illegal in the eyes of the United States Government, illegal in the eyes of most governments around the world, whether you want to look at the un-convention law of the sea or COLREGs or any number of issues in customary maritime law.

As for whether or not you need a U.N. mandate to sanction them, we don't have a U.N. mandate to sanction those who supported paramilitary activities in the Eastern Ukraine, but we've still done it.

At the very least, we should be arguing that Chinese companies who are supporting the paramilitary, who are supporting illegal construction in the South China Sea, who are supporting any number of illegal activities in the South China Sea, they should not be free to invest in U.S. infrastructure projects, in the infrastructure projects of our allies, in World Bank-, in AVB-supported projects, which at the moment they are.

CHAIR FIEDLER: Commissioner Lewis.

CHAIR WORTZEL: As long as I've got some time --

CHAIR FIEDLER: Oh. Yes.

CHAIR WORTZEL: -- Dr. Watson. I know that in Latin America there are also some satellite tracking facilities. Do you know if they are also supported by the PLA Strategic Support Force?

DR. WATSON: I do not know that. I know that the satellite tracking in the open press is primarily in Brazil, where there's long been interest in space ties between China and, between the

PRC and Brazil.

And then there are increasing, there's increasing evidence that Argentina, which is a place that Beijing has been showing considerably more interest in in the last couple of years, Argentina has been rumored to be one of the other places that that is appearing.

I would make the observation to your question that Beijing's primary interest in this region is in Brazil, for a range of reasons. But what we increasingly see is, as we see states where democracy has failed or is failing -- arguably, Argentina, Venezuela, Bolivia and Ecuador -- those are the same places that we see more PLA involvement in Latin America.

I would caution all of us that there may be a step further that we need to be aware of. And that is, as we see democracy under greater threat in Latin America, which is a phenomenon that arguably we are seeing, to include in Brazil, those seem to be the places that Beijing most readily targets with PLA connections, as a way to build military-to-military ties.

And as we see militaries that have for the last 40 years been on their heels and led a failed military government in the 1970s and '80s, we may see a much greater rise in those mil-to-mil ties because the militaries are rising as institutions within the states of Latin America that seem to have credibility that had been lost after the poor governance in the '70s and '80s.

I don't see much writing on that in the U.S. national security space right now.

Secondly, as we think about our mil-to-mil ties with this region, or actually our ties in general with this region, the importance of Southern Command as a symbol of U.S. government is one that is hard to overestimate.

Will we see the PLA attempt in its own way to model on that?

There is some evidence for that if we see militaries's rise again in Latin American, again, as credible institutions. But we are not there right now. And I don't mean to imply we are.

It simply strikes me as I see what's becoming less and less comfort with democracy, or, better said, as we see more and more possible failures of democracy in Latin America.

It is worrisome to wonder if they will then turn to some of the tried and true methods that have failed, frankly, in the past, to rely on the military. And I think that that would open the door potentially to more PLA involvement. I realize --

CHAIR WORTZEL: Thank you. I'm seeing really --

DR. WATSON: -- that's a very wrapped about way to answer --

CHAIR WORTZEL: -- positive head nods out of Dr. Mulvaney back there when I asked that question about, who's operating the satellite tracking station.

So, if you have published on it, we'll get a copy. And if you haven't, I wonder if we could invite you in to just talk about it. Thank you very much.

CHAIR FIEDLER: Commissioner Lewis.

COMMISSIONER LEWIS: Mr. Poling, as far as the South China Seas go, what was China saying as they began to build in the Spratly and Paracel Islands?

What was their justification for doing what they were doing and what did the U.S. do at that time? And is it too late now for the U.S. to do anything?

MR. POLING: Early on we heard silence from the Chinese and from the region. It took well over six months before any public reporting came out about the island-building. It was mid-2014 before anybody really knew what was happening.

The Chinese justification early on was a mixture of, these are necessary for the livelihood of those stationed aboard it, and then it was, well, they're for the civilian benefits throughout the region, we're going to use them for search and rescue, we're going to use them for weather forecasting, storm warnings, we'll use them for HA/DR.

These were the same excuses that were made when the Chinese first occupied the Spratlys in 1988 under the umbrella of U.N. weather monitoring, and again when they took Mischief Reef in '94.

They were of course not compelling to anybody in the region or the U.S. at the time. What we did, I think, was spend a year or so trying to figure out what the end game was. And by the time the U.S. realized how large in scope this project was going to be it was too late to stop it.

You can look at statements that have come out over the last couple of years from PLA officials saying that they were surprised by how little pushback they got from the Americans. Beijing was prepared for more of an international outcry and felt that they didn't receive it, and so it was full steam ahead.

Now, we did eventually wake up to the threat and started tightening relations with the Filipinos, with others in the region, negotiating the Enhanced Defense Cooperation Agreement in 2014, for instance, under the Obama Administration.

President Obama pulled Xi Jinping aside at the Nuclear Security Summit in 2016 and informed him that building on Scarborough Shoal would be a red line for the U.S. And by all accounts the Chinese turned their barges around and choose not to build on Scarborough.

So we did take steps late in the game that I think prevented things from being worse. We clearly didn't do enough.

Is there still more that can be done? Of course. We have to be realistic about our goals though.

There is no demilitarizing the South China Sea. What China has built is built, and what China has put on it is on it. And there is nothing that we can do, at a cost that we or our partners would be willing to accept, to reverse that now. Our goal should be to convince the Chinese not to use those facilities to kick around their neighbors.

And so, there is no putting the sand back in the ocean, but we can dissuade the Chinese from using them to rip up international law and attack our allies and partners.

COMMISSIONER LEWIS: The land where those bases have been built, is that land claimed by any other country?

MR. POLING: Yes. So, six of China's seven islands in the Spratlys, the artificial islands, six of them are claimed in one form of another, very clearly, by Vietnam or the Philippines.

The seventh, Mischief Reef, is not an island. According to international law, it's a piece of the seabed that belongs to the Philippines.

And so, all of them are, in one form or another, claimed by another country. Now, the U.S. position on six of the seven is that we take no position. We have not taken a position since 1909 and we're not going to now.

COMMISSIONER LEWIS: What's the justification for doing that?

MR. POLING: Well, our justification is that nobody has a very airtight case. If you were to go back and look in the Spratlys, it's not clear that any Chinese official set foot on the Spratlys until 1946. But no Philippine official officially claimed them until the 1950s.

The Vietnamese are the inheritors of a dubious French claim. There's just, there's no benefit to the U.S. to wade into these messy historical arguments in which nobody is a winner.

What we want is to make sure that if they do get results, they get results peacefully. If they want to take them to arbitration, fine. If they want to negotiate multilaterally, fine. But we can't accept the Chinese using force against our allies to resolve the issue themselves.

COMMISSIONER LEWIS: Now, is it also true that China is trying to keep Indonesian and other countries' fishing vessels away from certain other lands' fishing grounds in the South China Seas and they're being contested by the Indonesians?

MR. POLING: Certainly. So the Chinese claim vague historic rights that have no place in international law throughout the entirety of the South China Sea.

Their fishermen, in their minds, are allowed to go operate in the coastal waters of the neighbors. The neighbors are not allowed to go operate in China's coastal waters or the waters around the contested islands and reefs.

And so, the recent standoff with Indonesia was because the Chinese sent about half a dozen of their Coast Guard vessels to escort dozens of fishing boats who spent well over a month operating in the waters of Brunei, Malaysia, and Indonesia, simply to prove that they can. And they do that pretty regularly now.

COMMISSIONER LEWIS: Thank you very much. Thank you.

CHAIR FIEDLER: Commissioner Cleveland.

CHAIRMAN CLEVELAND: Thank you, all. Really interesting testimony, especially because it's late in the day. So I commend you for keeping us all sort of riveted.

We're going to have a hearing in, I think April, on Africa and China, so I don't want to overly focus on this.

But, Mr. Nantulya, your testimony was so compelling. And I'm really interested in your characterization that we're going to see a replication, or there is a risk of replication of Djibouti, based on three criteria of level of importance, ideological affinity, and an ability to mobilize international support.

And I'm interested in your sort of case studies of the 13 countries where there's partnerships. And most are maritime states.

They're also countries that enjoy the benefit of debt relief under HIPC and MDRI. And so, I'm curious about your assessment of sort of which came first.

Were these counties positioned where their credit and their economic position improved substantially with debt relief and then the Chinese moved in and took advantage of that? Or were these longer standing relationships, and that debt relief dynamic facilitated an acceleration of Chinese investment?

I guess what I'm curious about is, how do you see that intertwining of the position that seven of those 13 countries were put in by virtue of debt relief?

And I guess my real question is, is an assessment on your part of Chinese free riding when it comes to taking advantage of the debt relief, which has now created an economic and a security risk.

MR. NANTULYA: Thank you. Thank you, Commissioner. I think it's a combination. I think it's a combination.

The relationship, the relationships that -- and it's kind of difficult. When looking at all these different countries and looking at how they interact with China, it's kind of, you know, there's a lot of gray area.

And one might be tempted to think that it could be an outcome of a very deliberate, very systematic strategic thinking on the part of the Chinese, or could it just be coincidental.

But I try to go to the foundations. I tried to go to the foundations. And China started engaging these political parties long before they governed countries. And for many of them it was never really, it was never a foregone conclusion that they would be in office.

The Zimbabwean liberation movement is a very good example. I mean, there was a very,

very, fierce struggle between Mugabe's ZANU and Joshua Nkomo's ZAPU.

And it wasn't clear right up to the elections. Right up at the last minute. Nobody really knew which of these two movements would end up controlling the government in Zimbabwe.

And China has similar sets of relationships in these seven countries that I talk about. Many of them which now organize under the so-called former liberation movements of Southern Africa, where China really has very, very strong relationships with them.

And it was always a case where even in one particular country, China was associated with more than one movement. So that's where I take it to.

And in terms of the ideological foundations of these relations, what has happened is that on these, these are sort of like layers in an onion because you have the ideological element and then you have the political element being built on top of it. And then you have the economic dimension.

The fact that so many of them are maritime states as well with major Chinese dual assets and, you know, dual-use assets and civilian assets. So, it's essentially, just in terms of what the research is showing, is that the ideological element is really a foundation.

And it's true that the Cold War has been over a very long time. But the fact is that China's closest partnerships on the continent are with those countries that it mentored right from the time they established liberation movements.

So the debt, the economic dimension, the debt relief, that I think has just been a, you know, it's been a rider and it's been something that the Chinese have been, it's been an add-on to the Chinese engagement. But I think fundamentally we need to pay very close attention to those ideological partnerships.

We need to pay very, very close attention to the partnerships, the party-to-party relations, that China enjoys with many of these countries because we shouldn't forget that in the Chinese system the society, the party, the state and the military are one. And the party is above all these four.

So that impacts on the type of military relationships they have with these countries, and it is a shared heritage. Without exception, all these countries also have this very, very close relationship between the military and the party. And I think that's where the foundation is.

And there's not a whole lot of research being done into how China uses these ideological political relationships to build strategically-focused relations. So I think this is really an area of further research.

CHAIRMAN CLEVELAND: That's fascinating. If I have another round I'd like to talk about Cambodia.

CHAIR FIEDLER: We should be able to. Let me ask a quick question. On South China Sea, I mean, I'm perceiving this as a fait accompli, right? I mean, you said so without saying fait accompli.

I don't know that you're the person to ask the question, but two points. How did the South China Sea militarization affect our strategic forces and how vulnerable are they to being neutralized quickly? Because these are not particularly large land masses.

MR. POLING: I should be clear that I think that we're losing, but I don't think we've lost. As I said, we have to be clear about what our goals are, and if our goal is saving some form of the rules-based order in Asia,

making clear that the Chinese don't get to just set their own rules because they want to. Well, nobody has accepted Chinese claims. Even the weakest of its neighbors continues to insist that it's claimed to the nine-dash line is illegal.

We also have so far dissuaded them from using force against our only treaty ally in the fight, the Philippines. So, if you were to look at the U.S. critical interests here, I think we are holding the line, albeit being pushed back bit by bit.

When it comes to the islands themselves, I think they do a few things. I talked a bit about how they undermine the credibility of the United States as a provider of public goods. Right?

These states support our forward presence. Without that forward presence we are pushed back to Guam and Hawaii. And if they come to believe that our forward presence only benefits us, it doesn't actually help them, they no longer have any reason to support it.

And so if we can't, at the same time that we defend our freedom of navigation also defend their freedom of the seas, their right to drill for oil and gas, their right to fish, their right to do everything else guaranteed by international law, then we are going to lose the place in Asia that we've maintained since World War II, which has kept us safe.

When it comes to direct military power of projection, well, the islands turn, the South China Sea, in my opinion, into more or less a Chinese lake in the early stages of any hypothetical conflict.

A conflict in Asia, for instance, that involved Taiwan or Japan would require the U.S. to spend the vast majority of its forces in Northeast Asia. These islands cannot be neutralized without cost.

They are rather large. Mischief Reef, the largest of them, is about the size of the I-495 Beltway. You're talking about hundreds of pieces of ordnance to drop.

If you're going to use long-range munitions of some sort, well, we don't have that much magazine capacity in Asia. You would have to empty the magazines of U.S. forces to neutralize what is ultimately a secondary target.

Which means that when it comes to the war planning, based on our current posture, if a crisis breakout in Northeast Asia we would cede everything south of Taiwan to China, for the time being. And then fight our way back in. That is a radical departure from the posture that we've growing used to.

CHAIR FIEDLER: Thank you. That was my point of asking the question. I have a quick question of you on South Africa.

Lots of people are concerned about the China-South African relationship. And it seems to me that your analysis, going back to Chinese assistance, beginning in the Mao era, okay, has paid off.

And we must be frank that the United States government wasn't supporting the anti-Apartheid movement at the time. So, I'm wondering what your view of the historic relationship, or sort of today, the contemporary impact of the historic relationship on South Africa?

MR. NANTULYA: Thank you. Thank you very much, Commissioner Fiedler. No, I certainly agree with you that that history is very, very important.

South Africa is special in the sense that unlike the other, you know, these countries that I mention in my testimony, South Africa developed a fairly robust democratic constitutional state in which there's a very, very clear separation between the state, the government, the army, the military, should I say, and the ruling party. Very, very clear. Very clear lines.

And that shows, you know, in terms of the defense budget, discussions of national security matters and so on. So it's a very special case.

Namely that the relationship is very tight. The ANC and the Communist Party of China relationship is very tight.

But South Africa has not replicated the model. You know, the party-army model at all.

In any way shape or form.

However, for ideological reasons and for reasons of the strategic narrative and strategic communications and the messaging, that relationship is really key.

And especially under the Zuma administration. We've seen that it has extended into intelligence training.

We have seen more senior ANC personnel training at the Central Party School and at the different cadre academies. Like the – Pudong Cadre College and so on. So the relationship has definitely, has definitely deepened.

So I think it does play, it does play a role. Certainly the two sides do invoke that.

If we look at the statements that President Cyril Ramaphosa made at the FOCAC, when he was talking about the model, the Chinese model as being viable and it is a model that African countries are going to work with and that those sort of unnamed countries that think that China is a negative presence are only doing so for their own reasons.

That, again, that rhetoric really feeds into that, you know, sort of the Maoist traditions. Because the ANC does have Maoist traditions.

So I think that definitely plays a role in South Africa. You know, the military exercises that were done recently with the PLA as well.

So, yes, I would agree with you, it does play a role. But I should also mention that the anti-Apartheid movement also had very, very strong connections to the United States.

Nelson Mandela himself --

CHAIR FIEDLER: I know, I saw.

MR. NANTULYA: -- during the recent trial talked about American democracy, talked about his admiration for Thomas Jefferson and others. He's talked about the Federalist Papers.

And the ANC has a very strong relationship with the Congressional Black Caucus and so on. So, it's a complex, it's a complex relationship.

CHAIR FIEDLER: It's complex.

MR. NANTULYA: But I think all of these elements --

CHAIR FIEDLER: Thank you.

MR. NANTULYA: -- might factor in terms of smoothing that --

CHAIR FIEDLER: Thank you very much.

MR. NANTULYA: -- relationship in South Africa.

CHAIR FIEDLER: Commissioner Bartholomew.

VICE CHAIRMAN BARTHOLOMEW: Thank you very much. Thank you to our witnesses for very interesting testimony.

I have, Dr. Watson, does your portfolio of Latin America include the Caribbean?

We haven't mentioned that at all but there is growing arms sales and growing security cooperation between, between China and the Caribbean, and I wondered if you could speak to that?

And then, Mr. Nantulya, you talk here about the private security contractors who are primarily demobilized PLA and PAP. Are these contractors establishing themselves in the communities where they're protecting the projects or are they more sort of a migrant contractor presence?

And I'm just wondering if you know they've been demobilized from the PLA. Could they be re-mobilized in the event of needing to be used? Dr. Watson?

DR. WATSON: Yes, ma'am. Yes, there are growing arms sales, but when one talks about arms sales to the island nations of the Caribbean, one must think about what we're talking

about in relatively and absolute small terms.

What I think is much more interesting about PLA involvement in the Caribbean, is this is a region that is almost entirely excluded in anybody's analysis, apropos your question to me. And this is a case where the PLA has seen a vacuum and has moved in.

And in particular, we have long seen, we've seen a very tortured relationship between China and Cuba. I was very struck as Mr. Nantulya was discussing the ideological links between states in Africa and China. Because there's always been a great deal of tension, frankly, even between Cuba and China because each aspired to be the dominant remaining state in the post-Soviet world for a communist regime.

I would remind everyone that the only ideological tie really, in Latin America between the PLA and a Maoist movement was the Sendero Luminoso in Peru. Which has been quite a while ago and is dead. I mean, there is not anything that anybody takes seriously about a Sendero rise again, as there was even 20 years ago.

But what we see is that Cuba has proven extremely reluctant to commit to long-term ties with China that will, again, bind them to a regime that they then feel may discount them in a bilateral relationship.

I would also just add, and this is in my submitted remarks, this is a part of the world where sovereignty matters a great deal, as it does in China.

And that leads to one of the reasons that states outside of the Caribbean are reluctant to completely embrace China, and certainly embrace the PLA, for fear of a repetition of what they see as a long-term relationship with the United States that was not positive.

And even in a case such as Venezuela, you're talking about a regime driven by anti-American and anti, what they consider to be imperialist sentiment, rather than a pro-Chinese view. I think that's an important distinction.

You see the same thing to a lesser extent in Cuba, although there are ties in Cuba, according to public press reports, and intelligence, and there has certainly been attempts since Fidel Castro passed away to move back to the possibility of stronger ties between Cuba and China.

In the remainder of the Caribbean, you see bits and pieces of PLA interest but it tends to be relatively sporadic. And those arms sales that you're talking about are more to build trust than to have any sort of military effect.

And that simply comes down to the fact that the islands of the Caribbean are basically using only police activities. And there is no compelling reason for something beyond that.

That doesn't mean police ties don't build into other ties. But as we talk about arms sales, we generally are talking about something more substantial than what we've seen in this region.

I would also say, the other thing that's important is, the role of international banking in the Caribbean where we've seen a great deal of Chinese interest. And we've seen a willingness on the part of these regimes, often without a great deal of transparency, to potentially embrace those feelers that they receive from Beijing.

VICE CHAIRMAN BARTHOLOMEW: Mr. Nantulya.

MR. NANTULYA: Thank you, Vice Chairman Bartholomew. It's a fascinating and very confusing and very gray area topic. This, the Chinese private military companies. It's evolving.

I don't think the Chinese have a clear idea about where they are going about use. I think it's really, this is one of those moving targets.

Yes, they have a law. They have this national security law that allows them to deploy overseas into, you know, the PLA units overseas. They had 300,000 PLA units demobilized.

You know what to do with them. They could easily feed them to the domestic dynamic. And there have been problems with veterans on the ground.

But I think we can look at it from a five-point framework. The first is, in some situations where we've seen evacuations, so for instance, Nuba Mountains, South Sudan, these were highly trained demobilized units that were able to evacuate Chinese in situations of distress.

So I think that's really the first category. That's the first order of things. And this is what the Chinese government would really like to see happen.

The problem is that on the ground the situation can become extremely messy very, very quickly. And it doesn't always play out in the way that it played out in South Sudan and the Nuba Mountains. I think they also did an evacuation in Darfur.

So that brings us to the second layer. So with the ex-PAP, with the ex-PAP and ex-PLA there's a level of control. It doesn't always work out that way.

Then you have the companies. Like the Frontier Services Group and Deva Security and so they get short-, medium-term to long-term contracts, deployed in places like Ghana, Nigeria and other places with Belt and Road companies.

The problem is that they cannot, even under Chinese law, they cannot bear arms. But they do.

So what China has been doing, it's a very, very tricky situation. So we've seen all kinds of permutations on the ground.

In places like Zimbabwe, these companies or these contractors have tried to form like, local Chinese neighborhood watch type situations. Really gray area, really, really weird. But it's done

In other situations, they have tried to work with local partners in the private sector to form private security companies, and then they'll operate within that framework. Which again, is also very tricky from a legal standpoint.

In other situations, which this is basically the fourth level, we're starting to see, and we've seen this in South Africa, where the Chinese communities in those countries get together. And for purposes of safety, security and so on, will form sort of associations with security, with a security element to it. But again, it's very, very tricky from a legal standpoint.

And then at the fifth level, at the fifth level is basically direct, direct operations that are done by the Frontier Services Group. So for instance, they've got an office in Nairobi, they've got assets that they protect in places like Somaliland and Somalia as well.

So I think these are the five levels. I think it's a work in progress. China has a very, very, very robust legal assistance program in place for Africa. It's been around since 2005, 2006.

I mean, over 40,000 lawyers, paralegals. They've got a lot of frameworks -- the Chinese law society, there's a training, an executive training program within the Ministry of Commerce - that do legal training to harmonize African law with Chinese law.

At the moment it's dispute resolution and investments. But we need to look at that and see whether these, this machinery that China has developed will be used to push for legislation and laws that create a legal framework for the operation of Chinese private military companies.

So I think this is something that the Commission needs to look at. Because China does have the legal assistance machinery in place to do that.

VICE CHAIRMAN BARTHOLOMEW: And, sorry, just forbearance of my colleagues, when you say they're doing this legal assistance training, it's not as though China has a rule of law itself.

MR. NANTULYA: Correct.

VICE CHAIRMAN BARTHOLOMEW: So, what kind of norms and legal interpretation are they training different African lawyers in?

MR. NANTULYA: Yes. So, for the moment it's really been on two things. It's been on investments -- or, it's been on three things. It's been on investment, it's been on property law, because the Chinese are investing heavily and some of that investment gets into the area of property rights, things like compensation.

So in Kenya, doing the building of the standard-gauge railway, there were issues around that. There were issues around community compensation.

There are places in Africa where land is owned by the community and cannot be privately owned and that sort of thing. So that's the second, that's the second arena.

The third arena is in dispute resolution. You know, under the Belt and Road as well that has been beefed up.

So these have been the three areas. And it's legal assistance. I use that for want of a better word, but it's really harmonization of law and harmonization of jurisprudence. That's really what it is on the continent.

VICE CHAIRMAN BARTHOLOMEW: Concerns. Thank you.

CHAIR FIEDLER: Thank you. Commissioner Kamphausen please.

COMMISSIONER KAMPHAUSEN: Thank you. Mr. Nantulya, thanks so much for your, the level of detail, specificity and nuance in your testimony. It really reminds me of when I was a military attaché in Beijing and had a number of interactions on topics, some of which you've touched on today.

The first South African defense attaché deployed to Beijing when I was there and learned a lot about China's historic engagement from him. And then my principal interlocutor in the Ministry of National Defense, early part of his career, I had spent a lot of time in Tanzania.

And so, your testimony really brought back those memories and I appreciate the specificity and nuance of it. But I don't have a question for you.

(Laughter.)

COMMISSIONER KAMPHAUSEN: Mr. Poling, we typically start our thinking about the South China Sea with 2013, maybe late 2012. I argue, and have argued, that it really begins in Hanoi in July 2010 when Secretary Clinton annunciated the American principles for management of the South China Sea. And I will get back to that in a second.

But I think the Chinese went to school and did it. The PLA did a strategic estimate of the situation and judged that the kinds of actions that they later undertook would be those that the United States would not defend with use of force. And we made public statements to that effect along the way as you well know.

We're left with this circumstance now, and you said our policy is failing, if not failed yet. You know you followed this more than probably almost any other human over the last six years and yet I find myself left wanting with your principle policy recommendation that the United States should reinvigorate its diplomacy on this issue.

Earlier today we heard testimony that perhaps the U.S. should reconsider its two negatives. Our policy of two negatives where we're against, we don't recognize, we don't take a position and we're against the use of force.

The argument earlier today was that we ought to decide as a nation what our policy is and then we can proceed on a more proactive base thereafter.

I'd invite your comment. You've thought about this I'm sure. Where do you come out on this issue and related points?

MR. POLING: I think that we have failed over successive administrations to adequately state what our policy is. I agree with that.

I don't however think that we will gain much by trying to decide who gets to own Northeast Cay and who gets to have Southwest Cay.

We should stand on the principle that international law is international law, and China's claims are illegal because they are made outside of that framework. If the other claimants want to bicker over rocks and reefs within that framework, so be it.

We don't particularly care that the Japanese and the Koreans continue to bicker over Takeshima and Dokdo, as long as they don't come to blows over it, and as long as it remains within the framework of the international system.

So our problem with the South China Sea is not the disputes over territory. That's not of vital U.S. national interest. The maritime disputes that surround it, that of course touch upon the territorial disputes, but can be separated from it.

And so our goal should be to help push the region toward a long-term management regime for the disputes so that they can freeze the disputes over the Spratlys and the Paracels for the next hundred years for all we care.

The same with every other territorial dispute in Asia has been frozen for the last century. But that fisheries, seabed resources, freedom of navigation in the air and the sea, that those things are not impeded.

And that we don't have to worry about our ally in the Philippines getting kicked around over these rocks and reefs. That's been our policy, frankly, since at least 1946. And really since the 1920s.

I mean, our position was always that we weren't going to pick whether or not the French or the Chinese were making the sillier claim to the Spratlys. And I don't think there is a compelling reason to change that now.

CHAIR FIEDLER: Do we have any other questions from Commissioners? (Off microphone comments.)

CHAIR FIEDLER: Oh, yes, that's right, second round. I'm sorry, can't count.

CHAIRMAN CLEVELAND: I'd like to build on that and ask you, Mr. Poling, about Cambodia. And it seems to me it's a lost cause in terms of the Hun Sen government's relationship with Beijing.

I'm curious how you would characterize what U.S. interests are in attempting to correct, change, reverse, alter the game on the ground in terms of either the port or the airfield. What would you argue our interests are?

I'm eager to hear because I'd like to make that case, but.

MR. POLING: At this point, I tend to agree with you. I think that our interests at this point are limited to dissuading the Cambodians from allowing the forward deployment of Chinese military aircraft at Dara Sakor Air Base.

That is the thing that will threaten our larger interest. Threaten the Strait of Malacca, threaten our ally in Thailand and our partner in Singapore.

Short of that, I don't know that we want to bend over backwards in appeasement of the Hun Sen regime. And we invested an enormous amount of effort, an enormous amount of money -- and by "we" I mean the international community, not just the United States -- and that experiment has failed. Cambodia is in free fall. It is an authoritarian kleptocracy. We cannot compete with the Chinese in purchasing influence in Phnom Penh.

What we can do is from afar, as we usually do, try to support pro-democratic voices and

hope that at some point we see a change in governance in Cambodia.

But we cannot debase ourselves because we worry about a Chinese naval presence at Ream Naval Base. It undermines our larger effort in the region to support good governance and rule of law.

CHAIRMAN CLEVELAND: I might suggest it's about to become intergenerational kleptocracy. How do you think the, you mentioned Thailand, how do you think the other countries in the region view what's happening in Cambodia?

Because I don't know if you heard earlier, I view it as the full colonization of Cambodia. I think the Chinese interests have been very clear for some time and what will remain of Cambodia is in real doubt.

So that's not just a question for us, it's for ASEAN and our partners and allies in the region. How are they viewing the challenge of, as you described it, jets leaving from Cambodian airfields and threatening the Straits?

MR. POLING: I preface with everybody is going to keep quiet because you can't criticize a fellow ASEAN member too loudly. But obviously the Vietnamese and the Thais are worried about the idea of a Chinese military footprint on their doorstep, and are, I'm sure, quietly encourage the Cambodians to find some way out of whatever deal it is that they've already signed.

And again, I think that we can differentiate here. Some logistical access to Ream is something that they can hold their noses and live with.

J-11s flying out of Dara Sakor, that's a whole different matter. You've seen a reinvestment from the Vietnamese in their diplomacy toward Cambodia, there is only so much they can do.

It is certainly serving as a lesson for the rest of the region. And you watch, even Laos, the way that they negotiated hard, and for years, over the Kunming-to-Vientiane Railway, recognizing that they don't exactly want to be a client state.

I will caution that I think the reason that Cambodia has been so effectively captured by the Chinese is because the circle of rent-seekers they had to capture was so small.

MR. NANTULYA: Yes. Absolutely.

MR. POLING: And it does not reflect an actual capture of kind the hearts and minds of the country right now. Now, whether or not that leads to, in the next generation, certainly not if that's kind of a net, but we could certainly see this come back to bite the CPP in a post- Hun Sen era.

The one thing that we do have to accept though is that long as Cambodia is a Chinese client, and it is a Chinese client, then ASEAN's ability to be the regional center that we hoped for, that ASEAN saw itself as two decades ago, that that cannot happen on any sensitive issue, and especially the South China Sea.

Which means that if you want an effective negotiated mechanism in the South China Sea has to happen outside of the ASEAN context. Anything else is a pipe dream.

CHAIRMAN CLEVELAND: Thank you. And,

Mr. Nantulya, one final question for you. Has anybody done a map, as it were, of the kind of ideological party state relationships and training on the content?

Understanding that we have very, very diverse countries, has anybody sort of done a, just a, starting in 1960 there was this relationship with the ANC and we saw cadres going to China. Has anybody done that kind of historical mapping?

MR. NANTULYA: Thank you, Chairman Cleveland. To my knowledge, no. no.

So we do have bits and pieces and analysis that has come out over the years on this issue. But we don't have anything comprehensive as yet.

And I think it's necessary. It's necessary because this is really the foundation. Now, there are not that many of them but this is really the foundation.

And see, the thing is, these countries wield tremendous clout at the level of the African Union, and even at the United Nations, where China has really increased its engagement with African support in shaping the way UN agencies work at that level. So these countries have been very, very key.

So it's, I agree with you, it's a critical area. And it also shows a level of flexibility. Namely, that China also has very tight relationships with countries with which it doesn't have these ideological ties. But the foundation comes from those countries that it worked with at the moment.

And so I really think that it's an area that we need to look at quite systematically going forward.

CHAIRMAN CLEVELAND: Thank you.

MR. NANTULYA: Yes.

CHAIR FIEDLER: Thank you. And that is a, your last statement is a segue to our next hearing. That I would remind folks that, calling it a China model, Beijing's promotion of alternative global norms and standards. Which will happen on March 13th.

And I would like to thank everyone and the Staff for this hearing and the preparation and the hard work you've all done, and your testimony today. And with that we will adjourn for the day. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 3:43 p.m.)

Response to QFR from Chad Sbragia, Deputy Assistant Secretary of Defense for China, U.S. Department of Defense

Question:

Please describe China's operational role in UN peacekeeping operations. What are the PLA's missions, the extent of its collaboration with other nations and their leadership, and host nation support for the PLA during these operations?

Answer:

The PLA participates in five large-scale United Nations peacekeeping operations (UNPKO). It provides security only in the two largest: The UN Mission in South Sudan (UNMISS, 1031 personnel) and the UN Multi-dimensional Integrated Stabilization Mission in Mali (MINUSMA, 413 personnel). The PLA's presence in other missions is specialized, usually focusing on medical, engineering, or transportation roles.

The 6th peacekeeping infantry battalion deployed to UNMISS (Juba, South Sudan) in November 2019 for a 12-month tour. The battalion monitors the permanent ceasefire between the South Sudanese government and rebel forces. It also guards UN and refugee camps, patrols in weapons exclusion zones, and conducts local armed escort activities. China contributes 1,031 troops (including the 700-strong peacekeeping infantry battalion), 22 staff officers, and 19 police officers to UNMISS.

In May 2019, China deployed 413 troops as part of the 7th PLA peacekeeping force to MINUSMA, the UN's deadliest ongoing peace operation. The PLA troops are divided into a guard detachment, an engineer detachment, and an airborne medical evacuation unit. The PLA conducts engineering support tasks such as establishing defense structures for the mission's Sector East in the Menaka region.

With the exception of UN-led training and exercises, PLA peacekeepers generally do not collaborate extensively with their foreign peacekeeping counterparts. We lack information about host nation support to PLA peacekeepers at the unclassified level.

Summary of PLA participation in UNPKO Missions:

- UNMISS South Sudan
 - o PLA Role: monitor ceasefire and guard camps
 - o PLA Force Size: 1,031
- MINUSMA Mali
 - o PLA Role: guard camps, provide engineering and medical support
 - o PLA Force Size: 413
 - o Partner Collaboration: medical expertise
- UNIFIL Lebanon
 - o PLA Role: conduct mineclearing; provide medical support
 - o PLA Force Size: 410
 - o Partner Collaboration: mineclearing with Cambodia (not combined); medical exercise
- UNAMID Darfur, Sudan
 - o PLA Role: provide transportation (helicopter) and engineering support
 - o PLA Force Size: 365
 - o Partner Collaboration: transportation coordination
- MONURSO Western Sahara
 - o PLA Role: provide engineering support
 - o PLA Force Size: 218
 - o Partner Collaboration: Nepalese peacekeeping provide security; defensive drills

Response to QFR from Isaac Kardon, Assistant Professor, Strategic and Operational Research Department, U.S. Naval War College

1. Please describe Chinese state-owned enterprises' investments in U.S. ports; the rationale behind choosing those particular ports; and how U.S. policymakers can assess whether Chinese investments in such ports pose security risks to the United States.

Chinese state-owned enterprises hold ownership stakes in terminals at five U.S. ports. COSCO has established joint ventures at Long Beach, Los Angeles, and Seattle; CMPort holds a minority stake in a French firm's terminals at Miami and Houston. Neither PRC firm wholly owns or directly operates an American terminal. In contrast with the "strategic strongpoint" approach to developing dual-use port facilities in the Indian Ocean, Chinese port investment in the U.S. appears commercially-driven. Augmented U.S. restrictions on foreign investment in critical infrastructure diminish plausible risks posed by such investment. In particular, robust enforcement of the new Foreign Investment Risk Review Modernization Act (FIRRMA) by the Committee on Foreign Investment in the United States (CFIUS) will further diminish the control a Chinese firm can have over a U.S. port asset, and thus limit such investments from posing acute national security risks.

COSCO was the earliest Chinese SOE player in the U.S. maritime sector, beginning cargo shipments shortly after normalization in 1979 and gradually establishing a shipping presence at west coast ports. As the scale of U.S.-China trade increased in the 1990s, COSCO sought a commercial foothold in its biggest market, in part by establishing its own terminal. In November 1996, the City of Long Beach and COSCO signed a lease for the abandoned Long Beach Naval Station in order to develop and operate it as a cargo port. After public objections, including from Congress, the City of Long Beach canceled the lease in April 1997. A subsequent CFIUS review of the deal did not find national security risks, but further Congressional action ensured COSCO would not be eligible to use any closed U.S. military facilities. COSCO subsequently established joint ventures to operate at three terminals on the west coast:

COSCO at Long Beach, Pier J (Pacific Container Terminal). By 2001, COSCO had moved on to form a joint venture with Seattle-based Stevedoring Services America (SSA). They took over a lease vacated by the Danish shipping and logistics firm, Maersk. Their joint venture, Pacific Maritime Services LLC, is a private, Delaware-registered corporation that operates the Pacific Container Terminal at Pier J in Long Beach. COSCO is the majority shareholder (51%, through its New Jersey-based subsidiary COSCO Terminals America, Inc.), but decisions by the corporate board require an "affirmative vote of at least 70% of the ownership shares of the members," meaning COSCO does not have an effective majority. SSA operates the terminal itself, with COSCO providing cargo and

¹ The *Liu Lin Hai* cargo ship from COSCO Shanghai was the first PRC merchant ship to arrive in a US port (Seattle) after normalization. See Li Xing, "COSCO melds pieces of US-China success," *China Daily*, 14 January 2011, http://usa.chinadaily.com.cn/business/2011-01/14/content_11866137.htm

² According to a CRS report on the episode, the CFIUS review found "no credible evidence' that (1) COSCO has reasons other than commercial ones for operating at U.S. ports; (2) COSCO's planned expansion in Long Beach could threaten U.S. national security; nor (3) COSCO is engaged in espionage, smuggling, or other crimes in the United States." See Shirley Kan, "Long Beach: Proposed Lease by China Ocean Shipping Co. (COSCO) at Former Naval Base," CRS Report for Congress, no. 97-476 F, 11 August 1999, pp. 5-6

shipping services.³ COSCO's huge volumes of cargo and aggressively low pricing tend to distinguish it from rival firms, and make it a valued tenant at Long Beach.⁴

COSCO at Los Angeles, West Basin Container Terminal. Also in 2001, China Shipping Group (which merged with COSCO in 2016)⁵ entered a joint venture with the Taiwanese shipping and logistics firm, Yang Ming. China Shipping/COSCO owns 40% of the joint venture to operate the West Basin Container Terminal (Yang Ming owns 40% and Ports America later bought the other 20%).⁶ China Shipping operates three of the fourteen berths at the terminal; the rest are operated by Yang Ming, with stevedoring services provided by Ports America.⁷ Xi Jinping visited a China Shipping berth (number 100) at the terminal in February 2012 (when he was PRC Vice President), accompanied by California Governor Jerry Brown and Los Angles Mayor Antonio Villaraigosa. On site, Xi praised the terminal's role in facilitating huge volumes of Sino-U.S. trade, lauded the contributions of Chinese firms to U.S. employment and tax revenues, and called attention to the terminal's use of clean energy.⁸ At the time, an expansion of the terminal was entering its final stages after encountering lawsuits over its environmental impact and practices. The terminal was built, but controversy persists today with new mitigation measures demanded due to the Chinese firm's "languishing compliance" with emissions regulations.⁹

COSCO at Seattle, Terminal 30. In another joint venture, two COSCO subsidiaries hold a collective 33.33% stake of Terminal 30 at the Port of Seattle. As in Long Beach, SSA is the operator, and COSCO's role as a minority shareholder is to drive cargo traffic through the terminal. Officials at the Northwest Seaport Alliance (the port authority for Seattle and Tacoma ports) describe COSCO's massive cargo volumes in glowing terms, viewing the firm as a reliable and influential client. 11

China Merchants Port arrived in the U.S. market considerably later, in 2013 acquiring a 49% of the public shares of Terminal Link, the terminal operating subsidiary of the French firm CMA CGM. ¹² According to industry professionals, CMA CGM was cash-poor, and cargo-rich, while CMPort was

³ Federal Maritime Commission, "Pacific Maritime Services Cooperative Working Agreement," FMC Agreement, No. 201122-002, 26 November 2012, https://www2.fmc.gov/FMC.Agreements.Web/Public/Document/30220. Although CMA CGM, through its terminal operating subsidiary Terminal Link California LLC, bought an undisclosed stake in this joint venture in 2012, Drewry reports that COSCO's ownership stake remains 51% (See Neil Davidson et al., "Global Container Terminal Operators Annual Review and Forecast 2019," Drewry Maritime Research, 2019, p. 111.

⁴ Author interviews with Port of Long Beach management, March 2020.

⁵ Lee Hong Liang, "Cosco Shipping – a guide to the merger of Cosco and China Shipping," *Seatrade Maritime News*, 17 January 2017, https://www.seatrade-maritime.com/asia/cosco-shipping-guide-merger-cosco-and-china-shipping
⁶ IHS Markit, "Los Angeles," *Seaweb Ports*, accessed 20 March 2020
⁷ Ibid

⁸ "Xi Jinping Visits China Shipping Los Angeles [习近平参观考察中海运洛杉矶码头]," *Embassy of the PRC in the United States*, 17 February 2012, http://www.china-embassy.org/chn/zt/xijinpingfangmei/t906022.htm.

⁹ The Port of Los Angeles released an environmental impact report about the Chinese berths at WBCT in September 2019, which covers the whole sequence of events in detail. See Port of Los Angeles Environmental Management, "Final Supplemental Environmental Impact Report for the Berths 97-109 (China Shipping) Container Terminal Project," Executive Director's Report to the Board of Harbor Commissioners, 26 September 2019, https://kentico.portoflosangeles.org/getmedia/4abf48f1-e449-4a2d-bdce-7cc704dfcc6c/Environmental China-Shipping-FSEIR Board-Report-FINAL

¹⁰ IHS Markit, "Seattle," Seaweb Ports, accessed 20 March 2020; Drewry, "Global Terminal Operators," p. 112

¹¹ Author interviews with Northwest Seaport Alliance officials, February 2020.

¹² China Merchants Holdings (International) Company Ltd., "Discloseable Transaction in Relation to the Acquisition of 49% Equity Interest in Terminal Link SAS," *Hong Kong Exchanges and Clearing Limited*, 25 January 2013, https://www1.hkexnews.hk/listedco/listconews/sehk/2013/0125/ltn20130125584.pdf

the reverse and looking to diversify away from squeezed margins increasing labor costs at its Chinese terminals. CMPort in 2013 had substantial cash holdings and cash flow from its port operations in China. CMPort was thus able to offer CMA CGM much-needed capital, as well as favorable financing for shipbuilding, distinguishing its bid from that of a Japanese consortium also interested in acquiring stakes in Terminal Link. CMPort sought access to global markets and made a portfolio investment in a firm that held stakes (mostly minority) in 15 terminals scattered around Europe, Africa, North America, and Asia. This same commercial logic drove an additional CMPort investment, in the form of a \$1 billion loan to CMA CGM that secured 49% ownership of Terminal Link stakes in an additional 10 ports across the globe in December 2019.

Under the terms of the share acquisition, Terminal Link remains in charge of management and operations, and appoints four of the seven board members. With a minority position on the board and no CMPort managers involved in the terminals, the firm is an equity investor – an associate, not an operating partner – at the two U.S. ports in the Terminal Link portfolio. One industry executive described the Chinese role in Terminal Link as being contentious at first as CMPort sought more say in corporate governance, but that the firm's presence is now limited to "a couple of China Merchants marketing executives in Marseille" (the Terminal Link headquarters). The terminals are:

CMPort at Houston (Bayport). The Bayport terminal is a joint venture between Terminal Link Texas (51%) and Ports America (49%), meaning the CMPort equity stake in the entity is 25%. The facility handles tankers and a large portion of the containerized cargo in the Gulf of Mexico.²⁰

CMPort at Miami (South Florida Container Terminal). This terminal is a joint venture between Terminal Link (51%) and A.P. Moller-Maersk Terminals (49%), again giving CMPort a roughly 25% equity stake in the revenues from the terminal. As in Houston, this is a modern, upgraded facility with access to major U.S. and Latin American markets.

The commercial motivations underlying these two firms' entry into the U.S. market are not difficult to grasp. The potential security externalities from the presence of Chinese SOEs at critical U.S. infrastructure, however, are worth considering – and, indeed, have been considered by senior U.S. policymakers through the CFIUS mechanism. While there is not public reporting on each deal reviewed by this interagency body, parties involved with submitting CFIUS briefs for COSCO and CMPort confirm that all of their transactions concerning U.S. port terminals have been reviewed

¹³ Author interview with CMPort manager, June 2019.

¹⁴ Standard and Poor's, "China Merchants Holdings (International) Co. Ltd. – Summary," Reuters, 18 January 2013, https://www.reuters.com/article/idUSWLA0064O20130118

¹⁵ Author interview with CMA CGM executive, February 2020.

¹⁶ In pursuing this position, CMPort management saw "exposure to terminals in emerging markets" and a "potential pipeline of new projects" as a "driver for its volume growth and financial returns." See China Merchants, "Discloseable Transaction in Relation to the Acquisition of 49% Equity Interest in Terminal Link SAS," p. 5-6.

¹⁷ China Merchants Port Holdings Company Limited, "Discloseable Transaction in Relation to (1) The Subscription of Mandatory Convertible Bonds Issued by Terminal Link & (2) The Loan to be Granted to Terminal Link to Finance the Proposed Acquisition," *Hong Kong Exchanges and Clearing Limited*, 25 November 2019, https://www1.hkexnews.hk/listedco/listconews/sehk/2019/1222/2019122200019.pdf

¹⁸ Ibid. p. 5

¹⁹ Author interview with CMA CGM executive, February 2020.

²⁰ Two thirds of regional container traffic goes through two terminals at the port of Houston, and Bayport is the larger of the two. See Port of Houston, "Container Terminals," https://porthouston.com/container-terminals/

and conditions have been placed on the terms of their ownership. ²¹ The CMPort disclosure on its 2013 share acquisition noted that CFIUS approval was still in question, but that contingency agreements had been reached to remove the Houston and Miami terminals from the agreement if CFIUS were not satisfied by the closing date. ²²

Since its failed 1996 bid to lease the former navy facility at Long Beach, COSCO has been chastened in its approach to the U.S. market.²³ Beginning in 2017, COSCO sought to acquire the Hong Kong shipping firm Overseas Orient (International) Lines, whose assets included a wholly owned terminal at Long Beach.²⁴ They submitted the transaction for anti-monopoly review in China and the U.S., and also filed with CFIUS. In consultation with CFIUS, COSCO was conciliatory and offered to place the Long Beach Container Terminal (Pier E) at the Port of Long Beach into a U.S. trust pending final sale.²⁵ This facility was a rare prize – fully automated, with extraordinary efficiency in utilization, zero emissions, and 100% owned by a foreign firm on a long-term lease.²⁶ COSCO completed the sale in 2019 to an Australian firm, Macquarie, for \$1.78 billion, exceeding the expected sale price of \$1.5 billion.²⁷

Moving forward, any further Chinese interest in U.S. terminals will face an even more stringent regulatory environment. The CFIUS mechanism has been strengthened considerably with new FIRRMA regulations entering effect this year. ²⁸ They bring about a significant expansion of CFIUS jurisdiction over real estate transactions, detailed in Section 802. In addition to covering all real estate transactions that involve property in proximity to military facilities, the new regulations cover real estate transactions at any of the top 25 ports in the U.S. and those designated as "commercial strategic seaports within the National Port Readiness Network" (as defined by the Department of Transportation). ²⁹ The regulations also establish a lower threshold for CFIUS scrutiny when a foreign entity is judged to "control" a U.S. business. ³⁰ According to Proskauer Rose LLP, a U.S. law firm, special attention must be paid in structuring joint ventures such that foreign partners do not

4

²¹ Author interview with CMA CGM executive, February 2020. Among the issues at stake in the CMPort purchase of Terminal Link shares was reported involvement in Iranian industries under U.S. sanction.

²² China Merchants Port, "Discloseable Transaction in Relation to the Acquisition of 49% Equity Interest in Terminal Link SAS," p. 2

²³ The ill-fated 2006 Dubai Ports World bid to acquire terminal operations at six American ports provided yet another cautionary tale. See David E. Sanger, "Under Pressure, Dubai Company Drops Port Deal," *New York Times*, 10 March 2006, https://www.nytimes.com/2006/03/10/politics/under-pressure-dubai-company-drops-port-deal.html

²⁴ Costas Paris and Joanne Chiu, "China's Cosco to Buy Shipping Rival Orient Overseas for \$6.3 Billion," *Wall Street Journal*, 9 July 2017, https://www.wsj.com/articles/chinas-cosco-takes-majority-stake-in-orient-overseas-1499608780?mod=article-inline

²⁵ Costas Paris, "To Ease U.S. Concerns, Chinese Shipper Cosco Offers to Put California Terminal in a Trust," *Wall Street Jorunal*, 20 June 2018, https://www.wsj.com/articles/cosco-offers-to-put-long-beach-terminal-into-u-s-run-trust-1529519079

²⁶ Author interview with Port of Long Beach executive, March 2020.

²⁷ Lee Hong Liang, "Macquarie buys Cosco-controlled OOIL Long Beach terminal for \$1.78bn," *Seatrade Maritime News*, 30 April 2019, https://www.seatrade-maritime.com/americas/macquarie-buys-cosco-controlled-ooil-long-beach-terminal-178bn

²⁸ Department of the Treasury, Office of Investment Security, "31 CFR Parts 800 and 801, Provisions Pertaining to Certain Investments in the United States by Foreign Persons," *Federal Register*, Vol. 85, No. 12, 17 January 2020, https://home.treasury.gov/system/files/206/Part-800-Final-Rule-Jan-17-2020.pdf, pp. 3112-3156; Department of the Treasury, Office of Investment Security, "31 CFR Part 802, Provisions Pertaining to Certain Transactions by Foreign Persons Involving Real Estate in the United States," *Federal Register*, Vol. 85, No. 12, 17 January 2020, https://home.treasury.gov/system/files/206/Part-802-Final-Rule-Jan-17-2020.pdf, pp. 3158-3188 ²⁹ 31 CFR 802, 210 (4)-(5)

³⁰ 31 CFR 802, 208

receive "control" rights that will trigger CFIUS review.³¹ Given these expanded authorities and the increased political sensitivity to Chinese investment in the United States, it is highly unlikely that a Chinese firm will win a concession to operate a U.S. port in the foreseeable future, thus mitigating most (if not all) of the risks analyzed earlier in this testimony.

³¹ The note that "customary veto or approval rights granted in a typical joint venture agreement would not, standing alone, confer control to a foreign investor." See "Final CFIUS Rules Issued: What it Means for Real Estate Transactions and Investors," *Proskauer Rose LLP*, 5 February 2020, https://www.jdsupra.com/legalnews/final-cfius-rules-issued-what-it-means-55705/