"Building a World Class Expeditionary Force" Testimony Before the US-China Economic And Security Review Commission Hearing on China as a World Class Military Power June 20, 2019 By Christopher D. Yung

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#### Introduction

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

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

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

#### **China's Strategic objectives**

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

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

<sup>&</sup>lt;sup>1</sup> Daniel Hartnett, "the 'New Historic Missions': Reflections on Hu Jintao's Military Legacy" in Kamphausen, Lai & Tanner, eds., *Assessing the People's Liberation Army in the Hu Jintao Era*, US Army War College, Carlisle, PA, April 2014, pp. 40-55.

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

### What is Expeditionary?

A number of the US military services have offered definitions of expeditionary operations. The United States Army offers the following definition in its publication Army Doctrine Publication 3-0 Unified Land Operations. It defines expeditionary capabilities as "the ability to promptly deploy combined arms forces world-wide into any area of operation and conduct operations on arrival. Expeditionary operations require the ability to deploy quickly with little notice, rapidly shape conditions in the operational area, and operate immediately on arrival, exploiting success and consolidating tactical and operational gains. Expeditionary capabilities are more than physical, they begin with a mindset that pervades the force."<sup>2</sup>

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

<sup>&</sup>lt;sup>2</sup> U.S. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*, November 2016, p. 1-10.

<sup>&</sup>lt;sup>3</sup> U.S. Marine Corps Doctrinal Publication (MCDP) 3, *Expeditionary Operations*, 16 April 1998, pp. 31-2.

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

### What operational missions?

CCP strategic objectives tend to balance off of one another; with internal security and regime survival serving as the paramount objective and other objectives (important as they are) serving as secondary or tertiary objectives. This means that in addition to internal security, counter-terrorism and national stability missions within the PRC high up on the list of operational priorities will be a Taiwan mission, but that Taiwan mission must be balanced with an almost equally important objective of continued economic growth and international stability. The PLA has undoubtedly been tasked with planning for and executing military missions designed to keep Taiwan within the fold—preventing Taiwan from declaring de jure independence, or even asserting greater international autonomy for itself, but its mandate extends only so far. PLA force structure development with regard to its Taiwan mission appears to be to gradually develop the capability to fully assault Taiwan from the sea for the purposes of exerting maximum political pressure on the island.<sup>4</sup> As time elapses however the PLA will eventually develop a "World Class Expeditionary" capability to fully address, militarily, its Taiwan problem. Table One lists the CCP's "national sovereignty and territorial strategic objectives" and the PLA's "out of area strategic objectives" and the associated notional operational missions. Table Two lists likely expeditionary missions associated with the larger operational issues the PLA will have to be able to plan for and execute in relation to larger strategic objectives listed in Table One.

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

<sup>&</sup>lt;sup>4</sup> Both Bonnie Glaser and Tai Ming Cheung argue that the PLA had a hand in developing this strategy and policy toward Taiwan. Cheung's analysis is cited in Glaser's excellent chapter on the PLA role in national security decision-making. See Bonnie Glaser, "The PLA Role in China's Taiwan Policymaking" in Saunders and Scobell, eds., PLA Influence on China's National Security Decision Making, Stanford University Press, Stanford, CA, 2015, p. 168.

Indian Ocean wide SLOC protection mission or a maritime superiority mission somewhere in the future, but its current and near term emphasis is probably protecting those immediate interests associated with Chinese citizens living and working abroad, helping to protect and respond to threats to overseas Chinese businesses, the enormous Chinese interests associated with the BRI, and fostering a collective security response through the SCO.

military cooperation with Taiwan; te political integration; deter & coerce
te political integration: deter & coerce
; increase coercive pressure; isolate
; seize offshore islands; full-scale invasion
artner Capacity; Private Contractor
y support; Law Enforcement or Local
nt Response/Investigation; Coalition
se thru SCO; Joint Patrolling; Advise &
n implementation of internal security
res; Medical response; HA/DR response;
Counter-terrorism/COIN support; PLA
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Search & Seizure; Law Enforcement or
ncident Response/Investigation; PLA Direct
versus transnational criminals, pirates
of force; Coalition response thru SCO; joint
ing; PLA Direct Action vs.
sts/insurgents; PLA deterrence presence;
rt to HN authorities missions; UN
ceeping operations; Possibly ARG-MEU
ions
maritime superiority missions; area air
issile defense; Anti-Surface Warfare
/); extra-regional ASW; extra-regional
operations in a contested environment
; show of force; VBSS; MIO; area wide

Search & Rescue; limited carrier strike
operations; coordinated surface/sub-surface
operations

## Table 1. CCP Out of Area Strategic Objectives and Notional Operational Missions

In addition to strategic objectives related to operational missions associated with Taiwan, Table One lists the CCP's out of area strategic objectives and the associated notional operational missions. A cursory glance at this table reveals that there are definitely potential expeditionary missions associated with these broad operational missions. Table Three maps the potential "Far Seas" expeditionary missions to the identified larger operational missions of the PLA listed in Table One.

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

# Table 2. Notional Sovereignty & Territoriality missions and Associated Expeditionary Missions

Larger PLA Out of Area operational missions	Associated Notional Expeditionary Missions
Private contractor support; law enforcement	C2 platform; afloat stationing of personnel;
incident response/investigation; advise & assist	Amphibious and Air Lift; transportation of person
internal security measures; coalition response	and equipment
thru SCO	

HA/DR; NEO; COIN; CT; SOF Direct Action;	Amphibious lift; Air lift; transportation of
hostage rescue	person/equip; C2 platform; mother ship
Build Partner Capacity; joint training	Exercise platforms
MIO; VBSS; Counter-piracy, trafficking	C2 platform; mother ship; air surveillance &
	airborne early warning
Show of force; coalition response to major	Amphibious task force; personnel and equipment
terrorist event; ARG-MEU operations	carrier; C2 platform
Limited littoral operations in contested	Amphibious lift; C2 platform; regional air and
environment	missile defense
Maritime superiority; air superiority; ASW;	Amphibious lift; Amphibious task force; Air
ASUW; JFEO	superiority; carrier operations; Joint Air and Sea
	operations; comprehensive multi-domain
	operations

Table 3. PLA Out of Area Missions and Associated Expeditionary Missions
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# PLA modernization and the evolution of China's expeditionary capability

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

The Chinese also have over the past decade been procuring and have now developed an indigenous hovercraft style landing craft or Type 726 Class landing craft which has a top speed of over 60 knots, can carry a payload of 150 tons, and a 300 nm operational range.<sup>5</sup> A far cry from the Landing Craft Vehicle and Personnel (LCVP) of the Second World War, the Type 726 class landing craft can carry approximately 60 to 70 troops in addition to one Type 96 Main Battle Tank or four armored vehicles.<sup>6</sup> Although the Department of Defense cancelled the much anticipated Advanced Amphibious Assault Vehicle or AAAV, the Chinese have gone ahead and procured a similar vehicle for the PLA Marine Corps.<sup>7</sup>

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

<sup>&</sup>lt;sup>5</sup> Ronald O'Rourke, "China's Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress", August, 2018, p. 47.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>7</sup> Ibid.

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

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

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

<sup>&</sup>lt;sup>8</sup> Ibid, pp. 8-50.

<sup>&</sup>lt;sup>9</sup> "The AN-225 Transport Aircraft" GlobalSecurity.org as accessed in <u>https://www.globalsecurity.org/military/world/china/an-225-htm</u>

<sup>&</sup>lt;sup>10</sup> Ankit Panda, "China's Air Force Declares Shaanxi Y-9 Transport Aircraft Operational" in *The Diplomat*, December 2017.

<sup>&</sup>lt;sup>11</sup> Christina Garofalo and Timothy Heath, *The Chinese Air Force's First Steps Toward an Expeditionary Air Force*, RAND, 2017, pp. 12-33.

<sup>&</sup>lt;sup>12</sup> Dennis Blasko, "The Biggest Loser in Chinese Military Reform: The Army" in Saunders, Ding, Scobell, Yang and Wuthnow, *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University Press, Washington, DC, 2018, pp. 362-8.

<sup>&</sup>lt;sup>13</sup> Ibid, pp. 371-3.

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

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

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

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

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

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

<sup>&</sup>lt;sup>14</sup> Dennis Blasko and Rodrick Lee, "The Chinese Navy's Marine Corps, Part 1", *China Brief*, Jamestown Foundation, February 02, 2019.

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Bernard Cole, *China's Quest for Great Power: Ships, Oil and Foreign Policy*, Naval Institute Press, Annapolis, MD, pp. 51-84.

<sup>&</sup>lt;sup>17</sup> Andrew Erickson and Austin Strange, "No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden", China Maritime Studies Institute, # 10, Naval War College, November 2013, pp. 81-108.

<sup>&</sup>lt;sup>18</sup> Dennis Blasko and Rodrick Lee, "The Chinese Navy's Marine Corps, Part 2: Chain of Command Reform and Evolving Training", *China Brief*, Jamestown Foundation, February 2019.

<sup>&</sup>lt;sup>19</sup> Garofalo and Heath, pp. 12-33.

the close to yearly Shanghai Cooperation Organization exercises. These exercises with Central Asian countries, Russia and China have invariably involved some kind of major terrorist incident or threat to the sovereignty and survival of a partner regime.<sup>20</sup> The PLA has therefore had over a decade and a half to practice expeditionary responses to the kind of major crises possibly associated with its interests in Belt and Road Initiative countries.

Second, the PLA has had a decade of experience conducting counter-piracy operations and has had that long to practice the deployment of both naval and ground forces out of area to address threats to shipping and its SLOCs. A number of assessments have noted that China's real world operations, particularly its anti-piracy operations have led to a number of lessons learned and improvements in PLA expeditionary operations. In particular, Andrew Erickson and Austin Strange ("Learning by Doing") have noted the distinct improvement in PLAN training and "work up" preparation; the collection and fusion of intelligence while deployed and the utilization of intelligence to inform current operations; the specific procedures of the PLAN task force to include procedures on underway replenishment, vertical replenishment, force make up, force protection procedures, leave policy, and food preparation and preservation.<sup>21</sup>

Third, there is every reason to believe that the PLA is now beginning to incorporate these new out of area missions into its training and education regimens. When the author visited the PLA Marine Corps training academy in Guangzhou as part of a Marine Corps War College exchange with the PLA in both 2016 and 2018, he was told by the faculty and the leadership that lessons from these out of area operations are starting to be included in the curriculum so that the upcoming generation of operators can have the benefit of these expeditionary lessons.<sup>22</sup>

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

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

<sup>&</sup>lt;sup>20</sup> Ibid, pp. 13-5; Christopher Yung, "'Politics in Command': The Political Dimensions of Chinese Military Exercises" in Heuser, Heier, and Lasconjarias, *Military Exercises: Political Messaging, Strategic Impact*, NATO Defense College, Forum Paper # 26, 2018, pp. 347-8; Cortez Cooper, "'Controlling the Four Quarters': China Trains, Equips, Deploys a Modern People's Armed Police" in Kamphausen, Lai, and Tanner, eds., *Learning by Doing: the PLA Trains at Home and Abroad,* Strategic Studies Institute and US Army War College, Carlisle, PA, 2012, p. 153.

<sup>&</sup>lt;sup>21</sup> Andrew Erickson and Austin Strange, "No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden", China Maritime Studies Institute, # 10, Naval War College, November 2013, pp. 81-108.

<sup>&</sup>lt;sup>22</sup> U.S. Marine Corps War College exchange with the PLAN Marine Corps Training Academy, Guangzhou, PRC, May 2016 and 2018.

efforts. The Chinese have created and put in place a Peacekeeping training center in Beijing to which PLA units and command elements must attend prior to deploying on any UN Peacekeeping mission.<sup>23</sup>

#### Gaps in China's expeditionary capabilities

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

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

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

<sup>&</sup>lt;sup>23</sup> Michael Kovrig, "With an Influx of Blue Helmets and Cash, China's Role in African Security Grows More Pervasive", *China File*, October 2018.

<sup>&</sup>lt;sup>24</sup> Clarence Robinson, "China's Military Potency Relies on Arms Information Content" in Signal, November 2019.

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

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

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

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

<sup>&</sup>lt;sup>25</sup> O'Rourke, pp. 4-5.

<sup>&</sup>lt;sup>26</sup> Ibid.

continuously supply a sizeable force abroad;<sup>27</sup> and the PLA still does not have a robust maintenance and repair capability network abroad to deal with damaged or destroyed equipment.<sup>28</sup> Related to these points, if the PLA finds itself in a much more severe security environment in which its forces are taking serious casualties, there is no significant casualty care or mortuary service support system upon which the PLA can depend on. <sup>29</sup>

## Core Technologies in support of Expeditionary Force Building Efforts

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

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

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

<sup>&</sup>lt;sup>27</sup> O'Rourke, p. 58.

<sup>&</sup>lt;sup>28</sup> Christopher Yung, "Not An Idea We Have to Shun: Chinese Overseas Basing Requirements for the Twenty First Century", China Strategic Perspectives # 7, Institute for National Strategic Studies, National Defense University, 2014, pp. 11-2, 28-33, and 39-43.

<sup>29</sup> Ibid.

and well-decks designed to reduce likelihood, mitigate the consequences of, and speed the cleanup of, chemical, biological and other non-conventional attacks on an expeditionary force.<sup>30</sup>

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

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

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

<sup>&</sup>lt;sup>30</sup> With the exception of unmanned systems, the remaining technology developments have been on the Amphibious Forces wish list for close to two decades. Two examples are LCU Replacement and Maritime Prepositioned Force (Future).

<sup>&</sup>lt;sup>31</sup> Leigh Ann Luce and Erin Richter, "Handling Logistics in a Reformed PLA: The Long March Toward Joint Logistics" in Saunders, Ding, Scobell, Yang, and Wuthnow, *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University Press, Washington, DC 2018, pp. 267-9.

<sup>&</sup>lt;sup>32</sup> Ibid, pp. 264-7.

developing world; no mean feat. A commercial network which can address all or most of these requirements is a tall order.<sup>33</sup>

### **Potential Congressional Action**

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

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

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

<sup>&</sup>lt;sup>33</sup> Ibid.

<sup>&</sup>lt;sup>34</sup> Christopher Yung, "China's Evolving Naval Force Structure: Beyond Sino-US Rivalry", *China Brief*, Jamestown Foundation, April 2018.

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

#### Conclusion

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

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

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