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中国的陆军：陆基安全威胁和军事改革 2007-2018

China's Army: Land-Based Security Threats
and Military Reform 2007-2018

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中華民國 107 年 5 月

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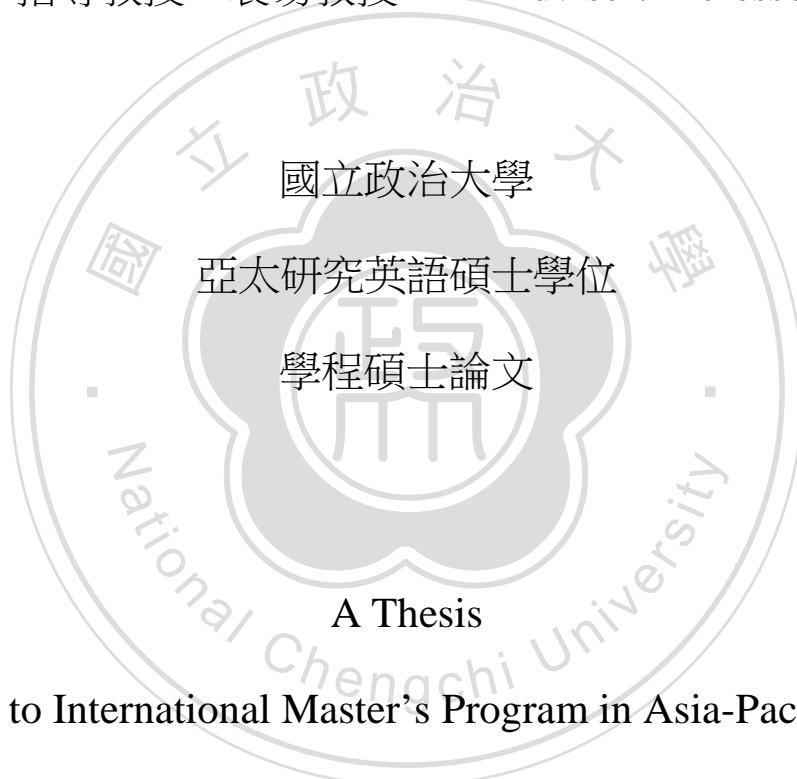
China's Army: Land-Based Security Threats
and Military Reform 2007-2018

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Abstract

What is the relationship between land-based security threats and the objectives of military reform in the PLA Army? After considering this relationship, is the continued advancement of PLA Army capabilities the most optimal policy choice? This thesis attempts to address these questions by examining various land-based security threats and applying this understanding to military reform in PLA Army. The foundation of this research will rely on the analysis of white paper guidance published by the Central Military Commission under the Communist Party of China. Theoretically, this study displays the question of military reform as either an optimal or suboptimal decision. The rationale behind the quality of the PLA Army's decision to bolster their military capabilities relies on the state of China's international security environment. Understanding the advancements of the PLA Army's reform within this context is vital to recognizing the thought process of Central Military Commission and can provide a more nuanced image of the PLAA. Additionally, countries with an interest in the People's Republic of China such as the United States will be able to reevaluate their military policies in the Asia-Pacific region while considering the position of the PLAA.

Keywords: land-based security threats, military reform, capacity building, PLA Army, international security environment, arms-building, white papers

摘要

陸基安全威脅與解放軍軍事改革目標之間的關係為何？考慮到這種關係，PLA 陸軍最優先選擇之策略會是持續提升其能力？這篇論文嘗試透過檢視不同的陸基安全威脅並適用解放軍陸軍的軍事改革來回答這些問題。這項研究以中央軍委會出版之白皮書指南分析為基礎。軍事改革包括最優或次優決策。中國人民解放軍陸軍在中國國際安全環境狀況之考量下決定加強其軍事力量。在這種脈絡下理解解放軍改革的進步對於認識中央軍事委員會的思想過程至關重要，可以為解放軍提供更加細緻的形象。另外，對中華人民共和國利益相關的國家能夠在考慮 PLAA 的立場的同時，重新評估其在亞太地區的軍事政策。

關鍵詞：陸基安全威脅，軍事改革，能力建設，解放軍陸軍，國際安全環境，建軍政策，白皮書

Acknowledgements

This research project developed out of a desire to better understand the People's Liberation Army. My curiosity in the armed forces of the People's Republic of China stems from my cultural background as a Chinese-American and my occupational knowledge as a U.S. Army officer. An acute perception of one another's military forces can prevent cross-cultural misunderstandings and set the foundation for further cooperation. As a young scholar in this field, I relied on the generous assistance from my professors. I would like to thank my three committee members who have invested so much time and effort into the production of my research. First off, I would like to thank Professor I Yuan for pointing out some structural issues with my thesis and guiding me in the right direction. As both my thesis advisor and professor, I have had the distinct pleasure of being a student under Professor I Yuan, inspiring both my personal and professional interest in China studies.

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Acronyms

| | |
|----------|-------------------------------------------------------------------------------------------|
| 2013 SMS | 2013 Science of Military Strategy |
| AIDC | Aerospace Industrial Development Corporation |
| ADA | Air Defense Artillery |
| APC | Armored Personnel Carrier |
| ATLA | Acquisition Technology and Logistics Agency |
| BDCA | Border Defense Cooperation Agreement |
| BDM | Border Personnel Mechanism |
| C4ISR | Command, Control, Communications, Computers Intelligence, Surveillance and Reconnaissance |
| CCP/CPC | Communist Party of China |
| CMC | Central Military Commission |
| DDP | Indian Department of Defense Production |
| ECM | Electronic Countermeasures |
| FAS | Federation of America Scientists |
| GDP | Gross Domestic Product |
| GSDF | Japanese Ground Self-Defense Force |
| HQ | Headquarters |
| IIS | International Institute for Strategic Studies |
| ISIS | The Islamic State of Iraq and the Levant |
| LAC | Line of Actual Control |
| MAC | Military Area Commands |
| MB | Main Battle Tanks |
| MR | Multiple Rocket Launcher System |
| MRH | Multirole Helicopter |
| MO | Ministry of Defense |
| NATO | North Atlantic Treaty Organization |
| OMTE | Outline for Military Training and Evaluation |
| PAP | People's Armed Police |
| PLA | People's Liberation Army |
| PLAA | People's Liberation Army Army |
| PLAAF | People's Liberation Army Air Force |
| PLAAMS | People's Liberation Army Academy of Military Science |
| PLAN | People's Liberation Army Navy |
| PLARF | People's Liberation Army Rocket Force |
| PLASSF | People's Liberation Army Strategic Support Force |
| PRC | People's Republic of China |
| RDT&E | Research, Development, Test, and Establishment |
| ROC | Taiwan, Republic of China |
| SASTI | State Administration for Science Technology and Industry for National Defense |
| SP | Self-Propelled Artillery |
| SSI | Strategic Studies Institute |
| TC | Theater Commands |
| THAA | Terminal High Altitude Area Defense |
| UN | United Nations |
| USD | United States Dollar |

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Chapter 1: Introduction

“The biggest sin results from insatiability, and the biggest disaster originates from endless desires.”¹ President Xi Jinping quoted the Chinese philosopher Laozi to encourage caution to his government during the 2008 meeting of the Central Committee of the Communist Party of China. For the past two decades, the question of China’s ambitions has weighed heavily on Western nations, especially the United States government. While China regards their nation’s growth as peaceful, western discussion about the rise of China’s military and economy generates warning signs of “potential threats” and a “hostile enemy”. While these kinds of conclusions may provide definitive policy stances for U.S. government officials, making assumptions based on theoretical speculations and unsupported claims can have dangerous implications.

This thesis will seek to better understand the relationship between land-based security threats and military reform of the People’s Liberation Army “Army” (PLA Army or PLAA), systematically, through theory and doctrine. The first chapter will introduce the purpose and overview of this analysis, followed by a thorough literature review on the three major approaches on Chinese military growth. After explaining the theoretical framework and doctrinal definitions in the third chapter, the fourth chapter will introduce the various land-based security threats that the PLA Army faces. The fifth chapter will summarize resulting force modernization trends and the last chapter will conclude the analysis.

¹“Chinese President Xi Jinping's quotes in a book,” *China Daily*, March 2, 2015, 1, accessed January 9, 2018, http://www.chinadaily.com.cn/culture/2015-03/02/content_19695291.htm.

1.1: The Importance of Understanding Chinese Military Reform

As military tensions continue to escalate with China's bolstering missile defense system and land reclamation initiatives in the South China Sea, China has begun to make significant strides in their attempts to professionalize and reform the PLA. Given these new reforms, China's changing military necessitates additional attention. As it stands, the official position of U.S. policymakers on PLA military reform has an underlying theme of apprehension. The *National Defense Strategy of 2018* put forth by the Trump administration labels China as an aggressive state set on the "displacement of the United States to achieve global preeminence in the future."² At the same time, the U.S. defense strategy maintains the belief that the United States is a nation seeking "transparency and non-aggression."³ To Chinese policymakers, the U.S. military is the aggressor in the Asia-Pacific region – and if peace is to be realized, the United States should take steps to scale back. In the security environment, neither country is willing to take preemptive steps to draw back. Therefore, increasing understanding of the China's perception of military reform is crucial to developing more informed policies on the region.

Convincing U.S. policy actors and military strategists to rethink their position on China is an overwhelming task. Thucydides wrote: "What made war inevitable was the growth of Athenian power and the fear which this caused in Sparta."⁴ An established power is often uneasy of a rising power. Throughout history, twelve of the last sixteen cases of large power displacements ended in war.⁵ Time and technological advancements have altered the modern

² U.S., The White House, *National Security Strategy of the United States of America*, by Donald J. Trump, December 17, 2017, 2, accessed January 15, 2018, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf>.

³ Ibid., 2.

⁴ Graham Allison, *Destined for War: Can America and China Escape Thucydides's Trap?* (Boston: Houghton Mifflin Harcourt, 2017), vii.

⁵ Ibid., vii.

security environment, hopefully in such a way that power transitions between nations can be resolved peacefully. In the current “Atomic Age”, war between the nuclear arsenals of China and the United States almost certainly guarantees mutually assured destruction. It is in the best interest of involved parties to conduct their due diligence to empathize with each other’s perspectives and insecurities. Regardless of the outcome, successful diplomacy is premised on the ability to understand the other party.⁶

1.2: Thesis Approach

The relationship between PLA reform and the strategic objectives of the Chinese government is inherently close. Unlike the U.S. military which attempts to separate political actors from their tactical and military decisions (except at the highest level of leadership), the PLA is a Party-army: its strategies, regulations, and traditions are all affected by the reality that it is devoted to the Chinese Communist Party (CCP or CPC).⁷ Therefore, it becomes imperative that researchers direct their analysis to the actions and words of the CCP. I raise this point to draw attention to the traditional battle between rhetoric and reality. Chinese rhetoric focuses on a defensive, almost pacifist, strategy. Western nations, especially the United States, are often suspicious China’s official policy statements. This thesis does not attempt to characterize PLA reform with labels such as offensive or defensive tendencies. Misinterpreting CCP policy directives based on predetermined negative or positive biases can produce unsubstantiated conclusions. This research will instead focus on the current reality of

⁶ Martin Griffiths, "Diplomacy Is All about Empathy," European Institute of Peace, accessed April 21, 2018, <http://www.eip.org/en/news-events/diplomacy-all-about-empathy>.

⁷ Mingda Qiu, “China’s Science of Military Strategy: Cross-Domain Concepts in the 2013 Edition,” *Detering Complex Threats*, (September 2015), accessed April 20, 2016, <http://deterrence.ucsd.edu>.

China's security situation through Chinese white papers and the resulting PLA Army reforms to present a robust argument on the quality of China's decision to develop their military power.

The PLA is a vast organization, but proper analysis requires specificity. This thesis will primarily focus on the land-based service branch of the PLA Army. Despite my focus on land-based troops, it would be remiss to not mention the modernization implications of the PLA Navy, Air Force, Rocket Force, and Strategic Support Force. In 2004, China's National Defense white paper published by the CMC explicitly stated that with regard to reform efforts, "priority [would be] given to the Navy, Air Force and Second Artillery Force [renamed the Rocket Force], and strengthen its comprehensive deterrence and warfighting capabilities."⁸ These official statements have given rise to an abundant amount of literature and analysis on the strategic repercussions of China's maritime security and aircraft carriers, their cyberattacks on American interests, and their development of fifth-generation jet fighters in addition to other studies. Chinese reform of traditional land-based units was and continue to be largely in the background of military research. For this reason, I have chosen the PLA Army to focus on.

1.3: Thesis Purpose

This research seeks to accomplish three major tasks. The first is to examine the various land-based security threats and apply this understanding to military reform in PLA Army. Contrary to popular belief, military advancements do not automatically equate to an offensive leaning agenda. The Chinese military labels its force modernization practices as an attempt to bolster their active defense strategy – a claim that many researchers refute. Rather than

⁸ China, State Council Information Office, *China's National Defense in 2004*, December 27, 2004, accessed December 12, 2018, <http://en.people.cn/whitepaper/defense2004/defense2004.html>.

placing definitive labels such as “offensive” or “defensive”, this thesis will evaluate the relationship between land security threats and PLA Army reforms as a consequence of the China’s current arms buildup in response to external threats. It is important to note that there is no standard for dictating what is considered “enough” to achieve defense. By way of illustration, the United States outspends the combined defense budgets of the next seven largest militaries in the world. Furthermore, the Trump administration intends to increase their military budget by another \$54 billion to maintain U.S. security.⁹

This leads into the second function of this thesis: to help develop a more robust understanding of the external security threats behind PLAA reform. The phrases: “offensive strategy” or “defensive strategy” are a matter of perspective. Offensive tasks can be conducted under the oversight of a defensive operations. Weapons and soldiers both have offensive and defensive capabilities.¹⁰ In theory, a better understanding of the precipitating reasons behind Chinese military reform might help eliminate instinctive negative perceptions of Western and U.S. researchers.

The last function of this research is to use these findings to reevaluate the current strategy in dealing with Chinese military reform. China is on the forefront of many active and dangerous international security issues. Continued violence in the Middle East, the threat of North Korea, dictatorship and terrorism in Africa – there are no shortage of problems that must be addressed by the international community. Despite their differences, relevant Asia-Pacific countries, China, and especially the United States, must find common ground to pursue a peaceful future.

⁹ Michael D. Shear and Jennifer Steinhauer, "Trump to Seek \$54 Billion Increase in Military Spending," The New York Times, February 27, 2017, 1, accessed February 10, 2018, <https://www.nytimes.com/2017/02/27/us/politics/trump-budget-military.html>.

¹⁰ See U.S. Army doctrinal definitions listed in Appendices for offensive/defensive operations.

1.4: Research Question(s)

This research will seek to answer the following questions: What is the relationship between land-based security threats and the objectives of military reform in the PLA Army? After considering this relationship, is the continued advancement of PLA Army capabilities the most optimal policy choice?

1.5: Overview of the People's Liberation Army Reform

What is the PLA – the People's Liberation Army? This name is a slight misnomer, because the People's Liberation Army includes five professional service branches, not just the Army. These service branches include the Army (PLAA), the Navy (PLAN), the Air force (PLAAF), the recently renamed Rocket Force (PLARF), and the Strategic Support Force (PLASSF). It is the fastest modernizing and largest military force in the world with an estimated 2 million active duty soldiers.¹¹ As a gauge of comparison, the next largest force is the U.S. military with roughly 1.3 million active duty soldiers.¹²

The People's Republic of China (PRC) has implemented vast organizational and technological reforms that aim to rearrange the entire military complex. The PLA is in the midst of a new and ambitious military modernization phase under the leadership of President Xi Jinping's statements in 2013, the goal of which is to create a more "professional force" on the similar scale to Western superpowers, namely, the U.S. military.¹³ However, military

¹¹ "CMC Issues Guideline on Deepening the Reform of National Defense and Armed Forces," International College of Defense Studies, May 16, 2016, accessed April 21, 2018, http://www.cdsndu.org/html_en/to_articleContent_article.id=40288a8553c564450154ec08fb690409.html.

¹² "2018 U.S. Military Strength," GlobalFirepower.com, accessed March 10, 2018, https://www.globalfirepower.com/country-military-strength-detail.asp?country_id=united-states-of-america.

¹³ "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

reform is not a new concept in China. Under Deng Xiaoping in the late 1970s, the PLA was firmly put under civilian control and separated from major political arenas.¹⁴ These reforms continued to 1987, when the PLA began several force reductions that have cut PLA manpower from 4.238 million to 2.285 million.¹⁵ These reductions centralized warfighting capability and helped streamline the “operational, logistics, and administrative chains of command.” Instead of controlling a large and unwieldy organization, these reductions were meant to make the PLA a more efficient organization. Along with efficiency, China’s ambitions to combat cyber warfare and win technology arms races have pushed forth a need for a more professional officer corps and a professional non-commissioned officer corps capable of handling specialized technical knowledge.¹⁶

The professionalization of armed forces can be described as an attempt to reconstruct the organization structure of the military to create a less polarized and politicized establishment: Military leaders attempt to initiate professionalization under the premise of strengthening the military institution as a whole through resource management, modern technology, and decreases in factionalism.¹⁷ There has been a trend towards increasing professionalism and expert knowledge in the Chinese military. Part of the downsizing efforts in the PLA modernization goals was to emphasize quality over quantity. With the consolidation of space and cyber branches into the PLA Strategic Support force, there has been an increased demand

¹⁴ Thomas J. Bickford, "A Retrospective on the Study of Chinese Civil-Military Relations Since 1979: What Have We Learned? Where Do We Go?" Semantic Scholar, accessed April 15, 2018, <https://pdfs.semanticscholar.org/0a4b/b111210f3f6540d13849d63dc89e00baadb9.pdf>.

¹⁵ "PLA Reductions," November 19, 2015, accessed December 23, 2017, <http://www.globalsecurity.org/military/world/china/pla-reductions.htm>.

¹⁶ Ibid.

¹⁷ "Military Measures," Toolbox, accessed January 2, 2017, https://extranet.creativeworldwide.com/CAIStaff/Dashboard_GIROAdminCAIStaff/Dashboard_CAIIAdminDatabase/resources/ghai/toolbox6.htm.

for high levels of technical skills to bring China to the forefront of modern military combat.¹⁸ The PLA is also beginning to require professional military education for certain officers to be promoted to “general officer.”¹⁹ Though many in China laud these military reform efforts, many outside disapprove. The following literature review examine the major trends of perspectives on China’s military growth and the main theories behind these viewpoints.



¹⁸ Hui Zhao Dong, "China upgrades missile force, adds space and cyber war forces," Global Times, January 1, 2016, accessed December 20, 2016, http://english.chinamil.com.cn/news-channels/pla-daily-commentary/2016-01/01/content_6840097.htm.

¹⁹ Michael Kiselycznyk and Philip C. Saunders, "Civil-Military Relations in China: Assessing the PLA's Role in Elite Politics," *China Strategic Perspectives* 2 (August 2010), accessed January 2, 2017, <http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/China Perspectives-2.pdf>, 13.

Chapter 2: Literature Review on the Perspectives of Chinese Military Growth

When reviewing the field of literature on Chinese military growth, it is readily apparent there are a wide range of perspectives and opinions. This literature can be broadly separated into three major areas of assessment: the parabellum offensive neorealist, the defensive neorealist/statecraft beliefs framework, and the Confucian-Pacifist approach. Instead of focusing on any one theoretical approach, this thesis aspires to analyze the base concept of arms building which is present in all three major approaches.

It is easiest to begin with the most common and widespread approach, parabellum “prepare for war” offensive realism. This international relations theory was coined in 2001 by John J. Mearsheimer, a renowned American political scientist and a member of West Point’s Long Gray Line. In his writings, Mearsheimer offers a pessimistic opinion on how he believes great powers think and act. By arguing that the ultimate aim of any strong nation is to be the only great power of the world and contending that nations will always seek power at the expense of others, Mearsheimer condemns the policy of engagement with China and predicts a conflict-driven future between the United States and China.²⁰ Following his lead, many policymakers in the current Trump administration and current Department of Defense have issued statements that label China as a threat that must be dealt with.

2.1: Parabellum Offensive Neorealism Approach

Established by Mearsheimer in his book, *the Tragedy of Great Power Politics*, the

²⁰ John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton & Company, 2001), 2.

offensive realist approach relies strongly on five major assumptions.²¹ The first assumption states that there is not an overarching government that regulates all the nations of the world. This state of being is called anarchy. The second assumption is that the significant great powers all have offensive military capability. In this manner, these different nations have the capability to harm one another. The third assumption declares that states are constantly uncertain about each other's intentions. While some uncertainty about intentions can be reduced, there is always the possibility that a state will act out of ordinary. The fourth assumption is that states seek to maintain their territorial integrity and the autonomy of their political state. Mearsheimer asserts that survival and the preservation of security is the primary concern for every nation. The last assumption maintains that all states are rational actors that are aware of their external environment and think strategically how to survive in it.²² These states constantly consider the differing intentions of other states and how other state behaviors might affect their strategy for survival. In considering the responses of other nations, a state must pay attention to both long and short-term consequences for all their actions.

These five assumptions create a predictable pattern of behavior through fear, self-help, and finally power maximization through arms building.²³ With great powers, there is a constant fear with the uncertainty of another state's intentions. Offensive military capabilities and technology make it possible for states to attack one another with little or no warning. As a result, each individual nation must rely on its own capabilities. In this self-help system, states

²¹ John J. Mearsheimer, "Anarchy and the Struggle for Power," in *International Politics: Classic and Contemporary Readings*, ed. Scott P. Handler (Washington, D.C.: CQ Press, 2013), 51.

²² Peter Toft, "John J. Mearsheimer: an Offensive Realist Between Geopolitics and Power," *Journal of International Relations and Development* 8, no. 4 (2005): 5, doi:10.1057/palgrave.jird.1800065.

²³ John J. Mearsheimer, "Anarchy and the Struggle for Power," in *International Politics: Classic and Contemporary Readings*, ed. Scott P. Handler (Washington, D.C.: CQ Press, 2013), 52.

realize the best way to maintain their security is to become the most powerful state. The state will then rationally decide how it will go about maximizing its own power in the pursuit of creating a global hegemony.²⁴ In this context, hegemony is defined as a nation that exercises a predominant influence over all others. It should be noted that Mearsheimer concedes that a global hegemony is highly improbable due to the stopping power of oceans. A regional hegemony then becomes the primary goal for great powers.²⁵

The offensive realism model sets the independent variable as the amount of power being sought by the state. States will then pursue regional hegemony by reducing another nations' security while increasing its own. The dependent variable is then either conflict or cooperation. In order to increase their own security, the state will logically have to engage the dependent variable through war or peaceful negotiations. The principle strategy in gaining more power is through conflict and war. Still, this does not mean that states will engage all its surrounding nations in reckless abandon. Mearsheimer hypothesizes that if a great power perceives a significant military advantage over its rivals, it will utilize conflict as a means of maximizing power relative to other powers until it reaches regional hegemony.²⁶ The model mentions that cooperation instead of conflict between nations may occasionally occur, but there are two major issues with cooperation. In cooperation, there must be some division of power. As with any nation that is trying to maximize its power, there will be strong disagreements about which nations gain more security. Even if they mutually compromise on some sort of division, there is a strong incentive for rational actors to cheat on one another in

²⁴ Peter Toft, "John J. Mearsheimer: an Offensive Realist Between Geopolitics and Power," *Journal of International Relations and Development* 8, no. 4 (2005): 6, doi:10.1057/palgrave.jird.1800065.

²⁵ Ibid., 6-7.

²⁶ John J. Mearsheimer, "Anarchy and the Struggle for Power," in *International Politics: Classic and Contemporary Readings*, ed. Scott P. Handler (Washington, D.C.: CQ Press, 2013), 53.

order to gain an advantage over the other.²⁷ Overall, offensive realism reasons that in a self-help world, there are more advantages and incentives to seek conflict rather than cooperation.

Mearsheimer uses his offensive realist theory to draw threatening conclusions about the future of U.S. – China relations. He argues that their rapidly modernizing economy and military will be a catalyst to China's pursuit of regional hegemony and the dominance of Japan, Korea, as well as other Asia-Pacific actors.²⁸ In opposition to the defensive realist theory, Mearsheimer argues that China will not be content with staying a status quo power. Rather, China will adopt an aggressive strategic agenda to consolidate and expand their power.²⁹ Mearsheimer's logic is sound but presents a few theoretical exaggerations that lack relevance in the modern world. His opinion on the crippling uncertainty of China's objectives ignores the diplomacy and cooperation approaches that could ease the amount of doubt by both nations. In addition, Mearsheimer glosses over the effect of nuclear deterrence and does not explain how China or any other security-seeking state, transition into aggressive actors.

Under offensive realism, there are a number of supporting sub-theories such as the power transition theory (Organski/Kugler), the hegemonic theory of war (Gilpin), and the balance of interest theory (Randall Schweller).³⁰ For the sake of clarity, this literature review focuses on offensive realism as a whole under Mearsheimer's leadership due to the large number of amalgamated theories presented in scholarly works. Mearsheimer's perspective seems to be the predominant theme in current Trump Administration and Department of

²⁷ John J. Mearsheimer, "Anarchy and the Struggle for Power," in *International Politics: Classic and Contemporary Readings*, ed. Scott P. Handler (Washington, D.C.: CQ Press, 2013), 57.

²⁸ John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton & Company, 2001), 102.

²⁹ *Ibid.*, 103.

³⁰ Jeffrey W. Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," *International Security* 25, no. 3 (Winter 2001): 135, accessed January 17, 2018, doi:10.1162/016228800560543.

Defense as evident by recent governmental publications: the *Department of Defense Asia-Pacific Maritime Security Strategy of 2015*, the *National Security Strategy of 2017*, and the most recent *National Defense Strategy of 2018*. In addition to these strategy publications, military researchers and Washington policy think tanks regularly churn out updated reports and analysis on the dangers of expanding PLA capabilities. Some of the leaders in the field of China military growth include (but is not limited to): the Research and Development Corporation (RAND), the Strategic Studies Institute from the U.S. Army War College (SSI), the Institute of National Strategic Studies at the National Defense University (NDU), the Jamestown Foundation, the Center for Strategic Studies & International Studies (CSIS), and the Council for Foreign Relations (CFR). The offensive realism rhetoric in the publications from these organizations represent the combined beliefs of hundreds of policymakers and leaders at the highest level in government, military, and academia. Rather than individually listing out all the think tank journals, this literature will focus on the attitudes of official U.S. publication that often reflect the policy agenda of the supporting research institutes:

“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.”³¹

As evident by the above quote from the summary on the new *National Defense Strategy of 2018*, and the following quote from the *National Security Strategy of 2017*, the net result sets the premise for conflict rather than cooperation:

“China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity. They are determined to make economies less

³¹ U.S. Department of Defense., *Summary of the 2018 National Defense Strategy of The United States of America*, January 2018, 2, accessed February 20, 2018, <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.

free and less fair, to grow their militaries, and to control information and data to repress their societies and expand their influence.”³²

There is also an instance in the *2017 Annual Report of the PRC to Congress* that lists one of the China’s strategic objectives to, “secure China’s status as a great power and, ultimately, reacquire regional preeminence.”³³ While this statement may be a valid subjective argument, the reports lists that specific objective among five other objectives that come directly from the CCP Constitution. It is highly likely that a casual reader or a policymaker that has not taken the time to read the Chinese constitution would also assume that power projection and regional hegemony is actually one of the explicit objectives of the CCP. It is readily apparent that in the majority of these writings, China is cast as the enemy. Col. W. Michael Guillot, a commander in the U.S. Air Force says that the new *National Security Strategy*, “rests on the realist assumption that diplomacy and leadership depend on military power.”³⁴ By focusing American interest on power, competition, and conflict, Col. Guillot reasons that the U.S. has become more “confrontational and coercive while our diplomatic prowess...has been weakened.”³⁵ In a time period fraught with tension against the rising China, the United States strategy has turned to brute force. A more tempered approach could be the key to swaying nations like China to become better allies.

Christopher A. Ford, the Chief Legislative Counsel for the U.S. Senate Foreign

³²U.S., The White House, *National Security Strategy of the United States of America*, by Donald J. Trump, December 17, 2017, 4, accessed January 15, 2018, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf>.

³³ U.S. Department of Defense, *Annual Report to Congress, Military and Security Development Involving People's Republic of China 2017*, May 17, 2017, 37, accessed February 20, 2018. https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF.

³⁴ W. Michael Guillot, *2017 National Security Strategy Perspective*, issue brief, Strategic Studies Quarterly, Air University, 1st ed., vol. 12 (Maxwell AFB, AL: Air University, 2018), 22.

³⁵ Ibid., 23.

Relations Committee also maintains his suspicions of CCP peace building statements and uses a unique approach of by analyzing Peter Perdue's historical literature on Chinese dynasties. He argues that modern day China has a hidden yearning to recreate their historical continental hegemony.³⁶ Ford backs his argument with strong historical anecdotes and a strategic cultural analysis of Chinese military actions in the 20th century. He suggests that a realist analysis of Chinese strategy may not be enough, researchers must also attempt to comprehend the "Chineseness" of the country's ancient culture.

Agreeing with the logic of Mearsheimer, Ford, the Trump administration and the majority of publications from policy think tanks, the Western and United States media has whipped up a frenzy of predominantly negative news about China. These stories focus on political corruption, pollution, human rights abuses, and more recently – the South China Sea military buildup.³⁷ "Pack journalism" in Western media has had a major role through in the widespread mistrust of China, perpetuating negative stereotypes and increasing the propensity for the offensive realist perspective to thrive. While this study will not address the specific role of the media in understanding military modernization, it is important to consider the adverse effects that an incomplete media agenda can have on the perspectives of policy makers in government and military.

2.2: Defensive Neorealism and Realpolitik Statecraft Beliefs Approach

Ford's analysis of Chinese strategic culture provides a bridge between the offensive realist and defensive realist approach to Chinese military strategy and reform. Both offensive

³⁶Ashley J. Tellis, Alison Szalwinski, and Michael Wills, *Strategic Asia 2016-17: Understanding Strategic Culture in the Asia-Pacific* (Seattle: The National Bureau of Asian Research, 2016), 29.

³⁷ Daniel Griffiths, *The International Media Coverage of China: Too Narrow an Agenda?* report, Reuters Institute for the Study of Journalism, University of Oxford (BBC Global News), 13.

and defensive realism operate under the same basic five assumptions but deduce different conclusions. While offensive realism implies that conflict is unavoidable due to the zero-sum rule, defensive realism proposes that security can be a shared resource and that conflict is preventable since states will be satisfied with a balance of power. In his book, *Theory of International Politics*, Kenneth Waltz argues that states understand the pitfalls of seeking too much power will force other states to counterbalance, “negating any gains in power”.³⁸ While defensive realists understand the incentive for nations to pursue power for personal security gain, defensive realists believe in a more optimistic approach compared to offensive realists. The contest for regional security in the Asia-Pacific region is a tense but resolvable situation.

From the perspective of offensive realism, there is a simple reason for Chinese military reform. A stronger military force provides a state with more security and maximizes the state’s ability to project their power. On the other hand, scholars in defensive realism do not believe it is that easy. A stronger and more professional military does not necessarily translate to more power. Neither does more power automatically create more security relative to other states. As mentioned above, Waltz believes that the more power a state accrues, the more fear and insecurity other nations feel. States typically cannot fully trust another state’s intentions. Therefore, if a powerful state as the United States perceives another state such as China building up its military – there is an automatic reaction of danger and suspicion. This occurrence has led to the current security dilemma between the United States and China.

Glenn H. Snyder describes the “security dilemma” as a vicious cycle of power accumulation.³⁹ The security dilemma is a concept that was first explored in 1951 by John H.

³⁸ Baohui Zhang, *China's Assertive Nuclear Posture: State Security in an Anarchic International Order* (Routledge, 2015), Chapter 3.

³⁹ Glenn H. Snyder, "The Security Dilemma in Alliance Politics," *World Politics* 36, no. 04 (1984): 461-465, accessed January 14, 2018, doi:10.2307/2010183.

Herz, author of *Political Realism and Political Idealism*. He defined the security dilemma as a “structural notion in which the self-help attempts of states to look after their security needs tend, regardless of intention, to lead to rising insecurity for others as each interprets its own measures as defensive and measures of others as potentially threatening.”⁴⁰ The security dilemma has the potential to trigger precarious situations, such as arms races or even war. While this state of uncertainty is present in all literature on Chinese military reform, researchers reach different conclusions based on the individual theoretical perspectives. Offensive realists contend that the security dilemma is an inescapable reality since nations will always seek to expand their power in the anarchic international system since states can never fully trust one another. Conversely, defensive realists argue that certain states are capable of balancing security through alliances to escape the security dilemma. Therefore, modern China should be able to escape the security dilemma because the CCP would hypothetically never attempt to infringe upon another country’s security unless actively provoked.⁴¹

Even though there might not be any aggressive intentions by either nation, when one state assumes or misperceives the other as building up military capabilities for offensive purposes, both states might begin an arms race in the hope of attaining more security than the other state.⁴² Scholars that defend the defensive realist perspective of China say that the U.S. misperception of Chinese military build-up is the key problem here. U.S. policymakers and military leaders refuse to accept the possibility that Chinese military modernization might be

⁴⁰ Herz, J. "Idealist Internationalism and the Security Dilemma", *World Politics* vol. 2, no. 2 (1950): 157-180, at p. 157 (Published by Cambridge University Press)

⁴¹ The case of Taiwan’s sovereignty as a nation is a separate political issue that will not be discussed in this thesis.

⁴² Glenn H. Snyder, "The Security Dilemma in Alliance Politics," *World Politics* 36, no. 04 (1984): 461-465, accessed January 14, 2018, doi:10.2307/2010183.

for peaceful and defensive purposes. As long as this perspective holds, China and the United States will remain in a security dilemma even if Chinese military actions are perceived to be defensive.

Although a literature search produces only a modest amount of published U.S. scholarship from the defensive realist perspective, there are a number of Australian, European and Chinese academics that have written on the matter. To begin, I would like to acknowledge James Douglas, a postgraduate student who wrote his master's thesis on defensive realism and Chinese maritime strategy. The PLAN has been at the vanguard of Chinese innovation due to the ever-growing importance of sea power. There have been countless books, journals, and articles published on the advancement of the Chinese Navy by U.S. think tanks. As previously mentioned, this is one reason why I have chosen to focus my attention on the PLA Army to broaden the current scholarly literature available. James Douglas uses his knowledge of PLAN modernization, their recent operations and international territorial disputes to defend his defensive realist argument that China is not seeking overreaching power.⁴³ He concludes that Chinese incidents at sea and other PLAN activities were and continue to be attempts to defend their territory to safeguard China's security. While his argument and evidence are strong, Douglas' application of theory is slightly limited. He relies mainly on a meticulous case study methodology that provides a substantial amount of information but lacks a thorough theoretical analysis.

Another familiar scholar in Chinese strategy and behavior is Huiyen Feng. Christopher Ford believes that her approach lies somewhere between offensive realism and Confucian-

⁴³ James Douglas, *Defensive realism and Chinese maritime strategy: a thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Master of Arts*, PhD diss., Victoria University of Wellington, 2012, 3.

pacifist.⁴⁴ While she follows some defensive realist principles, Feng contends Chinese strategy is strongly influenced by the “realpolitik statecraft literature of China’s pre-unification Warring States period...and Confucian ethical-moral traditions.”⁴⁵ Even though Feng calls her view realist, it should be noted that her evidence of Chinese peacebuilding is taken straight from CCP publications.⁴⁶ Therein lies one of the major issues of her arguments. As a nation that deeply mistrusts Chinese rhetoric, United States policymakers require much more than the synthesis of Chinese statecraft publications. In spite of this shortcoming, Huiyen Feng offers a valuable perspective – the Chinese perspective.

2.3: Confucian-Pacifist Approach

As mentioned before, the majority of literature on Chinese military strategy comes from the perspective of the neorealist school. Whereas offensive and defensive realism are both recognized international sub-theories of modern neorealism, Confucian-Pacifism gives the impression of a religious creed from a historical perspective. Confucianism is a humanistic belief system defined by the principles of social harmony and peace. Since Pacifism refers to an opposition of violence, these two terms fit well together. In his article on Confucian Foreign Policy, Feng Zhang defines Confucian Pacifism as the, “belief that Confucianism determined a defensive or accommodationist Chinese grand strategy and a largely peaceful

⁴⁴ Christopher A. Ford, "Realpolitik with Chinese Characteristics: Chinese Strategic Culture and the Modern Communist Party-State," in *Understanding strategic cultures in the Asia-Pacific*, by Ashley J. Tellis, Alison Szalwinski, and Michael Wills (Seattle: The National Bureau of Asian Research, 2016), 41.

⁴⁵ Ibid., 41.

⁴⁶ Huiyun Feng, *Chinese Strategic Culture and Foreign Policy Decision-Making* (London: Routledge, 2007), 4, 26.

foreign policy in China's imperial era."⁴⁷ Even though the concept of Confucian Pacifism is not a formal theory of international relations, many Chinese historians believe that this peaceful model was prevailing basis of Chinese foreign policy until "the century of humiliation" which started with the First Opium war in 1839.⁴⁸ By Chinese accounts, China has had a continuous civilization of several thousand years based on a "peaceful and harmonious" development.⁴⁹ In the rest of his article, Feng Zhang quickly dismantles the argument of "peaceful" growth by several violent and war-torn time periods. It would seem that Confucianism and Pacifism do not necessarily go hand in hand when the Chinese are threatened.

Aside from Chinese academics and formal CCP statecraft, it is difficult to find scholarly work published in English supporting the notion of a modern Confucian-Pacifist China. A more thorough literature review of this perspective would require in depth translation work of major Chinese works and history books. To review readily accessible literature on China from the pacifist perspective, it was necessary to peruse Chinese news sites. The Chinese Ministry of National Defense runs an official English-language website that provides almost all available and unclassified information on the Chinese PLA. After reading several short articles written in choppy English, it becomes very apparent that most articles are heavily censored to promote two central ideas: that China is peaceful country simply seeking defend

⁴⁷ F. Zhang, "Confucian Foreign Policy Traditions in Chinese History," *The Chinese Journal of International Politics* 8, no. 2 (April 13, 2015): 200, accessed December 17, 2017, doi:10.1093/cjip/pov004.

⁴⁸ Christopher A. Ford, "Realpolitik with Chinese Characteristics: Chinese Strategic Culture and the Modern Communist Party-State," in *Understanding strategic cultures in the Asia-Pacific*, by Ashley J. Tellis, Alison Szalwinski, and Michael Wills (Seattle: The National Bureau of Asian Research, 2016), 46.

⁴⁹ F. Zhang, "Confucian Foreign Policy Traditions in Chinese History," *The Chinese Journal of International Politics* 8, no. 2 (April 13, 2015): 200, accessed December 17, 2017, doi:10.1093/cjip/pov004.

its sovereignty and the United States is an ignorant aggressor that challenges the status quo. A classic example from the “opinion” sections of the website headlines, “China’s missile deployment in South China Sea completely reasonable: expert”.⁵⁰ In this article, a military expert Yin Zhuo explains that the increasing PLAN presence in the South China Sea is a very obvious response to the threatening U.S. naval force in the region. He then goes on to discredit specific statements released by Fox News. The author’s statements leave little room for argument – this achieves the desired effect of promoting the official CCP narrative of harmonious peace.



⁵⁰ Yao Jianing, " China's missile deployment in South China Sea completely reasonable: expert," *People's Daily Online*, January 4, 2017, 1, accessed November 11, 2017, http://eng.mod.gov.cn/Opinion/2017-01/04/content_4769263.htm.

Chapter 3: Theoretical Framework and Methods

The impetus for military advancements in the PLA Army can stem from a number of sectors, including economic, political, military and social domains. The literature review pointed out a wide spectrum of perspectives on PLA growth, this thesis will concentrate on the arguments listed by Chinese Defense White Papers and public CCP statements. The Chinese government splits their external reasons for military reform into two major types of security threats: traditional and non-traditional.⁵¹ Traditional threats can be defined as risks to a country that come from other countries and typically entail a military factor. Non-traditional threats comprise of all other threats outside of the normal sphere of physical military capabilities and can include anything from terrorism to epidemic outbreaks.⁵² Traditional threats provide a clear depiction of the challenges that the Chinese military specifically faces as well as a more direct comparison between military reform and military threats.

The relatively undefined nature and large scope of non-traditional threats makes them a difficult comparison to military reforms even though PLA Army objectives reference the exact risks they anticipate having to face: terrorist sabotage, cross-border sabotage, and unstable border/coastal areas.⁵³ Since the thesis concentration is on the PLA Army, the analytical framework in this thesis will focus on land-based traditional security threats due to ease of comparative appraisal. Referenced nontraditional threats by the PLA will also be

⁵¹ Hu Jintao, "Full Text: Report of Hu Jintao to the 18th CPC National Congress," China.org.cn, November 16, 2012, Section IX, accessed March 16, 2018, http://www.china.org.cn/china/18th_cpc_congress/2012-11/16/content_27137540_9.htm.

⁵² Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), vii.

⁵³ "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

briefly covered. The Chinese government places high emphasis on security and territorial integrity by protecting national borders:

“Building strong national defense and powerful armed forces that are commensurate with China's international standing and meet the needs of its security and development interests is a strategic task of China's modernization drive. China is faced with interwoven problems affecting its survival and development security as well as traditional and non-traditional security threats. To address these problems and threats, we must make major progress in modernizing national defense and the armed forces.”⁵⁴

The above excerpt comes from the *18th Party Congress by Hu Jintao* and highlights the belief that China faces a myriad of external traditional and non-traditional threats. To ensure the survival of China, these threats provide the Chinese government reasonable justification to build up their military force through reforms and advancements.

The main theories of offensive realism and defensive realism have already been explained in the literature review, this section will first explain the issues of associating Chinese military advancements with an offensive or defensive military strategy. The theoretical framework of this thesis will then utilize the optimal arming criteria in arms building to discuss the current threat environment specific to the land-based PLA Army. After evaluating these threats, this thesis will examine the military reforms in the PLA Army to identify the relationship between “military reforms” and “military threats”. It is hypothesized that analysis of land-based threats in China will provide a rational argument for PLA Army reforms.

⁵⁴ Hu Jin Tao, "Full Text: Report of Hu Jintao to the 18th CPC National Congress," China.org.cn, November 16, 2012, Section IX, accessed March 16, 2018, http://www.china.org.cn/china/18th_cpc_congress/2012-11/16/content_27137540_9.htm.

3.1: Does These Approaches Apply to Military Reform?

The three major theoretical perspectives referred to in the literature review rely heavily on subjective viewpoints when analyzing PLA military reform. In the literature review, there is a consistent theme of using PLA military reform as a reason to perceive China as a threat. At the most fundamental level, a military threat can be defined as “intent x capabilities”. By defining and researching PLA Army reform, this thesis will be able to objectively identify the “capabilities” of the military organization. CCP white papers are then able to provide the “intent” of these capabilities, hypothetically providing an accurate assessment of China’s “threat level”. However, herein lies the issue – who can accurately say what is China’s intent? CCP white papers seem very clear in stating that these reforms are geared towards defensive posturing. Yet offensive realists treat these statements with skepticism and formulate their own predictions for China’s intent. Defensive realists and Confucian-pacifists are criticized for taking CCP statements at their word. In this manner, all perspectives are simultaneously “right” and all perspectives are also “wrong” on military reform since intent is argued on the premise of subjective opinions.

PLA Army military reform does not provide a clear indication of China’s position as a “threat”. It is a measure of their capabilities. An alternative and more productive method of studying military reform is through arms and capacity buildup theories. Instead of trying to subjectively determine whether or not PLA Army military reform represents a threat to external nations, the next chapter will analyze the major external causes of the Chinese arms buildup in their military reform and China’s decision to build arms.

3.2: The Theory Behind China's Military "Arms Buildup"

It is rather controversial to definitively say there is an enduring arms buildup or race in East Asia. The term "arms race" most often conveys a negative connotation, implying that China is perhaps building up their military for nefarious reasons. Of course, Chinese military officials are quick to denounce the possibility of an arms race against any parties, in particular against the United States.⁵⁵ An "arms race" by itself, has little to no definitive bearing on the escalation of conflict between nations. The physical development and buildup of military arms is only a direct reference to military capabilities and does not accurately predict the intentions of the country. The belief that arms races can be delineated between offensive and defensive strategies is highly subjective at best – as is any attempt to discern the intentions of a country. Circumstance, external actors, chance, and any number of immeasurable variables can escalate peaceful intentions into war.

In an authoritative review on the theories of arms races, Professor Charles Glaser concludes that arms races are multifaceted affair and provide little concrete evidence on the possibility of war without considering a host of other conditions. He proposes a new framework for evaluating the rationality of arms buildup by posing two major characteristics: the state's international security environment along with its decisions and goals on the building arms.⁵⁶ For the purpose of his theoretical design, Glaser draws on realist assumptions about the state of anarchy and the security dilemma to develop the foundation of his arms-building framework. This theory focuses on determining if the arms buildup or military reform is the optimal and rational policy choice for the specified country. His

⁵⁵ Zhao Lei, "Nation Will Never Engage in Arms Race, PLA Official Asserts," China Aims to Boost Industries along Yangtze River, March 9, 2018, accessed April 15, 2018, <http://www.chinadaily.com.cn/a/201803/09/WS5aa1cfdda3106e7dcc14084a.html>.

⁵⁶ Charles L. Glaser, "When Are Arms Races Dangerous? Rational versus Suboptimal Arming," *International Security* 28, no. 4 (2004): 45, doi:10.1162/0162288041588313.

conclusion avoids falling in the trap of concluding if the arms buildup is aggressive or defensive against external nations, as that can be an issue independent of military buildup. Glaser believes that arms races and the probability of war could be correlating factors depending on the rationality of the arming decision, since the correlation might be a causal impact of precarious security environments.⁵⁷

Figure 1: Quality of Arming Decisions

| | | State should have armed/raced | |
|--------------------|-----|------------------------------------------------|---------------------------------------------|
| | | Yes | No |
| State did arm/race | Yes | optimal arming: necessary races | suboptimal arming: dangerous races |
| | No | suboptimal restraint: dangerous cooperation | optimal restraint: desirable cooperation |

This figure demonstrates the quality of arming decisions.⁵⁸ Glaser continues his theory by introducing factors of external and internal consequences, as well as the effects of the offense-defense balance. For this research on external security threats and military reform, analysis will focus on the primary figure listed above. Further research should consider internal factors of China's arming decision as well as the offense-defense balance between China and other nations. The following outlines how this thesis looks at the PLA Army behavior. If China's international land-based security environment justifies an arms buildup, then the PLA Army's current military reform is China's best and most optimal decision. On the other hand, if China's decision to build their military does not match their security

⁵⁷ Charles L. Glaser, "When Are Arms Races Dangerous? Rational versus Suboptimal Arming," *International Security* 28, no. 4 (2004): 50, doi:10.1162/0162288041588313.

⁵⁸ Ibid., 48.

environment, these are considered to be suboptimal policy decisions and may result in negative consequences for China.

As mentioned in the literature review, most studies refer to Chinese military reform as an arms race through informal terms and through the negative stance of expanding warfighting capabilities. There is an interesting study in which Brittani Wyner and Lique Xie attempted to answer the question of Chinese military expenditures through the use of quantitative analysis driven by Lewis F. Richardson's action-reaction theory. According to Lewis F. Richardson's action-reaction theory, the arms race born out of a security dilemma can be mathematically defined by using the changes in a nation's defense expenditures as a function of an opponent's defense expenditures.⁵⁹ Their mathematical analysis was unfortunately inconclusive due to the lack of data as well as the omission of Vietnam and the United States as rival nations. Despite the lack of statistical significance, the authors were still able to find some relationships that suggests China has a reactive policy to outside stimuli. In light of previous work done, this thesis will pursue Glaser's theoretical approach of arms building to understand the rationale of Chinese military reform.

3.3: Relationship between Strategic Goals, Land-Based Security Environment, and Ongoing Military Reforms in China

The general framework has been set up by Glaser's rational arms-building theory. The key variables affecting the rationality of arms-building are state goals and the international security environment. In the case of the PLAA, these variables are slightly different in the context of China's armed forces. To begin, since research demonstrates a large body of knowledge of existing and ongoing PLAA capacity building, the variable of "arms-building" will be utilized to validate the strategic goals of PLAA military reform.

⁵⁹ Xiao Bing Li, Xia Bo Hu, and Yang Zhong, *Interpreting U.S.-China-Taiwan relations: China in the post-Cold War era* (Lanham, MD: University Press of America, 1998), 169, 189.

When reading China's defense white papers, it is necessary to first pick out the overarching strategic goals of reform for the PLA. This qualitative analysis sets the background for the specific roles of the PLAA. PLAA objectives can be further broken down into the land-based security environment and PLAA military reforms:

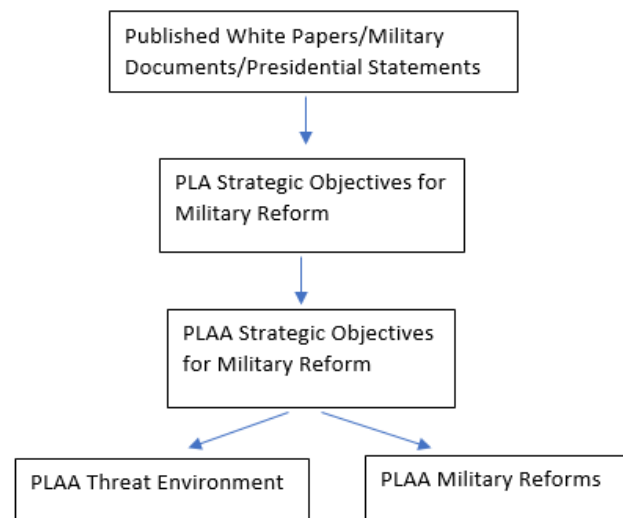
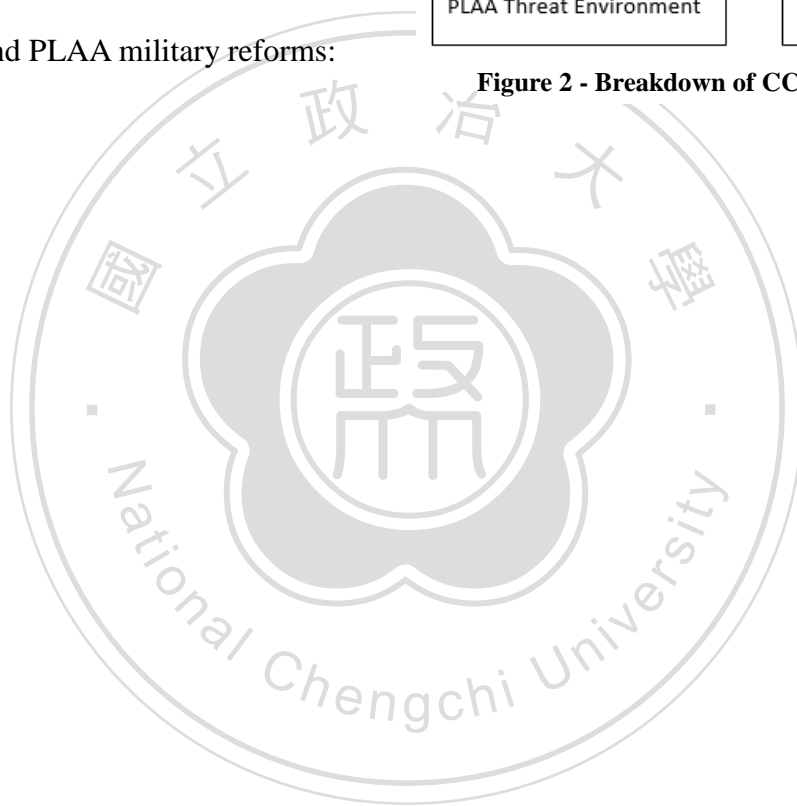
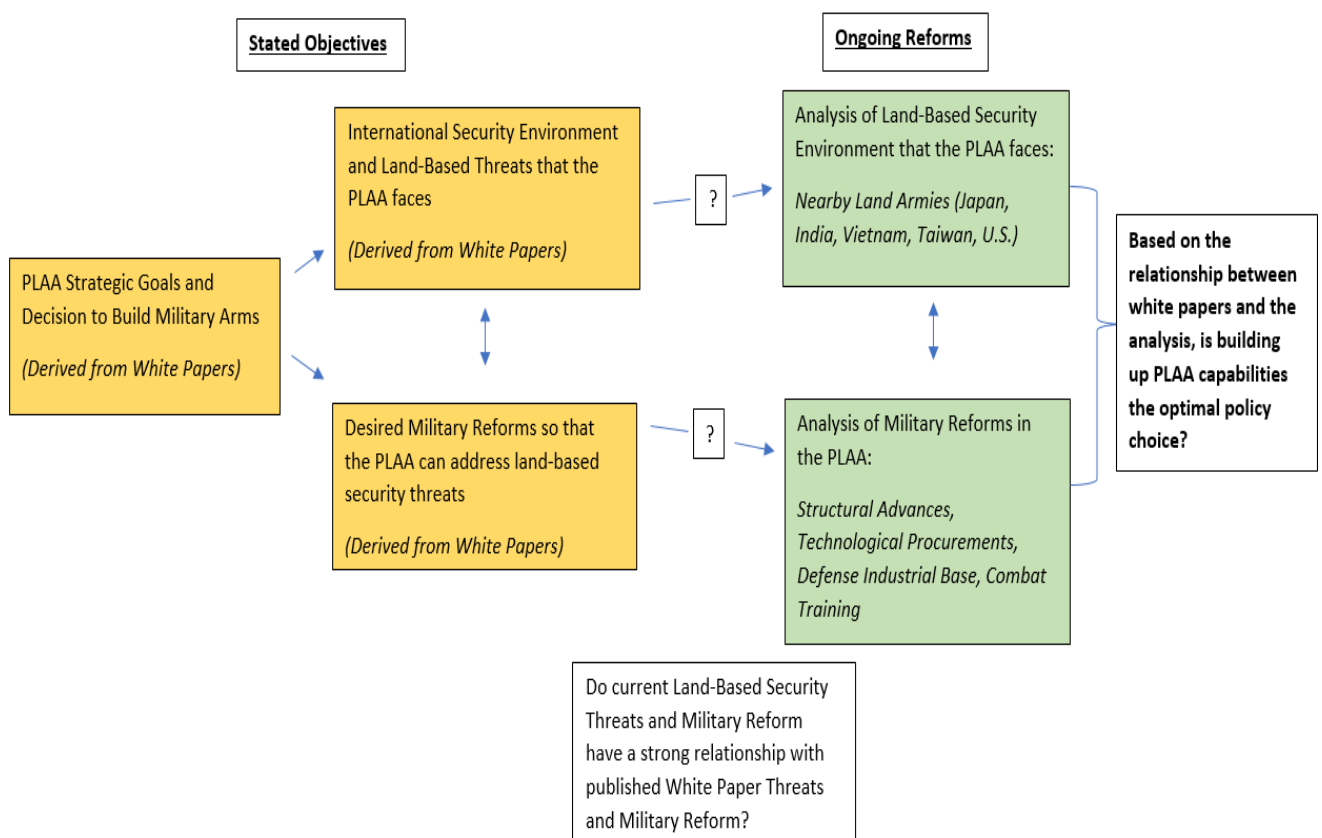


Figure 2 - Breakdown of CCP Publications



This research paper qualitatively analyzes CCP publications to break down the major threats that the PLAA envisions facing and the desired military reform goals to develop the PLAA. After comparing these two sets of variables, this thesis seeks to compare the stated objectives with the ongoing threats that the PLAA could potentially face and the military reforms that have been conducted or is ongoing. Referring back to the Glaser's framework, if the stated goals and military reforms are appropriate for the security environment – then the choice to build arms is a rational and optimal policy choice. This flowchart lists out the major variables and logical reasoning for this thesis' theoretical framework:

Figure 3 - Theoretical Framework Visual Depiction



3.4: Research Foundation – Chinese Communist Party White Papers

Due to the nature of this research, the most important part of the theoretical framework deals with primary sources from official defense white papers published by the State Council Information Office (SCIO) under guidance of the Chinese Communist Party (CCP). Since 2007, the CCP has published four major English defense white papers – each one detailing the goals of military reform, the strategic objectives of the PLA, relevant security threats to China, and other general information concerning the direction of the Chinese military. In addition to these white papers, there are publicly available statements from President Xi Jinping's 19th CPC National Congress and from military strategists in the 2013 edition of the *Science of Military Strategy*. The Chinese government also periodically releases military news on China Military Online as well as other media outlets such as Xinhua and China Daily.

The PLA is very aware of criticisms levied against the military organization about a lack of transparency and openness on military reform. In response, China's Ministry of Defense has taken serious steps to make PLA knowledge more accessible and readily available for public consumption.⁶⁰ While military analysts may continue to question the accuracy and candor of Chinese sources, there is a certain degree of consistency between Chinese publications, strategic objectives, and military reforms that provides a strong foundation for the analysis framework of this research. The following figure lists out the major strategic objectives set forth by the CCP and President Xi Jinping. Over the past decade, China's defense policy has stayed relatively uniform: focusing on the concept of active defense and building a strong military to safeguard Chinese interests and "motherland" integrity.

⁶⁰ "Debate: Chinese Military Becoming More Transparent?" China Daily, accessed March 21, 2018, http://www.chinadaily.com.cn/china/2014-07/31/content_18232500.htm.

Figure 4 – White Paper Excerpts on PLA Strategic Objectives on Military Reform

| White Paper Excerpts on PLA Strategic Objectives on Military Reform |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>China's National Defense in 2008: "China pursues a national defense policy which is purely defensive in nature. China places the protection of national sovereignty, security, territorial integrity, safeguarding of the interests of national development, and the interests of the Chinese people above all else. China endeavors to build a fortified national defense and strong military forces compatible with national security and development interests, and enrich the country and strengthen the military while building a moderately prosperous society in all aspects...China implements a military strategy of active defense. Strategically, it adheres to the principle of featuring defensive operations, self-defense and striking and getting the better of the enemy only after the enemy has started an attack. In response to the new trends in world military developments and the requirements of the national security and development strategy, China has formulated a military strategic guideline of active defense for the new period."</p> |
| <p>China's National Defense in 2010: "China pursues a national defense policy which is defensive in nature. In accordance with the Constitution of the People's Republic of China and other relevant laws, the armed forces of China undertake the sacred duty of resisting foreign aggression, defending the motherland, and safeguarding overall social stability and the peaceful labor of its people. To build a fortified national defense and strong armed forces compatible with national security and development interests is a strategic task of China's modernization, and a common cause of the people of all ethnic groups."</p> |
| <p>The Diversified Employment of China's Armed Forces (2013): China will never seek hegemony or behave in a hegemonic manner, nor will it engage in military expansion. China advocates a new security concept featuring mutual trust, mutual benefit, equality and coordination, and pursues comprehensive security, common security and cooperative security. It is a strategic task of China's modernization drive as well as a strong guarantee for China's peaceful development to build a strong national defense and powerful armed forces which are commensurate with China's international standing and meet the needs of its security and development interests. China's armed forces act to meet the new requirements of China's national development and security strategies, follow the theoretical guidance of the Scientific Outlook on Development, speed up the transformation of the generating mode of combat effectiveness, build a system of modern military forces with Chinese characteristics, enhance military strategic guidance and diversify the ways of employing armed forces as the times require. China's armed forces provide a security guarantee and strategic support for national development, and make due contributions to the maintenance of world peace and regional stability.</p> |
| <p>China's Military Strategy (2015): Building a strong national defense and powerful armed forces is a strategic task of China's modernization drive and a security guarantee for China's peaceful development. Subordinate to and serving the national strategic goal, China's military strategy is an overarching guidance for blueprinting and directing the building and employment of the country's armed forces. At this new historical starting point, China's armed forces will adapt themselves to new changes in the national security environment, firmly follow the goal of the Communist Party of China (CPC) to build a strong military for the new situation, implement the military strategic guideline of active defense in the new situation, accelerate the modernization of national defense and armed forces, resolutely safeguard China's sovereignty, security and development interests, and provide a strong guarantee for achieving the national strategic goal of the "two centenaries" and for realizing the Chinese Dream of achieving the great rejuvenation of the Chinese nation.</p> |
| <p>China's Military Strategy (2015) Eight Strategic Tasks: -- To deal with a wide range of emergencies and military threats, and effectively safeguard the sovereignty and security of China's territorial land, air and sea;</p> <ul style="list-style-type: none"> -- To resolutely safeguard the unification of the motherland; -- To safeguard China's security and interests in new domains; -- To safeguard the security of China's overseas interests; -- To maintain strategic deterrence and carry out nuclear counterattack; -- To participate in regional and international security cooperation and maintain regional and world peace; -- To strengthen efforts in operations against infiltration, separatism and terrorism so as to maintain China's political security and social stability; and -- To perform such tasks as emergency rescue and disaster relief, rights and interests protection, guard duties, and support for national economic and social development. |
| <p>President Xi Jinping's 19th CPC National Congress (2017): We have reached a new historical starting point in strengthening national defense and the armed forces. Confronted with profound changes in our national security environment and responding to the demands of the day for a strong country with a strong</p> |

military, we must fully implement the Party's thinking on strengthening the military for the new era and the military strategy for new conditions, build a powerful and modernized army, navy, air force, rocket force, and strategic support force, develop strong and efficient joint operations commanding institutions for theater commands, and create a modern combat system with distinctive Chinese characteristics. Our armed forces must be up to shouldering the missions and tasks of the new era entrusted to them by the Party and the people.

We will adapt to the trend of a new global military revolution and to national security needs; we will upgrade our military capabilities, and see that, by the year 2020, mechanization is basically achieved, IT application has come a long way, and strategic capabilities have seen a big improvement. In step with our country's modernization process, we will modernize our military across the board in terms of theory, organizational structure, service personnel, and weaponry. We will make it our mission to see that by 2035, the modernization of our national defense and our forces is basically completed; and that by the mid-21st century our people's armed forces have been fully transformed into world-class forces.

An analysis of these major strategic objectives laid out by CCP white papers statements and objectives deduces that the decision to conduct military reforms and to build up the PLA is an optimal and rational policy choice. Since China believes that as a country they will never pursue hegemonic power, they believe in an active defense strategic policy to protect against surrounding nations that might prevent their continued "peaceful development." A strong, modernized military is a necessary institution in order safeguard China's sovereignty, security and the "Chinese Dream". In consideration of the state of global affairs, President Xi Jinping believes that the currently deficient PLA needs to continue upgrading military capabilities in consideration of the "global military revolution", China's security needs, and to become a "world-class force." These modernization trends include changes in "theory, organizational, structure, service personnel, and weaponry". These stated objectives set the contextual background for PLAA reforms.

Chapter 4: Analysis of PLA Army Strategic Goals and Land-Based Security Environment

4.1: Introduction of the PLAA Organization

The PLAA is a foundational element of the PLA through their command of military land operations. Similar to the U.S. Army, the PLAA is composed of multiple branches such as “infantry, armor, artillery, air defense, aviation, engineering, signals, chemical defense and electronic countermeasures (ECM), as well as various specialized service units.”⁶¹ The most recent number released by the Chinese numbered the PLAA force at 850,000 active duty soldiers in 2013.⁶² Since then, President Xi Jinping has slashed the PLA force by 300,000 soldiers, many of which are predicted to come from the PLAA, which represents roughly 50% of their total active military force.⁶³ There are also estimates of 510,000 reserve soldiers for the PLA.⁶⁴ However, there is no breakdown available for PLAA specific reserve troops. The following figure lays out unit hierarchy of a typical combined corps element.⁶⁵

⁶¹ "China's National Defense in 2008," Ministry of National Defense of the People's Republic of China, January 2009, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778231.htm.

⁶² "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

⁶³ Sutirtho Patranobis, "China Officially Reveals the Size of Its Army," Hindustan Times, April 17, 2013, accessed May 5, 2018, <https://www.hindustantimes.com/world/china-officially-reveals-the-size-of-its-army/story-mQssnMTouFNfqwV3iQ6ZTO.html>.

⁶⁴ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 240.

⁶⁵ "China's National Defense in 2008." Ministry of National Defense of the People's Republic of China, January 2009, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778231.htm.

Figure 5 - Table of PLAA Organization Structure

| Military Level | Unit Type (includes mobile operation, garrison, border, and coastal defense) |
|---------------------------------|-------------------------------------------------------------------------------------|
| Operational Level | Combined Corps |
| Basic Operational Level | Divisions/Brigades |
| Tactical Level | Regiment |
| Basic Tactical Unit | Battalion |
| Tactical Element (Higher Level) | Companies |
| Basic Tactical Element | Platoon |

4.1.1: Historical Background of PLA Army Reform and Waning Role of Land Power

When the PLA was established on August 1, 1927 by Mao Zedong, the military organization consisted only of guerilla infantry troops. During the organization's early years, the PLA was known as the “中國工農紅軍”, or the Red Army. China's *National Defense Policy from 2008* lists out major reform periods to the PLA Army by citing several wars that the PLA was involved in. The Agrarian Revolutionary War between 1927 and 1937 developed the cavalry, artillery, engineering, and signal troops. The Liberation War between 1946 and 1949 instituted armor and chemical troops. Following the Liberation War, these specialized troops transitioned into formal branches. The 1980s saw another revolution in military affairs as the Army combined corps came into fruition and the CCP began their force reductions efforts to streamline the military in anticipation of a possible attack from the former Soviet Union. China's national defense policy describes the past 91 years as an exceptional developmental period, growing the Army into a “modern army with various arms...powerful service capable of conducting...operations with the Navy, Air Forces and

Second Artillery Force.”⁶⁶

Despite the history of PLAA reforms and the gradual progression of military technology, some scholars believe that the PLAA might be the “loser” within Chinese military reforms. This belief stems from the growing emphasis placed on sea, air-based, and cyber military power, as well as large force reductions mostly within the PLA Army.⁶⁷ In a 2016 article written by Dr. Phillip C. Saunders and John Chen, it argued that the PLAA has “lost status, budget share, and end strength relative to other services in recent years.”⁶⁸ This phenomenon is not necessarily contained to the PLA either. In another study, Dr. James C. Mulvenon remarked that prior to the World Trade Center attack, traditional land forces have had decreased relevance given the evolving state of modern warfare.⁶⁹ Instead, there is a perceived emphasis on developing technology-driven domains of warfare through sea, air, space, and information. China’s homeland defense by PLAA forces remains an imperative objective, but many U.S. researchers argue that Chinese land power is in the decline.

This belief is refuted by Chinese PLA Army commanders that argue the ongoing military reforms such as PLAA manpower cuts are necessary modifications to build a more powerful land-based force. One article from a Chinese military newspaper cautioned against the belief

⁶⁶ "China's National Defense in 2008," Ministry of National Defense of the People's Republic of China, January 2009, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778231.htm.

⁶⁷ "China's National Defense in 2004," Ministry of National Defense of the People's Republic of China, December 2004, accessed May 10, 2018, <http://www.china.org.cn/e-white/20041227/index.htm>

⁶⁸ Saunders, Phillip C., and John Chen. "Is the Chinese Army the Real Winner in PLA Reforms?" *Joint Force Quarterly* 83 (Winter 2016): 44-48. Accessed April 14, 2018. http://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-83/jfq-83_44-48_Saunders-Chen.pdf?ver=2016-10-19-102201-690.

⁶⁹ James C. Mulvenon, “The PLA Army’s Struggle for Identity,” in *The People’s Liberation Army and China in Transition*, ed. Stephen J. Flanagan and Michael E. Marti (Washington, DC: NDU Press, 2003).

that, “land warfare is obsolete” or that “army forces are useless.” Throughout the article, the author recognizes the relevance of other warfare domains, but is adamant about the continued necessity to reform the PLAA in conjunction with other services.

“随着世界新军事革命浪潮风起云涌，各主要国家纷纷加快军事变革，争夺军事竞争新优势。开展军事理论创新，就是要抓住机遇、乘势而上，既要摒弃“大陆军”的惯性思维，也要破除“陆战过时”“陆军无用”的认识误区，始终紧盯时代要求和战争需求，抢占建设发展的制高点。”⁷⁰

According to the article, the force reductions in the PLAA and increased emphasis on other services are an inevitable process to become a leaner, more efficient, and informationized military land-power.

The fight for the relevance of ground troops amidst a limited defense budget is not an issue specific to China’s PLA. Rather, this is an ongoing argument systematically present in many modern militaries across the world. The fast-paced and constantly evolving battlespace of warfare has highlighted the importance of advanced aircrafts, cyber capabilities, missiles, and other military technology over traditional land troops. In a 2016 white paper released by Strategic Landpower, Army Chief of Staff Gen. Odierno, USMC Commandant Gen. Amos, and USN Admiral McRaven argue the relevance of operations in the land domain by human operatives. They point out the short-sighted nature of relegating warfare to a “contest of technologies” and present a strong case for the role of land-based forces in a country’s overall strategic objectives.⁷¹ The white paper concludes that there must be a “balanced, adequately resourced, and sufficiently sized Joint force” in all domains of warfare (land, sea, air, space, and information) to effectively prevent or win conflicts. To this end, the Army is a relevant

⁷⁰ “军事理论创新要避免“大陆军”也要破除“陆军无用”,” People.cn, February 23, 2016, accessed April 21, 2018, <http://military.people.com.cn/n1/2016/0223/c1011-28142430.html>.

⁷¹ Raymond T. Odierno, James F. Amos, and William H. McRaven, Strategic Landpower; Winning the Clash of Wills (Washington, DC: May 6, 2013), www.arcic.army.mil/app_Documents/Strategic-Landpower-White-Paper-06MAY2013.pdf.

service branch for any country that wishes to be an effective military power. While the purpose of this thesis is not to explicitly argue the modern relevance of the PLA Army, there is a foundational assumption of this research: that PLA Army is an important institution, and its reforms need to be studied and recognized.

4.1.2: Strategic Objectives of PLAA and PLAA Reform

In a previous section, the literature review extrapolated the main strategic objectives of military reform. This section will go through several of the publicly released white papers already mentioned in the literature review. Further analysis will target the specific objectives of PLAA reform. This thesis covers military reforms spanning over a decade, during which the CCP has released multiple white papers regarding PLAA advancements. An immediate glance over the available literature demonstrates a strict level of consistency between the policy papers and between Hu Jintao's and Xi Jinping's administration.

As seen below, the major reform goals of the PLAA have been to make its units smaller and more “modular” in order to fulfill the goal of “trans-regional mobility” rather than “regional defense”.⁷² In addition, there has been an increased emphasis on the aviation corps of the PLAA and enhanced combined arms capabilities. These reform objectives target military characteristics of versatility and precision as reflected in the *2015 China's Military Strategy*, “multi-dimensional, trans-theater, multi-functional and sustainable operations.”⁷³ The table below lists the major security threats within each white paper which represents China's rationale and legitimization for the mobilization of resources to reform the PLAA.

⁷² "China's Military Strategy," Ministry of National Defense of the People's Republic of China, 2015, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768294.htm.

⁷³ Ibid.

Figure 6 - White Paper Excerpts for PLAA Reform/Security Concerns

| White Paper Selections of PLAA Reform/Security Concerns | | |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Reform Goals | Security Concerns |
| China's National Defense Policy 2008 | “In recent years, in line with the strategic requirements of mobile operations and three-dimensional offense and defense, the Army has been moving from regional defense to trans-regional mobility. It is gradually making its units small, modular and multi-functional in organization through appropriate downsizing and structural reform. It is accelerating the development of aviation, light mechanized and information countermeasure forces, and gives priority to the development of operational and tactical missile, ground-to-air missile and special operations forces, so as to increase its capabilities for air-ground integrated operations, long-distance maneuvers, rapid assaults and special operations.” | The border and coastal defense force of the Army, under the leadership of general headquarters/departments, military area and provincial military commands, is the mainstay for safeguarding national sovereignty and territorial integrity, and maintaining security and stability in border and coastal areas. In recent years, adhering to the principles of placing equal emphasis on land and sea, strengthening border defense by means of science and technology, giving priority to key projects and promoting coordinated development, the border and coastal defense force has focused on combat readiness, and comprehensively enhanced its reconnaissance and surveillance, command and control, quick response and defensive operations capabilities.” |
| China's National Defense Policy 2010 | “In line with the strategic requirements of mobile operations and tri-dimensional offense and defense, the PLA Army (PLAA) has invested additional efforts in reform, innovation and development, and advanced the overall transformation of the service. The PLAA has emphasized the development of new types of combat forces, optimized its organization and structure, strengthened military training in conditions of informationization, accelerated the digitized upgrading and retrofitting of main battle weaponry, organically deployed new types of weapon platforms, and significantly boosted its capabilities in long-distance maneuvers and integrated assaults.” | “The armed forces are mainly tasked to safeguard the border, coastal and maritime security, and guard against, stop and subdue such activities as foreign intrusions, encroachments, provocations and cross-border sabotage.” |
| The Diversified Employment of China's Armed Forces 2013 | “In line with the strategic requirements of mobile operations and multi-dimensional offense and defense, the PLAA has been reoriented from theater defense to trans-theater mobility. It is accelerating the development of army aviation troops, light mechanized units and special operations forces, and enhancing building of digitalized units, gradually making its units small, modular and multi-functional in organization so as to enhance their capabilities for air-ground integrated operations, long-distance maneuvers, rapid assaults and special operations.” | “With a borderline of more than 22,000 km and a coastline of more than 18,000 km, China is one of the countries with the most neighbors and the longest land borders. Among all China's islands, more than 6,500 are larger than 500 square meters each. China's island coastline is over 14,000 km long...They are responsible for defense and administrative tasks such as safeguarding the national borders, coastlines and islands, resisting and guarding against foreign invasions, encroachments and provocations, and assisting in cracking down on terrorist sabotage and cross-border crimes. The border and coastal defense forces focus on combat-readiness duties, strengthen the defense and surveillance of major directions and sensitive areas, watercourses and sea areas in border and coastal regions, maintain a rigorous guard against any invasion, encroachment or cross-border sabotage, prevent in a timely fashion any violation of border and coastal policies, laws and regulations and changes to the current borderlines, carry out civil-military joint control and management, and emergency response missions promptly, and effectively safeguard the security and stability of the borders and coastal areas. |
| China's Military Strategy 2015 | “In line with the strategic requirement of mobile operations and multi-dimensional offense and defense, the PLA Army (PLAA) will continue to reorient from theater defense to trans-theater mobility. In the process of building small, multi-functional and modular units, the PLAA will adapt itself to tasks in different regions, develop the capacity of its combat forces for different purposes, and construct a combat force structure for joint operations. The PLAA will elevate its capabilities for precise, multi-dimensional, trans-theater, multi-functional and sustainable operations.” | “Maintaining constant combat readiness. China's armed forces will continue to improve its routine combat readiness, maintain a posture of high alertness, and conscientiously organize border, coastal and air defense patrols and guard duties. The PLAA will improve its combat readiness system with inter-connected strategic directions, combined arms and systematized operational support, so as to ensure agile maneuvers and effective response.” |

4.2: Asian Security Concept and Active Defense Concept

The security threats that will be explored in this section fall under the umbrella of the new Asian Security Concept championed by President Xi Jinping. At the 2014 Conference on Interaction and Confidence Building Measures in Asia (CICA), President Xi Jinping indirectly criticizes the current U.S. centered “hub and spokes” alliance system for their Cold War attitude and adherence to the zero-sum game mentality.⁷⁴ The Chinese President goes on to say:

“Security must be equal. Every country has the equal right to participate in the security affairs of the region as well as the responsibility of upholding regional security. No country should attempt to dominate regional security affairs or infringe upon the legitimate rights and interests of other countries.”⁷⁵

While this statement does not specifically mention the U.S., it can be inferred that China views the dominating U.S. role in Asia-Pacific security as unwelcome and threatening presence. However, President Xi Jinping tempers these implicit critiques by promoting security cooperation between all countries around the world. He reiterates that China does not want shut out foreign countries out, rather, he believes that Asian countries should have a more definitive role in their own security issues.

“The final analysis, it is for the people of Asia to run the affairs of Asia, solve the problems of Asia and uphold the security of Asia. The people of Asia have the capability and wisdom to achieve peace and stability in the region through enhanced cooperation.”⁷⁶

This conclusive comment reiterates the Chinese idea that Asian countries need to have the capabilities and be responsible enough to contend with their own security threats. President

⁷⁴ Adam Liff, China and the US Alliance System, *The China Quarterly*, 233, (2018): 137, accessed March 25, 2018. doi:10.1017/S0305741017000601.

⁷⁵ President Xi Jinping, “New Asian Security Concept for New Progress in Security Cooperation,” May 21, 2014, accessed April 22, 2018, http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1159951.shtml.

⁷⁶ Ibid.

Xi Jinping also goes to great lengths to be inclusive of other Asian countries, following a security cooperation framework guided by the United Nations Charter and Five Principles of Peaceful Co-existence.⁷⁷

The Asian Security Concept provides a contextual background for the Chinese response to security threats through military reform. Rather than relying on an outside force to provide a security blanket for the Asia-Pacific region, China seeks to have the capabilities necessary to achieve their own security. As it stands, the Chinese government believes that the current PLA force needs to upgrade its military capabilities before the PLA can comfortably provide the defense necessary to deal with national security needs. President Xi Jinping hopes that by the PLA will transform into a world-class force by the mid-21st century, implying that the PLA still has to undergone much reform.⁷⁸ China attempts to further justify the buildup of military arms and reform with the Chinese strategic concept of active defense.

The strategic theory of active defense is a recurring term in Chinese military circles. According to the 2015 China's Military Strategy, active defense is defined by the following excerpt:

“Adherence to the unity of strategic defense and operational and tactical offense; adherence to the principles of defense, self-defense and post-emptive strike; and adherence to the stance that "We will not attack unless we are attacked, but we will surely counterattack if attacked.””

In essence, the objective of active defense against security threats in accordance with the Asian Security Concept provides China a major component of their self-justification for continued military reform.

⁷⁷ Nidhi Prasad, "Understanding China's Foreign Policy Perspective," East Asia Forum, December 4, 2015, accessed April 20, 2018, <http://www.eastasiaforum.org/2015/12/04/understanding-chinas-foreign-policy-perspective-2/#more-48593>.

⁷⁸ "Full Text of Xi Jinping's Report at 19th CPC National Congress," Xinhua.net, November 3, 2017, accessed February 21, 2018, http://www.xinhuanet.com/english/special/2017-11/03/c_136725942.htm.

4.3: What is the threat level/security environment for the PLAA according to China?

The first question that must be addressed is the threat level for the PLA. According to Susan L. Craig of the SSI, there are a number of both traditional and nontraditional threats that China faces.⁷⁹ The Chinese must be able to protect their maritime economic trade interests, prevent Taiwan from declaring independence, protect their 8000 miles of coastline, and defend against U.S. power projection to name a few.⁸⁰ The PLA has security threats specific to each service branch; this thesis will individually consider several of the major land based threats that the PLA Army face in accordance with the security concerns listed in Figure 4.

Land-based security threats to the PLA Army are referred to as a general category, but CCP white papers refrain from explicitly listing specific nations and external actors. The following list is pulled from Figure 4 and provides the potential threats the PLAA believes they may face:

Non-traditional Threats

- ➔ Unstable border and coastal areas
- ➔ Cross-border sabotage/crimes
- ➔ Terrorist sabotage

Traditional threats

- ➔ Violation of border/coastal policies/laws/regulations
- ➔ Foreign intrusions
- ➔ Encroachments and Provocations

In general, this list suggests a lack of immediate and actively pressing security threats to the PLAA within the last decade. Aside from small United Nations missions, the PLAA has not engaged in large scale warfare since the Sino-Vietnamese War in 1979 which only lasted a

⁷⁹ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: U.S. Army War College, 2007), vii.

⁸⁰ Ibid., 26-26.

month.⁸¹ While there have been rising tensions amongst religious extremists and acts of violence in the Xinjiang Province as well as the South China Sea, China faces no active external threats.⁸² The *2015 Chinese Military Strategy* exhibits the same understanding, “With a generally favorable external environment, China will remain in an important period of strategic opportunities for its development, a period in which much can be achieved.”⁸³ Even though potential threats are all listed as hypotheticals, China has accelerated their military reform. This period of relative peace is an opportunity for the PLA to upgrade its capabilities in anticipation of conflict escalation.

Outside of official CCP white papers, there are several state-sponsored newspapers and Chinese military analysts that are more specific when referring to potential external threats. The most commonly referred source is *The Science of Military Strategy (SMS)*, the latest edition published in 2013 by the PLA Academy of Military Science (PLAAMS). PLAAMS was ranked the 4th most influential think tank in China by the China Internet Information Center (China.org.cn), a government sponsored website on Chinese affairs and news.⁸⁴ The PLAAMS reports directly to the CMC and is tasked to research matters such as, “defense and armed forces development, drafts and modifying military doctrines, regulations and laws, and provides strategic advice and consultation for military policymakers.” Consequently, many PLA analysts from both the West and China consider the *2013 SMS* to be an authoritative text

⁸¹ David C. Gompert, Hans Binnendijk, and Bonny Lin, *Blinders, Blunders, and Wars: What America and China Can Learn* (Santa Monica: RAND, 2014), 117.

⁸² Robbie Gramer, "The Islamic State Pledged to Attack China Next. Here's Why," *Foreign Policy*, March 1, 2017, accessed April 16, 2018, <http://foreignpolicy.com/2017/03/01/the-islamic-state-pledged-to-attack-china-next-heres-why/>.

⁸³ "China's Military Strategy," Ministry of National Defense of the People's Republic of China, 2015, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768294.htm.

⁸⁴ 蔺丽瑶, "Top 10 Think Tanks in China," China.org.cn, September 26, 2011, accessed May 15, 2018, http://www.china.org.cn/top10/2011-09/26/content_23491278_7.htm.

on Chinese military strategy. The 2013 SMS summarizes four major types of potential threats that the PLA faces:

#1. 大规模、高强度的防卫战争。在我国和平发展的关键阶段，不排除霸权国家以迟滞或打断我国崛起进程为目的率先挑起战争。战争的起因可能是危机失控，逐步升级，也可能是预有图谋，突如其来。此类战争爆发概率低，但危险指数高。

#2. 较大规模、较高强度的反分裂战争。在我国和平统一的历史进程中，不排除“台独”势力在国际反华势力支持下一意孤行，越过我《反分裂国家法》所规定的“红线”，我被迫以武力打击“台独”势力、维护国家统一。这将是一场典型的政治军事仗，并须高度防备外敌军事干预。此类行动危险指数与爆发概率均较高，是我军事斗争长期准备的目标。以上两类战争(军事)行动，将是在信息化条件下进行的高端的局部战争。

#3. 中小规模、中低强度的自卫反击作战。这是针对周边主要对于挑起的信息化条件下中端类型的局部战争。一是因岛屿被侵占、海上划界纠纷激化、大量海上油气资源被掠夺，在海上方向引发的武装冲突和局部战争;二是因陆地边界划界问题引发的边境反击作战;三是由邻国政局不稳，爆发战乱引发的边境封控作战行动。此类行动危险指数与爆发概率均为中等，但有上升的趋势。

#4. 小规模、低强度的反恐、维稳、维权作战行动。这是较低等级的战争(军事)行动，非战争军事行动中具有对抗性的行动与之紧密相关。一是“三股”势力策动恐怖袭击和骚乱暴乱，为维护国家安全。”⁸⁵

In summary, these potential conflicts include: (1) A large scale, high-intensity defensive war against hegemonic countries that preemptively try to interrupt the rise of China. This scenario is unlikely, but a dangerous possibility; (2) A large scale, high-intensity anti-separatist war with Taiwanese independence forces. This scenario is a relatively high possibility and is also a dangerous situation as foreign nations are likely to intervene; (3) medium to small scale, low-intensity self-defense counterattacks in local wars. This might occur due to island

⁸⁵ 军事科学院军事战略研究部, *战略学* (北京市: Academy of Military Science, 2013), 99.

invasions, exploitation of oil/gas resources, conflict over border demarcations, or by unstable political situations that trickle over borders. The risk level for this scenario is moderate; (4) small-scale, low-intensity, anti-terrorism, peacekeeping, and human rights operations to maintain Chinese stability.

4.4: Land Security and Physical Border Concerns

According to the Diversified Employment of China's Armed Forces, the PLAA plays a central role in protecting 22,000 km of borderline, 18,000 km of coastline, and 14,000 km of island coastline.⁸⁶ Considering the current size of the PLAA, these large swaths of land certainly pose a significant challenge to defend. Still, some geographical context can give security researchers a more nuanced understanding of what the PLAA must face.

There are number different minority groups outside the most common Han (Chinese) majority, many of which reside on the borders provinces of China. Geo-analysts call these areas geographic buffer regions that make use of natural land barriers to provide strategic protection. Three of these regions, Tibet, Xinjiang, and Inner Mongolia are discernible by their ethnic composition. The fourth, Manchuria, is more often defined by its systematic history of being occupied by foreign powers.⁸⁷ The abovementioned qualities characterize these four regions as both geographic and ethnic barriers to outside invasion and terrorism. It is noted that Chinese White Papers often reference separatist forces working for "East Turkistan independence" and "Tibet independence" as threats to national security. However, as these are internal domestic disputes, these threats should hypothetically fall under the

⁸⁶ "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

⁸⁷ "The Geopolitics of China: A Great Power Enclosed," Stratfor, March 25, 2012, accessed May 12, 2018, <https://worldview.stratfor.com/article/geopolitics-china-great-power-enclosed>.

jurisdiction of the People's Armed Police (PAP) force and not the PLAA.⁸⁸

Aside from the coastline, China's border with Vietnam is considered the only geographic barrier that could realistically be invaded by a land-based military force. The Yunnan province border is surrounded by hilly jungles; Tibet's border is protected by the imposing Himalayas; Xinjiang lacks mountainous regions to protect its borders but provides nearly a thousand miles of land between the border and Han Chinese provinces; Inner Mongolia and Manchuria are both characterized as areas that lack significant transportation infrastructure but still demonstrate a degree of risk due to the Korean Peninsula Border and parts of the Russian-China borders.⁸⁹

Even though China has been afforded some geographic features that provide defensive land barriers, the East Asian nation still has the highest number of bordering nations in the world – 14 in total. It should also be noted that there are an additional 8 countries that are China's maritime neighbors or have a stake in the South China Sea. While these maritime security threats would be the focus of the PLAN, the PLAA still has a role to play in island disputes (and of course Taiwan). The following table pulls data from a myriad of sources, to include the EU-Asia Centre think tank, the World Bank, and a relevant (but subjective) "military strength ranking" from Global Firepower.⁹⁰ An exhaustive analysis of China's security threats would consider all 22 nations and the staggering total 8,470,660 active military personnel surrounding the nation. This thesis, however, will only cover nations that

⁸⁸ "China's National Defense in 2010," Ministry of National Defense of the People's Republic of China, March 2011, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778206.htm.

⁸⁹ "The Geopolitics of China: A Great Power Enclosed," Stratfor, March 25, 2012, accessed May 12, 2018, <https://worldview.stratfor.com/article/geopolitics-china-great-power-enclosed>.

⁹⁰ It should be noted that global firepower is not endorsed by any government body and as a private site, is subject to failures of accuracy. Rankings provide a general representation of country's military strength but are subject to change.

China likely perceives as risky security threats. Risk categories are assigned to low, medium, or high classifications. This classification is based on the active relationship between the two countries, the existence (or non-existence) of strategic partnerships, border concerns, and the military size/ranking. Countries that are explicitly named by China in their defense white papers are automatically placed in a higher risk category: such as the United States or Taiwan. Countries that have strong relationships with China, lack border disputes, and generally present a very low risk index do not constitute important security threats.

Figure 7 - Table of Security Threats

| <u>Bordering Country⁹¹</u> | <u>Population</u> | <u>Interstate Tensions</u> | <u>Land Border Length</u> | <u>Active Military Manpower</u> | <u>Global Firepower Ranking</u> |
|----------------------------------------------|--------------------------|-----------------------------------------------------------------------------|----------------------------------|----------------------------------------|----------------------------------------|
| North Korea | 25,368,620 | Demarcation Line Disputes, Nuclear Threats (low risk) | 1,416 km (small border issue) | 945,000 | #18 |
| Russia | 144,342,396 | Strategic and Security Partnership under BRICS (low risk) | 4,300 km (no border disputes) | 1,013,628 | #2 |
| Mongolia | 3,027,398 | Security and Trade Partners after Collapse of Soviet Union (low risk) | 4677 km (no border disputes) | 10,275 | #87 |
| Kazakhstan | 17,794,397 | Increasing trade/security cooperation (low risk) | 1,700 km (no border disputes) | 74,500 | #50 |
| Kyrgyzstan | 6,079,500 | Ethnic tensions and Domestic Turmoil, (moderate risk) | 1,100 km (no border disputes) | 13,700 | #91 |
| Tajikistan | 8,734,951 | Ethnic tensions and Domestic Turmoil (moderate risk) | 414 km (no border disputes) | 7,400 | #96 |
| Afghanistan | 34,656,032 | Increasing trade cooperation, security threats from Taliban (moderate risk) | 210 km (no border disputes) | 200,000 | #71 |

⁹¹ Military Ranking pulled from "Global Firepower - Ranking the World Military Strengths," GlobalFirepower.com - World Military Strengths Detailed, accessed May 10, 2018, <https://www.globalfirepower.com/>; Population Data pulled from "World Bank Group - International Development, Poverty, & Sustainability," World Bank, accessed May 10, 2018, <http://www.worldbank.org/>; Shen, Wenwen. "China and Its Neighbours: Troubled Relations." Eu-Asia Centre. March 1, 2012. Accessed May 10, 2018. http://www.eu-asiacentre.eu/pub_details.php?pub_id=46.

| | | | | | |
|----------------------|---------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------|------|
| Pakistan | 193,203,476 | Economic partnership growing (low risk) | 523 km (no border disputes) | 637,000 | #17 |
| India | 1,324,171,354 | Trade/Economic ties increasing (moderate risk) | 4,057 km (McMahon Line border disputes) | 1,362,500 | #4 |
| Nepal | 28,982,771 | Strong economic ties (low risk) | 1,415 km (no border disputes) | 95,000 | #101 |
| Bhutan | 797,765 | No official ties with China, tense relations (high risk) | 470 km (active border disputes) | 7,500 | #136 |
| Myanmar | 52,885,223 | Economic dependence on China, domestic conflict and refugees (moderate risk) | 2,185 km (no border disputes) | 406,000 | #35 |
| Laos | 6,758,353 | Normalized Diplomatic and Trade relations (low risk) | 505 km (no border disputes) | 30,000 | #117 |
| Vietnam | 94,569,072 | Historically tense relationship, trading partners (low-moderate risk) | 1,300 km (Paracel Islands Dispute) | 448,500 | #20 |
| Indonesia | 261,115,456 | Economic trading partners (low risk) | Maritime Border (Natuna Island Dispute) | 435,750 | #15 |
| Brunei | 423,196 | Economic Trading Partners, Chinese Dependence (low risk) | Maritime Border (no active dispute) | 7,000 ⁹² | N/A |
| Malaysia | 31,187,265 | Energy, Defense, Trading Cooperation (low risk) | Maritime Border (no active dispute) | 110,000 | #44 |
| Philippines | 103,320,222 | Gradually improving relations since President Duterte's appointment (low-moderate risk) | Maritime Border (Scarborough Shoal and Spratly Islands Dispute) | 172,500 | #52 |
| Japan | 126,994,511 | Improving economic ties, poor country perceptions, mistrust of U.S.-Japan relations (moderate risk) | Maritime Border (Senkaku/Diaoyu Island Disputes) | 247,157 | #8 |
| South Korea | 51,245,707 | Strengthening Strategic/Cooperative Relationships, THAAD Disputes (U.S. Military presence – moderate risk) | Maritime Border (no active border disputes) | 625,000 | #7 |
| Taiwan | 23,550,000 | Ongoing Separation tensions, poor diplomatic relationship (high risk) | Maritime Border (one China policy dispute) | 257,500 | #24 |
| United States | 323,127,513 | Interdependent economic relationship, mutual security interests, wary adversaries | Disputes over territorial issues in South China Sea | 1,281,900 | #1 |

⁹² International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 276.

The interstate tensions column from the table broadly separates xCountry-China relationship into three general categories: low, moderate, and high risk. The moderate category can further be separated into non-traditional and traditional security threats:

| <u>Risk Category</u> | <u>Countries</u> |
|----------------------------------------------|--------------------------------------------------------------------------------------------|
| Low Risk: | North Korea, Russia, Mongolia, Kazakhstan, Nepal, Indonesia, Brunei, Malaysia, Philippines |
| Moderate Risk Non-Traditional Threat: | Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, Myanmar |
| Moderate Risk Traditional Threat: | India, Vietnam, Japan, United States, South Korea |
| High Risk: | Bhutan, Taiwan |

It should be noted that this categorization is not mutually exclusive, and countries can pose both traditional and non-traditional threats. This next section will discuss the Moderate and High Risk (traditional threat) countries to China.

4.4.1: Traditional Threat: United States

The moderate (traditional threats) and high-risk countries include India, Vietnam, Japan, the United States, Bhutan, Taiwan, and South Korea. Since the security threat from South Korea is mainly a byproduct of U.S. military presence and the U.S. THAAD deployment, this traditional threat will be removed from analysis. In addition, as Bhutan has an estimated military force of 7,500 active duty soldiers and a low Global Firepower Ranking, this threat will also be removed from analysis. The land-force military capability of the remaining five countries: India, Vietnam, Japan, United States, and Taiwan will be generally covered. The author recognizes that any land-based army still has to deal with potential threats from air-based or sea-based service branches. However, as the army primarily operates on land, the

following sections will focus on the army branch of the listed nations that present the traditional threats that China faces: violation of border/coastal policies/laws/ regulations, foreign intrusions, encroachments and provocations.

United States:

Of the five listed countries, the United States and China likely have the most controversial and convoluted relationship. The two countries are economically interdependent and are each other's top trading partner.⁹³ Their economic success has also pushed the two nations towards competition. Most recently in April 2018, President Trump threatened a potential trade war with China due to what he perceived as unfavorable trade policies to the United States.⁹⁴ The relative power of both countries on the international stage provides the two nations with immense influence over global political issues. Regrettably, as mentioned before, this relationship is often contextualized in the form of the Thucydides Trap. Despite Chinese statements and releases on their active defense policy and a "peaceful" rise, the United States has consistently named China to be a military threat in their white papers. According to an analysis of China's influential elite, there is prevailing perception in China that characterizes the United States as a hegemony.⁹⁵ In the *2010 National Defense Policy*, China asserts that the United States is building up regional military alliances and attempting

⁹³ Alanna Petroff, "These Are America's Biggest Trading Partners," CNNMoney, December 15, 2016, accessed May 15, 2018, <http://money.cnn.com/2016/12/15/news/economy/us-trade-canada-china-mexico/index.html>.

⁹⁴ Ana Swanson and Keith Bradsher, "Trump Doubles Down on Potential Trade War With China," The New York Times, April 05, 2018, accessed May 12, 2018. <https://www.nytimes.com/2018/04/05/business/trump-trade-war-china.html>.

⁹⁵ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), 27.

to enhance their presence in regional security affairs.⁹⁶ This perception leads to China's conclusion that the United States will consider any country capable of challenging their hegemony as a threat, hence the current political climate and the prevalent "China Threat Theory".⁹⁷

Militarily, the United States and China have consistently clashed on the deployment of THAAD in South Korea, the territorial disputes of the South China Sea, the U.S. – Taiwan Arms trading relationship, and the 62,500 U.S. troops stationed in Japan and South Korea.⁹⁸ In addition, as the United States Army is internationally recognized to have the most technologically advanced and combat proficient Army in the world, the PLAA is constantly comparing their own capabilities to the U.S. Army. Accurately measuring any force's military capabilities is an inexact science, but studies have shown that certain metrics are often provide a suitable indication of military strength. Some of the main metrics often used include Defense Budgets, Manpower, Combat RDT&E Institutions, Defense Industrial Base, Warfighting Inventory and Support, Organization and Military Infrastructure.⁹⁹

U.S. Army Budget: \$158,353,823,000 (2018) or 22.7% of Defense Budget.¹⁰⁰

⁹⁶ "China's National Defense in 2010," Ministry of National Defense of the People's Republic of China, March 2011, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778206.htm.

⁹⁷ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), 28.

⁹⁸ Greg Price, "U.S. Military Presence In Asia: Bases, Troops in Japan, South Korea and beyond," Newsweek, May 01, 2017, accessed May 5, 2018, <http://www.newsweek.com/us-military-japan-north-korea-asia-590278>.

⁹⁹ Ashley J. Tellis, *Measuring National Power in the Postindustrial Age*, (Santa Monica, CA: RAND/Arroyo Center, 2000) 133-176.

¹⁰⁰ United States. Comptroller, Office of Undersecretary of Defense, *Comptroller*, by Department of Defense, February 2, 2018, 8-1, accessed April 4, 2018.

Manpower: There is a total Army end-strength of 1,347,300 which includes 475,350 active duty soldiers, 542,550 Army Reserve soldiers, and 343,700 Army National Guard.¹⁰¹ Since 2013, the active army has downsized from 45 Brigade Combat Teams (552,100 soldiers) to 32 BCTs (490,000 soldiers), resulting in a 12% reduction in Army troops.¹⁰²

Combat RDT&E Institutions: The United States Army has invested a total of \$8,636,503,000 during the FY 2018 in a number of combat research institutions focused on research, development, test, and evaluation activities.¹⁰³ This includes the U.S. Military Academy at West Point, a world class military academy that many other military schools model their educational system off of. In addition, the United States has 881 R.O.T.C military programs at different universities and multiple senior military colleges that commissions and around 61% of 5,000-6,000 active duty officers per year.¹⁰⁴ Finally, the U.S. Army enjoys a multitude of powerful resources from government sponsored think tanks, national laboratories, intelligence agencies, and military tech companies.

¹⁰¹ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 45.

¹⁰² C. Todd Lopez, "Brigade Combat Teams Cut at 10 Posts Will Help Other BCTs Grow," www.army.mil, June 25, 2013, accessed May 21, 2018, https://www.army.mil/article/106373/Brigade_combat_teams_cut_at_10_posts_will_help_other_BCTs_grow/.

¹⁰³ United States. Comptroller, Office of Undersecretary of Defense, *Comptroller*, by Department of Defense, February 2, 2018, 8-1, accessed April 4, 2018.

¹⁰⁴ "Source of Commission," CNA Analysis, August 15, 2002, accessed May 5, 2018, <https://www.cna.org/pop-rep/1998/html/4-commission.html>; "Schools That Offer Army ROTC," Ink: Niche Insight Analysis, accessed May 9, 2018, <https://ink.niche.com/schools-offer-army-rotc/>.

Defense Industrial Base: According to the Department of Homeland Security, the U.S. Defense Industrial Base consists of more than 100,000 companies, their subcontractors, as well as a powerful assortment of domestic and foreign entities partnered with the Department of Defense.¹⁰⁵ A number of these commercial firms, such as Boeing, General Dynamics, Lockheed Martin, Northrop Grumman, and Raytheon are responsible for the advanced weaponry and support system within the U.S. Army as well as other service branches.¹⁰⁶ In addition, many of these defense tech firms sell only to the U.S. forces.

Warfighting Inventory and Support: The U.S. Army Aviation branch maintains a large inventory of combat tested and dependable aircraft to include 1,872 UH-60 Black Hawks, 596 AH-64 Apaches, 435 CH-47 Chinooks, 44 OH-58A Kiowas, and an additional 427 Light Helicopters.¹⁰⁷ The U.S. Army also operates an estimated 5,884 M1A1 and M1A2 Abrams, the most lethal and effective modern tank on the battlefield to date. Currently, the U.S. Army is looking to procure 49,099 Joint Light Tactical Vehicles (JLTV) designed to reduce combat risks during HMMWV scouting missions. There are also estimates that the U.S. Army has 35,275 Armored Fighting Vehicles, 963 Self-Propelled Artillery, 1242 Towed Artillery, and 600 Multiple Rocket Launchers.¹⁰⁸ The sheer size of the U.S. Army's modern equipment inventory is staggering and significantly larger than China's, providing the PLAA a sense of

¹⁰⁵ "Defense Industrial Base Sector," Department of Homeland Security, July 06, 2017, accessed May 7, 2018, <https://www.dhs.gov/defense-industrial-base-sector>.

¹⁰⁶ Barry D. Watts, "Sustaining the US Defense Industrial Base as a Strategic Asset," September 2013, accessed March 12, 2018, <https://csbaonline.org/uploads/documents/Sustaining-the-U.S.-Defense-Industrial-Base.pdf>, 1-3.

¹⁰⁷ "U.S. Army," Heritage Foundation, 2016, accessed May 11, 2018, https://s3.amazonaws.com/ims-2016/PDF/2016_Index_of_US_Military_Strength_ASSESSMENT_MILITARY_ARMY.pdf, 231.

¹⁰⁸ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 57.

urgency to match up capabilities. For a full list of all available equipment items in the U.S. Army, please see the open access U.S. Army Weapon Systems Handbook 2016.¹⁰⁹

Organization and Military Infrastructure: The operational U.S. Army is a vast organization, to include 72 posts spanning 33 domestic states, and present in 74 international locations (which accounts for 10 of the 22 countries on China threat table).¹¹⁰ From the following organizational chart: the U.S. Army is split into three major categories of commands. The Army commands provide oversight on specific aspects of Army sections. Army Service Component Commands provide control over operations in geographic areas. Direct reporting units provide special services to the U.S. Army such as medical care or human resources.¹¹¹ Current organizational reforms in the PLAA seem to reflect U.S. Army organizational brigade system.

4.4.2: Traditional Threat: Japan

“Some country has strengthened its Asia-Pacific military alliances, expanded its military presence in the region, and frequently makes the situation there tenser. On the issues concerning China's territorial sovereignty and maritime rights and interests, some neighboring countries are taking actions that complicate or exacerbate the situation, and Japan is making trouble over the issue of the Diaoyu Islands.”¹¹²

¹⁰⁹ United States, U.S. Army, *Army.mil*, 2016, accessed May 12, 2018, <https://www.army.mil/e2/c/downloads/431298.pdf>.

¹¹⁰ "Post Locations," Goarmy.com, accessed May 15, 2018, <https://www.goarmy.com/about/post-locations.html>.

¹¹¹ "The United States Army Organization," *www.army.mil*, accessed May 15, 2018, <https://www.army.mil/info/organization/>.

¹¹² "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

Japan is one of the few countries that Chinese white papers explicitly names as a “troublemaker” in the Asia-Pacific region. Aside from the Senkaku-Diaoyu island dispute, China is cautious about the warmth of the U.S. – Japan relationship. An article from China.org, a state controlled news website, makes the analysis that United States has a degree of control over Japan – and therefore Japan acts as a sort of proxy for U.S. agendas.¹¹³ This conclusion applies especially to Japanese military build-up. As Japan bulks up their military, the PLAA must consider the possibility that Japan is acting on behalf of the U.S. to contain China through military means. If so, how should the PLAA respond?

Outside of the current security climate between China and Japan, the two nations have a historical precedence for conflict and aggression. The Japanese military threat to China is exacerbated by an overwhelmingly negative public sentiment that Chinese citizens have against Japan due to their history of poor relations.¹¹⁴ The horrifying events of the 1937 Nanjing Massacre continue to permeate Chinese sentiments against the Japanese according to a public opinion poll conducted by Peking University and a Japanese think tank.¹¹⁵ In consideration of these social, political, and military factors, the Japanese Ground Self-Defense Force (GSDF) represents a moderate risk to the PLAA.

¹¹³ Ma Shikun, "Does US Really Want to Instigate a China-Japan Maritime War?" China.org.cn, November 29, 2013, accessed May 8, 2018, http://www.china.org.cn/opinion/2013-11/29/content_30745853.htm.

¹¹⁴ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), 60.

¹¹⁵ Ibid., 60.

Japan's Self Defense Budget: According to Japan's Ministry of Defense, the GSDF accounts for 36.1% of defense-related expenditures: 1.77 trillion yen or 16.2 billion USD FY 2017.¹¹⁶

Manpower: There is a total GSDF force of 158,950 soldiers, consisting 150,875 "regular" personnel and 8,075 "ready reserve" personnel – accounting for 62.3% of Japan's total self-defense force. The GSDF also has an additional 46,000 reserve personnel.¹¹⁷ The GSDF force number has stayed fairly stable since FY 2009 (160,108).¹¹⁸

Combat RDT&E Institutions: Strengthening education and research systems is one of the GSDF's primary goals by increasing funding to the National Institute for Defense Studies (to increase international research exchanges), through \$3.7 mil USD to the National Defense Academy, and \$4.75 mil USD to clinical skills labs and military medicine research at the National Defense Medical College.¹¹⁹ In addition, their budget includes the development of 7 new major research and development military projects amounting over \$261 mil USD.¹²⁰

Defense Industrial Base: The modern Japanese defense industry was restarted in 1970, after several types of arms bans and restrictions on the island nation post WWII. Today, Mitsubishi

¹¹⁶ Japan, Ministry of Defense, *Defense Related Expenditures*, 2017, 234, accessed May 2, 2018, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_2-2-4_web.pdf.

¹¹⁷ Japan, Ministry of Defense, *Defense Programs and Budget Request of Japan*, 2017, 41, accessed May 2, 2018, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_2-2-4_web.pdf.

¹¹⁸ *Ibid.*, 41.

¹¹⁹ Japan, Ministry of Defense, *Defense Programs and Budget Bill of Japan*, 2017, 28, accessed May 2, 2018, http://www.mod.go.jp/e/d_budget/pdf/290328.pdf

¹²⁰ Japan, Ministry of Defense, *Defense Programs and Budget Request of Japan*, 2017, 40, accessed May 2, 2018, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_2-2-4_web.pdf.

Heavy Industries, Kawasaki Heavy Industries, and Fuji Heavy Industries produce a large portion of Japanese weapon systems and export their products to countries such as the U.S., France, and Israel. The Japanese Ministry of Defense founded the Acquisition Technology and Logistics Agency (ATLA) in 2015 to streamline defense acquisitions, defense industrial policies, and defense research and development.¹²¹ In addition, since Japanese defense industries have close “production and cooperation agreements” with major U.S. based defense companies – Japan has access to much of the best warfighting inventory and technology in the world.¹²² These advanced capabilities present China with an intimidating threat on its maritime border.

Warfighting Inventory and Support: According to the 2017 Military Balance edition and the Global Firepower, the GSDF operates 690 effective Type 10, Type 90, and Type 74 Main Battle Tanks, 3,178 Armored Fighting Vehicles, 172 Self-Propelled Artillery, 398 Towed Artillery, and 99 Multiple Rocket Launcher Systems.¹²³ Their helicopter fleet includes 104 Attack Helicopters, 44 OH-6D, and 259 transport helicopters. According to their Ministry of Defense, the GSDF is also attempting to acquire an additional 24 Armored Vehicles, 17 Tilt-Rotor V-22 Aircraft and 6 Cargo Helicopters CH-47JA, 14 Companies of Guided Missiles (to

¹²¹ United States, Department of Commerce, *Japan Defense Procurement*, September 25, 2017, accessed May 5, 2018, <https://www.export.gov/article?id=Japan-Defense-Procurement>.

¹²² Elchanan Harel, "Japan: A New Player in the Global Defense Industry," *Israel Defense*, December 28, 2017, accessed May 12, 2018, <http://www.israeldefense.co.il/en/node/32403>.

¹²³ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 300; "Global Firepower - Ranking the World Military Strengths," *GlobalFirepower.com - World Military Strengths Detailed*, accessed May 10, 2018, <https://www.globalfirepower.com/>.

include PAC-3MSE Patriot Systems, Type 3 middle range STA, and Type 11 short-range STA missiles), 44 Tanks, and 31 additional Howitzers.¹²⁴

Organization and Military Infrastructure:

The GDSF is divided into 6 major armies based on location, the Northern Army, the Northeastern Army, the Eastern Army, the Middle Army, the Western Army, and the Central Readiness Army.¹²⁵ These armies are further broken up into multiple brigades and divisions with tank, infantry, field artillery, antiaircraft, logistics, missile, and Special Operations Regiments.¹²⁶ Currently, there are no GDSF units deployed overseas on UN missions, so the GDSF units are utilized primarily in a defensive fashion.¹²⁷

4.4.3: Traditional Threat: India

India's annual military report describes the India-China border as a peaceful situation, with both sides patrolling only up to their respective "perceptions of the line of actual control (LAC)". The wording also suggests that India and China may have slightly different perceptions of the LAC. Fortunately, the report lists several measures such as the Border Defense Cooperation Agreement (BDCA), new Border Personnel Mechanism (BDM), joint

¹²⁴ Japan, Ministry of Defense, *Japan's Security and Defense Policy*, 2017, 231, accessed May 2, 2018, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_2-2-3_web.pdf

¹²⁵ Japan, Ministry of Defense, *Location of Principal SDF Units*, 2017, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_location1_web.pdf

¹²⁶ Japan, Ministry of Defense, *Organizational Diagram of Self Defense Force*, 2017, http://www.mod.go.jp/e/publ/w_paper/pdf/2017/DOJ2017_diagram_web.pdf

¹²⁷ JiJi, "SDF Still Seeking U.N. Opportunities 25 Years after Peacekeeping Law's Passage," *The Japan Times*, June 17, 2017, accessed May 12, 2018, <https://www.japantimes.co.jp/news/2017/06/17/national/politics-diplomacy/sdf-still-seeking-u-n-opportunities-25-years-peacekeeping-laws-passage/>.

training exercises, and joint humanitarian assistance exercises to bolster intercountry military relations.¹²⁸

India and China are competitive within multiple sectors for resources, economic prowess, and global authority. In 2007, India competed with China for oil and gas reserves with multiple African countries, threatening Chinese economic growth. India has also been vying for increased power in East Asia while pursuing positive relationships with U.S. friendly countries.¹²⁹ China is also wary of strengthening U.S.-Indian relationships such as the recent military pact of Logistics Exchange Memorandum of Agreement (LEMOA) which promotes logistical support and services between U.S. – Indian militaries.¹³⁰ The conventional threat of India's fortifying military with bolstering arms, maritime influence, and nuclear capabilities obliges Chinese military to tread carefully.¹³¹ The fear that China perceives with a rising Indian military is similar to the concern that the U.S. has with a rising Chinese military. However, it should be noted that India's military sits on Chinese borders, while the United States is separated from China by the Pacific Ocean. Finally, the ongoing India-Pakistan border conflict represents a destabilizing regional security issue on the Chinese border.¹³²

¹²⁸ India, Ministry of Defense, *Annual Report*, 2017, 16, <https://mod.gov.in/dod/sites/default/files/AnnualReport1617.pdf>.

¹²⁹ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), 91.

¹³⁰ "Five Reasons Why China Is so Scared of India," *The Economic Times*, March 07, 2017, accessed May 11, 2018, <https://economictimes.indiatimes.com/news/international/world-news/five-reasons-why-china-is-so-scared-of-india/articleshow/57516156.cms>.

¹³¹ Susan L. Craig, *Chinese Perceptions of Traditional and Nontraditional Security Threats* (Carlisle, PA: Strategic Studies Institute, 2007), 87.

¹³² India, Ministry of Defense, *Annual Report*, 2017, 3, <https://mod.gov.in/dod/sites/default/files/AnnualReport1617.pdf>.

Defense Budget: According to the Indian Ministry of Defense, the Indian Army has a FY 2016-17 expenditure of 135416.91 Crore, or roughly 20.015 billion USD. This calculates out to 55.99% of the Indian military's total budget.¹³³

Manpower: The 2017 Military Balance report estimates an active India military manpower of 1,395,100 and a reserve number of 1,155,000. Further breakdown asserts 1,200,000 active Indian Army personnel and 960,000 Army reserve soldiers.¹³⁴

Combat RDT&E Institutions: There are several notable military think tanks in India such as the Institute for Defense Studies and Analysis (IDSA) and the Centre for Joint Warfare Studies (CENJOWS) which are funded by the Ministry of Defense to conduct military research. In addition, there are think tanks that focus on specific military sectors such as the Centre for Land Warfare Studies (CLAWS) for the Army, the Centre for Air Power Studies (CAPS) for the Air Force, and the National Maritime Foundation (NMF) for the Navy.¹³⁵ The leading R&D agency in India is the Defense Research and Development Organization (DRDO), which aims to provide the Army with state-of-the-art communication systems, missiles, sonars, and engineering systems.¹³⁶ The Indian Army also operates several major military academies: The National Defense Academy, the Indian Military Academy, two

¹³³ India, Ministry of Defense, *Budget and Accounts*, 2017, <https://mod.gov.in/dod/budget-and-accounts>.

¹³⁴ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 289.

¹³⁵ Centre for Air Power Studies (CAPS). Accessed May 10, 2018. <http://capsindia.org/about>; Centre for Joint Warfare Studies. Accessed May 10, 2018. <https://cenjows.gov.in/geo-strategic-scans-2.html>; National Maritime Foundation. Accessed May 10, 2018. <http://www.maritimeindia.org/>.

¹³⁶ India, Ministry of Defense, *Annual Report*, 2017, 74, <https://mod.gov.in/dod/sites/default/files/AnnualReport1617.pdf>.

Officer Training Academies, and three Cadet Training Wings.¹³⁷ In total, the Indian Military looks to spend around 2.18 billion USD on research and development – this figure does not include officer training budgets.¹³⁸

Defense Industrial Base: Since 1962, the Indian Department of Defense Production (DDP) has been developing a complex production infrastructure to develop weapons for the Indian Army.¹³⁹ According to 2016-17 figures, state-sponsored Public Sector Undertakings (PSU) and Ordnance Factories Board (OFB) have produced 4.77 billion USD worth of equipment.¹⁴⁰ In addition, the Indian defense industry was opened up to the private sector to improve access to modern technology and to realize the goal of self-reliance. Currently, due to a limited domestic defense manufacturing sector, the Indian Army depends heavily on foreign arms suppliers such as Russia, Israel, and the United States to provide advanced weaponry.¹⁴¹

Warfighting Inventory and Support: The Indian Army Aviation operates a small number of 275 Multirole helicopters to include Dhruv, Lancer, Cheetah, and Chetak designs.¹⁴² These helicopters are generally older and have limited application against modern helicopters. The

¹³⁷ "Training Academies," Join Indian Army, accessed May 10, 2018, <http://joinindianarmy.nic.in/alpha/training-of-academies.htm#12>.

¹³⁸ India, Ministry of Defense, *Budget and Accounts*, 2017, <https://mod.gov.in/dod/budget-and-accounts>.

¹³⁹ India, Ministry of Defense, *Annual Report*, 2017, 52, <https://mod.gov.in/dod/sites/default/files/AnnualReport1617.pdf>.

¹⁴⁰ *Ibid.*, 53.

¹⁴¹ Franz-Stefan Gady, "Russia Remains India's Largest Arms Supplier (For Now)," *The Diplomat*, March 01, 2016, accessed May 12, 2018, <https://thediplomat.com/2016/03/russia-remains-indias-largest-arms-supplier-for-now/>.

¹⁴² International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 291.

Indian army also maintains an estimated 3,024+ main battle tanks, 1,950 of which are the aging Soviet era T-72M1 tanks. The Ministry of Defense is currently in the process of acquiring over 1,700 new generation tanks called the Future Ready Combat Vehicle (FRCV).¹⁴³ Additional figures include over 2,836+ armoured fighting vehicles, 190 Self-Propelled Artillery, 2970+ Towed Artillery, and 192 Multiple Rocket Launcher Systems (MRLS).¹⁴⁴ There are ongoing attempts to procure modern weapons for the infantry, 155mm caliber artillery, multiples rocket systems, advanced helicopters, and to increase production capacities of ordnance factories.¹⁴⁵

Organization and Military Infrastructure: The current Indian Army operates out of six regional command headquarters designated by geographic locations and one additional training command: Northern, Western, Central, Southern, Eastern, and Southwestern. These large commands are gradually being transitioned into more modular units such as the new eight integrated battle groups (IBG), which were created to respond quickly to threats.¹⁴⁶ Additionally in 2014, the Indian Army formally began to acquire “quick-reaction ground offensive capabilities” against China to be stationed along the 4,057km Line of Actual

¹⁴³ Shaurya Karanbir Gurung, "Indian Army May Soon Get New-generation Tanks," The Economic Times, November 10, 2017, accessed May 5, 2018, <https://economictimes.indiatimes.com/news/defence/indian-army-may-soon-get-new-generation-army-tanks/articleshow/61583396.cms>.

¹⁴⁴ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 290; "Global Firepower - Ranking the World Military Strengths," GlobalFirepower.com - World Military Strengths Detailed, accessed May 10, 2018, <https://www.globalfirepower.com/>.

¹⁴⁵ India, Ministry of Defense, *Annual Report*, 2017, 20, <https://mod.gov.in/dod/sites/default/files/AnnualReport1617.pdf>.

¹⁴⁶ Stephen P. Cohen and Sunil Dasgupta, *Arming Without Aiming: India's Military Modernisation* (Washington: Brookings Institution Press, 2010), p. 62.

Control (LAC). These 90,274 soldiers provide an ominous force of “credible deterrence” against the PLAA.¹⁴⁷

4.4.4: Traditional Threat: Taiwan

Of all the listed security threats, Taiwan represents the greatest risk to China and vice versa. In the most recent meeting of the Central Political Committee (CPC), President Xi Jinping proclaimed the following:

“We stand firm in safeguarding China’s sovereignty and territorial integrity, and will never allow the historical tragedy of national division to repeat itself. Any separatist activity is certain to meet with the resolute opposition of the Chinese people. We have the resolve, the confidence, and the ability to defeat separatist attempts for “Taiwan independence” in any form. We will never allow anyone, any organization, or any political party, at any time or in any form, to separate part of Chinese territory from China!”

The rhetoric from Chinese White Papers is very clear on the topic of Taiwan. When considering national unification and territorial integrity, China points out “three forces”: terrorism, separatism, and extremism. Of these “three forces”, the “Taiwan Independence” separatist forces are considered the biggest threat.¹⁴⁸ Consequently, one of PLAA’s major strategic objectives is, “to resolutely safeguard the unification of the motherland.” The field of cross-strait relations is a hefty and heavily nuanced discipline. For the purpose of this thesis, it is only necessary to call attention to the fact that China views Taiwan’s military as a

¹⁴⁷ Rajat Pandit, "Army Kicks off Raising of 2nd Division under Mountain Strike Corps, Plans Exercise in Ladakh," The Times of India, May 29, 2017, accessed May 13, 2018, <https://timesofindia.indiatimes.com/india/army-kicks-off-raising-of-2nd-division-under-mountain-strike-corps-plans-exercise-in-ladakh/articleshow/58884540.cms> (written 2017).

¹⁴⁸ "The Diversified Employment of China's Armed Forces," Ministry of National Defense of the People's Republic of China, April 2013, accessed April 20, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768293.htm.

high-risk security threat if the “Taiwan Independence” movement comes to fruition. Accordingly, the PLAA has directives to obtain the necessary capabilities to prevent a separatist movement.

On the other hand, the ROC also considers the PRC their greatest security threat and military challenge – publishing periodic reports on PLA operations, budget, manpower, and reform trends.¹⁴⁹ Consequently, much of the reform conducted by ROC military forces reflect PRC/PLA advancements. It should be noted that the ROC military lack a degree of transparency and does not regularly publish military statistics to the public. This is likely due to security reasons. Therefore, many of the listed figures below may be inaccurate depending on the source.

Defense Budgets: The current proposal for the 2018 budget for defense spending is 10.7 billion USD, which stands at roughly 2% of Taiwan’s GDP.¹⁵⁰ Budget breakdown for Taiwan’s army is unknown. Increasing the national defense budget is one of President Tsai Ing-wen’s major administration objectives in order to enhance military training and to strengthen Taiwan’s defensive capabilities against China’s PLA.¹⁵¹

Manpower: The Taiwan (Republic of China ROC) Army is estimated to have 130,000 active soldiers and 1,500,000 reserve soldiers. The ROC Army operates a conscription system in which all male citizens between 19 and 36 years of age perform mandatory military

¹⁴⁹ Taiwan, Ministry of National Defense, *National Defense Report*, 2017, 36, <https://www.mnd.gov.tw/NewUpload/歷年國防報告書網頁專區/歷年國防報告書專區.files/國防報告書-106/國防報告書-106-英文版.pdf>.

¹⁵⁰ Matthew Strong, "Taiwan Presents Defense Budget for 2018," Taiwan News, October 7, 2017, accessed May 21 14, 2018, <https://www.taiwannews.com.tw/en/news/3269913>.

¹⁵¹ "More Military Spending on Agenda: Tsai," Taipei Times, October 24, 2017, accessed May 16, 2018, <http://www.taipeitimes.com/News/front/archives/2017/10/24/2003680928>.

service.¹⁵² Length of service depends on date of birth as Taiwan is beginning to phase out conscription into an all-volunteer force.

Combat RDT&E Institutions: Taiwan has seen a gradual increase in think tanks researching on defense strategy and military topics, the latest of which was launched in April 2018: the “semi- official” think tank named Institute of National Security Studies, which will be researching and providing policy recommendations on national security issues.¹⁵³ In addition, there are a number of other defense-related think tanks to include the Taiwan Center of Strategic Studies, Society of Strategic Studies Council for Advanced Policy Studies, and the Institute of Marine Affairs and Policy. Taiwan also operates a number of well- known military training institutes, to include the R.O.C Army Academy, the R.O.C Military Academy, the National Defense University, and the Chung Cheng Armed Forces Prep. School. For the air force and navy, there are also the R.O.C Air Force Academy and R.O.C Naval Academy.¹⁵⁴

Defense Industrial Base: The 2017 Taiwan Quadrennial Defense review states that the defense industry organizational structure is currently being adjusted to improve R&D on military technology for domestic production.¹⁵⁵ Current budget for local development and

¹⁵² Act of Military Service System, Laws & Regulations Database of the Republic of China § Ministry of National Defense (2013). <https://law.moj.gov.tw/Eng/LawClass/LawContent.aspx?PCODE=F0040001>

¹⁵³ "Publicly Funded Security Think Tank to Be Launched Tuesday," FOCUS TAIWAN, April 30, 2018, accessed May 18, 2018, <http://focustaiwan.tw/news/aip/201804300021.aspx>.

¹⁵⁴ "Military Schools in Taiwan," Military School Directory. accessed May 16, 2018. <https://militaryschooldirectory.com/taiwan/>.

¹⁵⁵ Taiwan, Ministry of National Defense, *2017 Quadrennial Defense Review ROC*, 2017, 46, <http://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2000/01/2017-Taiwan-Quadrennial-Defense-Review-QDR.pdf>

production of weapons is 1.77 billion USD, a rise of 397.34 million USD.¹⁵⁶ The leader in Taiwan's defense industry is the Chung Shan Institute of Science and Technology that designs and tests a number of missile and artillery rocket systems. There is also the Aerospace Industrial Development Corporation (AIDC) which helps promote aerospace manufacturing capability in Taiwan. Despite these companies, the majority of Taiwan's military arms is still supplied by the United States.¹⁵⁷

Warfighting Inventory and Support: The ROC Army operates a modest number of 565 Main Battle Tanks (MBT) as well as 625 Light Tanks (LT TK).¹⁵⁸ According to the Federation of American Scientists (FAS), these tanks are mostly older United States technology with limited capabilities against modern tanks.¹⁵⁹ Taiwan has attempted to procure M1 Abrams from the United States, however, that deal has seemed to fallen through. Currently, Taiwan is investing several million USD in order to develop an upgrade for their current 200 M60A3 MBT.¹⁶⁰ The ROC Army have obtained a number of effective attack helicopter systems from the United States to include 67 AH-1W Cobras, 29 AH-64E Apaches, and OH-58D Kiowa Warriors. ROC Army inventory also includes 96 transport

¹⁵⁶ Matthew Strong, "Taiwan Presents Defense Budget for 2018," Taiwan News, October 7, 2017, accessed May 21 14, 2018, <https://www.taiwannews.com.tw/en/news/3269913>.

¹⁵⁷ United States, Department of Commerce, *Diversification and Defense Trade OPPs, January 1, 1999*, accessed May 5, 2018, <https://fas.org/irp/world/taiwan/isar0020.htm>.

¹⁵⁸ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 331.

¹⁵⁹ "Army Equipment," Federation of American Scientists, accessed May 15, 2018, <https://fas.org/irp/world/taiwan/army-inventory.htm>.

¹⁶⁰ Mike Yeo, "Giving up on Abrams Tank Acquisition, Taiwan Moves to Upgrade Its M60A3 Tanks," Defense News, October 06, 2017, accessed May 17, 2018, <https://www.defensenews.com/land/2017/10/06/giving-up-on-abrams-tank-acquisition-taiwan-moves-to-upgrade-its-m60a3-tanks/>.

helicopters to include multiple Chinooks and Blackhawks. The ROC Army also have 1445 Armoured Fighting Vehicles, 448 Self-Propelled Artillery, 1060+ Towed Artillery, and 330 Multiple Rocket Launchers.¹⁶¹ The 2018 budget also lists 105 million USD to purchase new weapons from the U.S. and an additional 86.8 million USD for new soldier's equipment.¹⁶²

Organization and Military Infrastructure: The 2017 Military balance asserts that the ROC Army has 3 corps HQ, 5 defense command HQ and 1 Special Forces/Helicopter Command HQ. Underneath these commands exist 13 combat maneuver brigades, combat support units, and a coast defense battalion. Taiwan's 2017 quadrennial defense review generally states that they are attempting to reform their organizational structure through integrated command and control mechanisms.¹⁶³ There is also an emphasis on enhancing joint operational training through doctrinal upgrades on logistic capabilities (specifics are omitted).¹⁶⁴

4.4.5: Traditional Threat: Vietnam

China and Vietnam have the most established relationship out of the five listed countries. Since the Sino-Vietnamese war of 1979, the two countries have built up economic, trade, and security agreements.¹⁶⁵ The PRC Ministry of National Defense regularly reports

¹⁶¹ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 331.

¹⁶² Matthew Strong, "Taiwan Presents Defense Budget for 2018," Taiwan News, October 7, 2017, accessed May 21 14, 2018, <https://www.taiwannews.com.tw/en/news/3269913>.

¹⁶³ Taiwan, Ministry of National Defense, *2017 Quadrennial Defense Review ROC*, 2017, 46, <http://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2000/01/2017-Taiwan-Quadrennial-Defense-Review-QDR.pdf>

¹⁶⁴ Taiwan, Ministry of National Defense, *2017 Quadrennial Defense Review ROC*, 2017, 49-50, <http://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2000/01/2017-Taiwan-Quadrennial-Defense-Review-QDR.pdf>

¹⁶⁵ Daniel Tretiak, "China's Vietnam War and Its Consequences," *The China Quarterly*, no. 80

on friendly, military cooperation-building meetings between Chinese and Vietnam defense ministers.¹⁶⁶ Vietnam's official diplomatic bluebook hailed 2015 as a year for stable developments, with many positive steps forward.¹⁶⁷ In contrast, the bluebook also mentions that there were "complex developments at sea due to China's illegal actions."¹⁶⁸ For the past three years, the Paracel Islands in the South China Seas has strained Sino-Vietnam relations. In June 2017, tensions culminated in a Chinese ultimatum that forced Vietnam to stop drilling for oil and gas in the South China Sea. Since then, while Sino-Vietnam relations have stagnated, U.S.-Vietnam relations have improved with a 2017 visit from a U.S. aircraft carrier and opening dialogue for improved defense cooperation.¹⁶⁹

As mentioned before, the Sino-Vietnam borders are some of the only land borders that provide direct access into China without significant geographic barriers. While official relations between the two countries seem generally positive and the Vietnamese security threat is low, land borders differences, the South China Sea disputes, and improving U.S.-Vietnam relations are issues that threaten to put China in a cautious position.

(1979): 740, <http://www.jstor.org/stable/653041>.

¹⁶⁶ China, Ministry of National Defense, *Chang Wanquan*, 2018, <http://eng.mod.gov.cn/Database/Leadership/Chang.htm>.

¹⁶⁷ Vietnam, Socialist Republic of Vietnam Government Portal, *Diplomatic Bluebook 2015*, 24, http://www.gov.vn/portal/page/portal/English/publications/publications_details?categoryId=100003069&articleId=10057713.

¹⁶⁸ *Ibid.*, 26.

¹⁶⁹ Eric Beech, and My Pham, "Vietnam Wins U.S. Defense Pledges as Tension with China Grows," Reuters, August 09, 2017, accessed May 11, 2018, <https://www.reuters.com/article/us-usa-vietnam-military/vietnam-wins-u-s-defense-pledges-as-tension-with-china-grows-idUSKBN1AP010>.

Defense Budget: The Military Balance 2017 estimates Vietnam's military budget at 4.01 billion USD. If accurate, Vietnam has quadrupled their defense spending in the past decade from 1.19 billion USD in 2008.¹⁷⁰

Manpower: Vietnam's 2009 White Paper on Vietnam National Defense lists a 450,000 strong active duty force and a 5,000,000 strong additional reserve force.¹⁷¹ It is estimated that the Army manages approximately 412,000 of those soldiers.

Combat RDT&E Institutions: Currently, Vietnam has total 21 military institutions to train officers for multiple branches. Three of these officer training colleges and six of these schools are major academies and report directly to the Ministry of National Defense, The National Defense Academy is the chief state educational institution and is Vietnam's primary location for training "strategic-level officers".¹⁷² The Vietnam Ministry of National Defense also manages several research institutes such as the "Institute for Military Strategy, the Institute of Military Science and Technology, the Institute for Military History, and the Institute for Defense International Relations."¹⁷³

Defense Industrial Base: The U.S. Department of Commerce recently analyzed the Vietnam defense industry and came to the conclusion that, "the lack of private participants and

¹⁷⁰ Vietnam, Socialist Republic of Vietnam Government Portal, *2009 White Paper*, 38, http://www.gov.vn/portal/page/portal/English/publications/publications_details?categoryId=100003069&articleId=10053585

¹⁷¹ *Ibid.*, 69.

¹⁷² *Ibid.*, 79.

¹⁷³ Vietnam, Socialist Republic of Vietnam Government Portal, *2009 White Paper*, 80, http://www.gov.vn/portal/page/portal/English/publications/publications_details?categoryId=100003069&articleId=10053585.

transparency severely restricts defense industry growth.”¹⁷⁴ Currently, the state owns all capital of companies that participate in national defense/security or military technologies. Consequently, foreign investment is highly discouraged. The current defense market is saturated with Russian equipment as seen by the VPA inventory, but U.S. suppliers have slowly made headways in the market through Foreign Military Sales.¹⁷⁵ Aside from improving defensive missile systems for the Army in 2014, much of Vietnam’s defense industry is catered towards advancing capabilities for maritime and airpower.

Warfighting Inventory and Support: The Ground Forces of the People’s Army of Vietnam are equipped with the goal of being “modern, light, and compact” to maximize military capabilities of “high mobility, strong shock and firepower, and fighting in various terrains.”¹⁷⁶ The Vietnamese Army operates 1270 MBT, most of which are Soviet Era built tanks such as the T-62, Type-59, and T-54/55. The Army inventory includes another 620 Light Tanks build by the Soviet Union and PRC. The VPA manages an additional 300 IFV and 1380+ APCs, most of which were also built in the 1950s and 1960s by the Soviet Union and PRC. Their munitions fire store boasts over 3040 artillery pieces to include 30+ self-propelled vehicles, 2300 towed artillery, and 710+ MRL.¹⁷⁷

¹⁷⁴ United States, Department of Commerce, *Vietnam Defense Sector*, July 7, 2017, accessed May 8, 2018, <https://www.export.gov/article?id=Vietnam-Defense-Sector>.

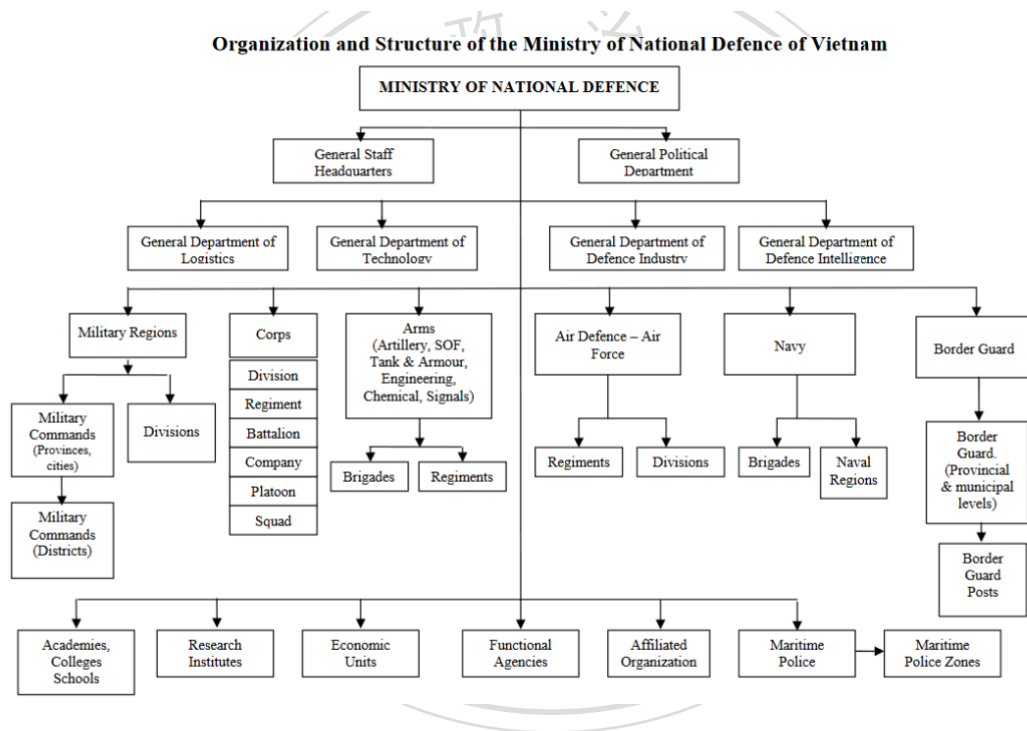
¹⁷⁵ Ibid.

¹⁷⁶ Vietnam, Socialist Republic of Vietnam Government Portal, *2009 White Paper*, 71, http://www.gov.vn/portal/page/portal/English/publications/publications_details?categoryId=100003069&articleId=10053585

¹⁷⁷ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 338-339.

Organization and Military Infrastructure: The Ground Forces in the People's Army of Vietnam is put under direct command of the Ministry of National Defense and consists of seven Military Regions as well as the Hanoi Capital Command. Spread amongst these regions are multiple brigades and regiments under four main Corps units with individual Commander/Vice commanders/Commissar/functional agencies/and other subordinate units.¹⁷⁸

Figure 8 - VPA Organization Chart from MOD



¹⁷⁸ Vietnam, Socialist Republic of Vietnam Government Portal, 2009 White Paper, 70, http://www.gov.vn/portal/page/portal/English/publications/publications_details?categoryId=100003069&articleId=10053585; Image is from pg. 109 of 2009 White Paper.

4.4.6: Nontraditional Threat: Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, Myanmar

This list of five countries represent a palpable security to China's borders and internal domestic issues. The PLA Army lists out three major threats from these kinds of countries: terrorist sabotage, cross-border sabotage, and unstable border/coastal areas. According to the China's Military Strategy (2015):

"Terrorist activities are growing increasingly worrisome. Hotspot issues, such as ethnic, religious, border and territorial disputes, are complex and volatile. Small-scale wars, conflicts and crises are recurrent in some regions. Therefore, the world still faces both immediate and potential threats of local wars."

This excerpt warns against spillover conflicts from neighboring countries, which can also interfere with China's economic projects in the Middle East. Aside from personal domestic and power disputes, these countries largely face destabilizing threat of militant radical Islamic extremism.¹⁷⁹ The continued presence of the Taliban in Pakistan, Afghanistan, Tajikistan and Islamic extremism in Kyrgyzstan/Myanmar present a very complex security environment to Chinese borders.¹⁸⁰ The Islamic State of Iraq and the Levant (ISIS) has even issued a public threat to China in March 2017.¹⁸¹ The estimated 22 million Muslims that mostly live in the Xinjiang province of China also have separatist tendencies that may be exacerbated by the

¹⁷⁹ Daniel L. Byman, "The Islamic State's Long-term Threat to the Middle East," Brookings, July 27, 2017, accessed May 15, 2018, <https://www.brookings.edu/blog/markaz/2017/07/28/the-islamic-states-long-term-threat-to-the-middle-east/>.

¹⁸⁰ Bruce Riedel, "Pakistan, Taliban and the Afghan Quagmire," Brookings, July 28, 2016, accessed May 21, 2018, <https://www.brookings.edu/opinions/pakistan-taliban-and-the-afghan-quagmire/>.

¹⁸¹ Robbie Gramer, "The Islamic State Pledged to Attack China Next. Here's Why," Foreign Policy, March 1, 2017, accessed April 16, 2018, <http://foreignpolicy.com/2017/03/01/the-islamic-state-pledged-to-attack-china-next-heres-why/>.

prevalence of Islamic extremism on Chinese borders.¹⁸² Overall, the erratic and unpredictable nature of these nontraditional threats make them impossible to quantify, and even harder to compare to PLAA reforms. These threats may also involve other security forces such as the PAP.

Overview: China faces a diverse array of traditional and non-traditional security threats on their land/maritime borders. While some of these threats are low-risk, many of the countries listed above have exhibited behaviors that may require PLAA military intervention. The U.S. Army threatens hegemonic control in the Asia-Pacific region, a large Indian Army sits on the border of Tibet, the historical danger of Japan's GSDF presents glimpses of U.S. power projection, Taiwan's Army poses the possibility of separation, and the Vietnam VPA controls an opening to one of China's most vulnerable land barriers.

CCP threat perceptions that are publicized by official defense white papers provide a series of military reform guidelines, deeply intertwining the two concepts. The military capabilities of external threats, in particular the U.S. Army, relentlessly highlights the deficiencies within the PLAA – creating a sense of urgency to develop a “modern” Army. Individually quantified, apart from the U.S. Army, the military capabilities provided above do not constitute a significant threat to the PLAA. Together however, the military land power of all these nations poses an impressive risk element to the PLAA. Overall, the list of land-based security threats is accurately matched to published military threats that the PLAA would have to face, substantiating the validity of the PLAA's perceived security environment.

¹⁸² Jacques Neriah, "The Chinese Approach to Radical Islam," Jerusalem Center For Public Affairs, March 27, 2017, accessed May 16, 2018, <http://jcpa.org/article/chinese-approach-radical-islam/>.

Chapter 5: Analysis of PLA Army Strategic Goals and Military Reform

5.1: PLA Strategists and White Paper Guidelines

Section 4.1 and Figure 4 briefly covered the reform goals of the PLAA from various White Paper sources. To recap, in addition to the overarching objectives to improve PLAA technological innovation, structural organization, military training – the PLAA seeks to become more modular and mobile, improving capabilities for “multi-dimensional offense and defense”. These capabilities are meant to promote the PLAA ability to conduct swift maneuvers between theaters to promote operational characteristics such as “shock value”, “surprise/exploitation”, “quicker tempo and massing concentration”.¹⁸³

According to the most recent edition of the Science of Military Strategy, as a more maneuverable and modular force, the PLAA will be conducting reform to more effectively perform the following strategic objectives:

#1. Participate in large-scale operations in major strategic directions and maintain national unity. The Army is the foundational element of joint operations and will participate in blockade operations, fire strikes, island operations, and defense operations. In particular, during the joint landing on the island, the Army will undertake important tasks such as landing on the beach, assault on the island, urban aggression, and post-war stability. This is an important role in safeguarding the national reunification war.

This strategic task requires PLAA reforms in joint operations with other service branches to conduct blockade, fire, island and defense operations. The security threat is primarily focused on the potential separation movement of Taiwan’s independence movement.

#2. Implement counterattacks on border self-defense to defend the security of the land and the territory. China has a large number of neighboring countries on land, with a border line of more than 22,000 kilometers. Although the possibility of a large-scale land-based invasion war is relatively small, some border delimitation issues remain unresolved. Some frontier areas have been devastating the struggle against encroachment, rubbing, and anti-friction for a long time. The turmoil in neighboring

¹⁸³ See Appendix table for U.S. Army Characteristics

countries threatens the security of our border areas. The threat cannot be ruled out. With border self-defense, the Army units will unite with other military arms, and carry out combat operations such as border control, defense, fighting, intervening in depth, attacking troops, and occupying the control board according to the battlefield and characteristics of different strategic directions. We will actively improve our defensive posture, resolutely safeguard our territorial sovereignty, and restore peace and stability in the border areas.

This strategic objective requires PLAA reforms in maneuverability across trans-theater regions to quickly deploy units from multiple strategic directions on the border areas.

Modularity and multi-functionality allows the PLAA to be more flexible regardless of the battle landscape and environmental conditions. This objective focuses mainly on non-traditional security threats from the border nations of Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, and Myanmar. As referred to in section 4, these nations pose moderate risks due to internal domestic turmoil that China perceives as a potential threat to borders. In addition, this objective refers to the nations of Vietnam and India, countries that still have ongoing border issues with China. While border control typically evokes images of the 1.5 million strong paramilitary People's Armed Police (PAP), it should be remembered that the PAP is fundamentally separate from the PLA and focuses on non-traditional internal security threats.¹⁸⁴ These are not necessarily the same threats that the PLAA is trained for, even though the PAP may be used to augment PLAA forces.

#3. Participate strategically in defensive operations. With the development of potential adversaries' long-distance capabilities, combat forces, and the improvement of precision strike capabilities, strategic locations such as the capital of China may become the key targets of enemy strategy raids in the war. In the strategic defense of the future, the army will be responsible for important protection objectives. While shielding heavy armed groups and preventing the penetration of anti-enemy special forces and other ground-

¹⁸⁴ Kristin Huang, "China Brings People's Armed Police Under Control of top Military Chiefs," South China Morning Post, December 28, 2017, accessed May 10, 2018, <http://www.scmp.com/news/china/diplomacy-defence/article/2125880/china-brings-peoples-armed-police-under-control-top>

based defense combat tasks, the Army also deploys air-to-surface missiles, anti-aircraft artillery, and other air defense weapons, and cooperate with the support of the Air Force, Navy, and the Second Artillery (renamed the Rocket Force) to counter enemy air raids and ensure that anti-airstrike operations are won.

This strategic objective requires major technological military advancements in missiles, anti-air defense, and ground-defensive combat tasks. This objective focuses on the threat of major military powers such as the United States, Japan, and India. It is likely that the proliferation of ICBMs, the radar capabilities of THAAD's, and the impact of U.S. Special Forces in recent engagements has pushed the PLAA to seek military reform. These threats, despite the low likelihood of actually acting on China, points China's own military weaknesses and where reform needs to occur.

#4. Participate non-war military operations. Emphasize characteristics of the Army's adaptability, strong military strength, diversity of arms, flexibility, quick response, and strong control, to assist the relevant state agencies, and to protect against events such as terrorism, unrest, and major natural disasters such as earthquakes and floods to ensure social stability and the safety of people's lives and property. At the same time, the Army is gradually expanding its participation in overseas non-war military operations such as international peacekeeping, international rescue, protection of overseas evacuation, protection of overseas assets and strategic channels, effectively supporting the country. expanding interests and shaping a favorable strategic situation.

This last objective, is the PLAA's attempt to improve their civil-military and international military relations by demonstrating to the global community that their capabilities can be positively utilized to the benefit of others. This task requires specific training and budget allocations to prepare soldiers for non-traditional "war tasks".¹⁸⁵

While the listed tasks from the *2013 SMS* are not official statements from China's Ministry of Defense, they represent a nuanced compilation of the opinions of China's top strategists. After meticulously examining security threats to the PLAA in the previous section,

¹⁸⁵ Major security objectives translated from 军事科学院军事战略研究部, *战略学*, (北京市: Academy of Military Science, 2013), 198-199.

this chapter will qualitatively analyze the various reforms that the PLAA has undergone. Understanding the relationship between China's external security environment and the PLAA reforms will reveal the quality of China's arming decision.

5.2: Structural and Professional Advances in PLAA: Manpower

The PLAA structural command has made extensive changes to the PLAA organization in the past decade. In part, these reforms have been part of a political move to reconsolidate power under the CPC, the CMC and President Xi Jinping.¹⁸⁶ Internal discord and corruption practices in such large forces, especially in the PLAA, are likely to also play a role in President Xi Jinping's decision to reduce PLA size and to centralize his Party's authority over the military institution. Practically, these structural changes have been necessary to reduce overhead costs as well as the inefficiency of several million troops.

Force Reductions

According to Premier Li Keqiang in 2018, the PLA has already finished its most recent manpower reduction to 2 million soldiers.¹⁸⁷ However, it seems unclear how many troops are actually in the PLAA. According to the 2017 Military Balance release by IISS, the PLAN numbers 235,000 soldiers, the PLAAF numbers 398,000 soldiers, the PLASSF numbers 100,000 soldiers, and the PLA Reserves number 510,000 soldiers.¹⁸⁸ While some these

¹⁸⁶ "CMC Issues Guideline on Deepening the Reform of National Defense and Armed Forces," International College of Defense Studies, May 16, 2016, accessed April 21, 2018, http://www.cdsndu.org/html_en/to_articleContent_article.id=40288a8553c564450154ec08fb690409.html.

¹⁸⁷ "China to Be More Open to Foreign Investment, Speed up Beijing-led Trade Bloc and Strengthen Its Military: Li Keqiang," South China Morning Post, March 06, 2018, accessed May 13, 2018, <http://www.scmp.com/news/china/policies-politics/article/2135619/what-will-chinas-parliamentary-session-reveal-about-its>.

¹⁸⁸ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 240.

numbers are sourced from a 2013 CCP White Paper, the PLAN, PLAF, and PLASSF manpower have most likely not changed much. This is because the simultaneous emphasis on these services and overall manpower reduction would prevent sudden increases or decreases in those three services. Common logic assumes that the land forces of the PLAA and the PLA Reserves will most likely face the largest reductions.

Figure 9 - PLA Manpower Table

| | 2007¹⁸⁹ | 2016¹⁹⁰ | 2017/18¹⁹¹ |
|--------------------|---------------------------|------------------------------------------------|---------------------------------------------------------|
| PLAA | 1,600,000 (IISS) | 1,600,000 (IISS) 850,000 (2013 White Paper) | 1,150,000 (IISS) Est. 600,000-800,000 (Recalculated) |
| PLAN | 255,000 (IISS) | 255,000 (2013 White Paper) | 235,000 (IISS) |
| PLAF | 400,000 (IISS) | 398,000 (2013 White Paper) | 398,000 (IISS) |
| PLASSF | Unknown | 100,000 (IISS) | 100,000 (IISS) |
| PLARF | Unknown | Est. 150,000 | 150,000 (IISS) |
| PLA Reserve | Unknown | 510,000 (IISS) | 510,000 (IISS) Est. 410,000-510,000 |
| Total Force | 2,500,000 (CMC) | 2,300,000 (CMC) 2,843,000 (IISS) | 2,000,000 (CMC) 2,693,000 (IISS) |

This table lists manpower estimates of PLA forces over the years. As seen, there seems to be a fairly large discrepancy of number between what the IISS estimates and the numbers that the CMC releases periodically. In addition, it becomes even more confusing when new sites

¹⁸⁹ International Institute for Strategic Studies (IISS), *The Military Balance 2007* (London: Institute for Strategic Studies), 347.

¹⁹⁰ International Institute for Strategic Studies (IISS), *The Military Balance 2016* (London: Institute for Strategic Studies), 278.

¹⁹¹ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 240.

and research articles start using multiple numbers from different sources during inconsistent years. This makes it difficult to estimate the PLAA's actual manpower, as it seems to fluctuate about 40-50% depending on what source is used. This phenomenon is quite troublesome since the belief that China has the largest military in the world is widespread threat perception, and one that may not be necessarily true depending on the sources.

If we follow official Chinese sources (MOD, CMC, State Sponsored news sites), the PLAA is estimated to have between 600,000-800,000 active duty soldiers after the 2016 manpower reduction. Since researchers also do not have access to accurate PLA reserve, PLASSF, or PLARF numbers – the 600,000 is merely an estimate that assumes the majority of the completed 300,000 reductions to have been within PLAA ranks. The IISS does not name a source in its force estimates, making it difficult to substantiate their numbers.

Command Reorganization

Reducing sheer manpower to cut down on inefficient force management is one of many steps that the PLAA has taken to increase efficiency and maneuverability. President Xi Jinping has also taken steps to regroup the current seven regional military area commands (MAC) into new theater commands (TC) managed by the CMC. In February 2016, the Eastern, Southern, Western, Northern, and Central TCs were established with senior PLAA officers at the head of each TC.¹⁹² Each new theater command is set up with a joint operation headquarters in an attempt to separate combat commanding function from troop management

¹⁹² "President Xi Announces Establishment of Five PLA Theater Commands," ChinaMil.com.cn, February 1, 2016, accessed May 19, 2018, http://english.chinamil.com.cn/news-channels/china-military-news/2016-02/01/content_6884069_4.htm.

and administrative functions.¹⁹³ In this manner, each individual service organ (Army, Air Force, Navy, Rocket Force, SSF) under the TCs will be able to better prepare their individual units. These actions will separate decision making, enforcement, and supervision power to create a more sophisticated checks and balances system.¹⁹⁴

In 2016, the PLAA also was finally outfitted with an independent official headquarters comparable to other service headquarters. Prior to this change, the four General Departments were in charge of the PLAA Headquarters. According to the 2013 SMS, the old system of China's leading service organs being commanded by four headquarters and military regions in charge of their respective units is generally ineffective at handling a joint operational command system.¹⁹⁵ This change signifies a shift in attitude to the PLAA by treating as a distinct service rather than an amalgamation of multiple services.¹⁹⁶

The 2013 SMS lists out three major reasons for the new reorganization of command and unit structure:

#1. Classification based on combat function. Battlefield environments can divide different types of troops into amphibians, mountains, deserts, plains, cities, cold regions, and plateaus. Southwestern troops will focus on the construction of mountainous and plateau type units. Southeastern coastal areas will focus on the construction of amphibious, light, and airborne types of troops. The northeast will focus on the

¹⁹³ "Army adjustment and establishment completed in five Theater Commands," ChinaMil.com.cn, February 4, 2016, accessed May 19, 2018, http://english.chinamil.com.cn/news-channels/china-military-news/2016-02/04/content_6890499.htm

¹⁹⁴ "Xi Urges Breakthroughs in Military Structural Reform," Xinhua.net, November 26, 2015, accessed May 15, 2018, http://www.xinhuanet.com/english/2015-11/26/c_134859089.htm.

¹⁹⁵ 军事科学院军事战略研究部, *战略学*, (北京市: Academy of Military Science, 2013), 198-208.

¹⁹⁶ Kenneth W. Allen, Dennis J. Blasko, and John F. Corbett, Jr. "The PLA's New Organizational Structure: What Is Known, Unknown and Speculation, Parts 1 & 2," Jamestown.org, accessed May 12, 2018, https://jamestown.org/wp-content/uploads/2016/02/Updated_The_PLA_s_New_Organizational_Structure_-_What_is_Known_Unknown_and_Speculation_Parts_1_and_2.pdf.

construction of alpine and heavy forces, and the north will focus on the construction of traditional troops moving on plains.

#2. Classification based on task nature. Larger garrison troops such as heavy brigades that target specific areas of combat operations may be deployed in various mission areas to independently perform tasks such as maintaining the situation and responding to medium and low-intensity conflicts. Medium and lighter brigade-level units will deploy from strategic locations and transportation hubs to carry out support missions and temporary assignments.

#3. Classification according combat readiness. Troops are divided into task forces and mobile units, with periodic rotations to promote proper usage of troops.¹⁹⁷

The 2013 SMS makes it clear that the organizational changes are specific in nature and targeted to achieve precise objectives. Troops will be trained to be versatile and effective in their respective threat environments. These classifications and organizational reforms indicate a shift of focus for the PLAA. Reforms are conducted in response to specific threat environments rather for the sake of simple arms-building. In April 2017, it was announced that the previous 18 army groups will be reorganized into 13 army groups in an attempt to emphasize quality over efficiency.¹⁹⁸ By reducing large group armies and shifting from a corps-division-regiment-battalion to a corps-brigade-battalion structure, the PLAA is able to better achieve their goal of a more mobile force across trans-theater regions to combat threats from all strategic directions.¹⁹⁹

¹⁹⁷ 军事科学院军事战略研究部, *战略学*, (北京市: Academy of Military Science, 2013), 201-202.

¹⁹⁸ "China to Regroup PLA Army," Chinamil.com.cn, April 27, 2017, accessed May 16, 2018, http://eng.chinamil.com.cn/view/2017-04/27/content_7580712.htm.

¹⁹⁹ 军事科学院军事战略研究部, *战略学*, (北京市: Academy of Military Science, 2013), 201.

5.3: Technological Advances in PLA Army: Equipment

Military technological reform immediately evokes images of new J-20 stealth fighters and the very impressive Liaoning aircraft carrier. Since the PLAAF and PLARF and PLAN are all on cutting edge of new-domain battle technology, the scale of their military reforms is much different than the PLAA. After all, the majority of PLAA individual soldiers only carry a QBZ-95 5.8mm carbine.²⁰⁰ Over the past decade, by comparing statistics between the 2007 and 2017 PLAA inventory, there has been an overall decrease in active equipment. Rather as a sign of weakness, by watching how the weapon types have changed – there is a trend towards effective and modern weaponry over defunct and old equipment.²⁰¹

The development of the PLAA's equipment structure is crucial to reducing what the Chinese call the “代差” – which is the act of weakening weapons as other countries develop their military capabilities. The 2013 SMS lists out three major tasks to accelerate the development of Army weapons and equipment.

#1. Improve Army's equipment structure. Use active research and development to increase proportion of new types of mechanized equipment. Upgrade systems to realize equipment informationization, increase Army's early warning systems, air defense systems, rocket artillery, precision strike forces, development of special operation, information network warfare equipment, aviation helicopters etc.

#2. Highlight integration of command system by improving network systems. Create compatible systems between multiple service branches: PLAN, PLAAF, PLARF. (summarized to improve command, control, communications, computers, intelligence, surveillance, and reconnaissance or C4ISR, the systems used to collect and disseminate information).

²⁰⁰ Ben Lowsen, “Overview: China's People's Liberation Army Equipment at a Glance,” The Diplomat, March 9, 2016, accessed May 12, 2018, <https://thediplomat.com/2016/03/overview-chinas-peoples-liberation-army-equipment-at-a-glance/>.

²⁰¹ Overview of PLAA Equipment from *The Military Balance* 2007-2017

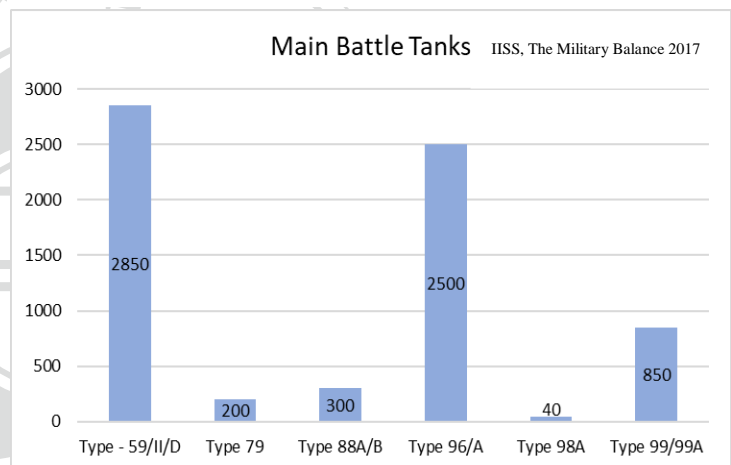
#3. Improve Army's equipment management mechanism. Establish a standardized R&D model for required weapons and equipment. Reduce number of similar weapons, achieve standardization and adaptability of current Army equipment, increase ease of use and maintenance of weaponry.

These next few sections will explore the status of current major weapon systems and have they have slowly changed to adapt to PLAA security threats and strategic objectives over the years.

Figure 10 - PLAA Tank Graph

Tanks: "The armored component has strengthened the development of digitized units, accelerated the mechanization of motorized units, and improved its combat system, which combines heavy, light, amphibious and air-borne assault forces."²⁰²

Current conflicts in the Middle East have shifted the focus from traditional tank warfare into urban operations and Special Forces units. However, in a defensive war for China, tank warfare would likely be a great asset. China is considered to be a "tank heavy" army, with an estimated 7,390 tanks in their equipment inventory. 6740 of these are Main Battle Tanks, and the other 650 are Light Tanks.²⁰³



Even though the PLAA has a large tank inventory, only about 50% of their tanks, Type

²⁰² "China's National Defense in 2010," Ministry of National Defense of the People's Republic of China, March 2011, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778206.htm.

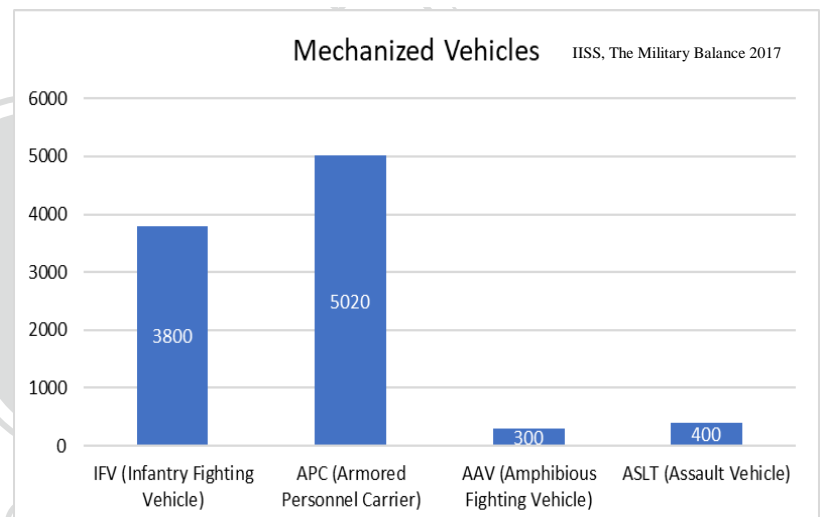
²⁰³ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 280.

96, Type 98, and Type 99 are considered to be modern tanks. The PLAA will likely continue to procure more modern tanks to phase out older types. Advanced drone research being done on driverless tanks boasts capabilities that could be equipped with artificial intelligence.²⁰⁴ In addition, many of the PLAA's lighter tanks are being developed to be used as fire support weapons that can traverse difficult terrain such as along the Indian border in the Himalayas or in forest terrain near Vietnam and Myanmar.²⁰⁵ This tank, supposedly named ZTQ-105, is a leader in its field of lighter armored fighting vehicles in rough terrain and will provide the PLAA a strong asset against border tensions.²⁰⁶

Figure 11 - PLAA Mechanized Vehicles Graph

Mechanized Vehicles

Despite their prowess on the battlefield, tanks are often heavy and unwieldy – a detrimental characteristic to the PLAA's desire to become flexible and maneuverable. The PLAA's Mechanized Infantry Units have



made great progress in recent years by combining Chinese and Russian technology to create

²⁰⁴ “China trials unmanned tanks in latest modernisation push,” Channel NewsAsia, March 21, 2018, accessed May 15, 2018, <https://www.channelnewsasia.com/news/asia/china-trials-unmanned-tanks-in-latest-modernisation-push-10061894>.

²⁰⁵ Leo Timm, “5 Unique Chinese Weapons (and Why They’ve Built Them),” The Epoch Times, January 30, 2016, accessed May 14, 2018, https://www.theepochtimes.com/five-unique-chinese-weapons-and-why-theyve-built-them_1953284.html.

²⁰⁶ David Axe, “China’s Got a New Mountain Tank,” Medium, January 9, 2015, accessed May 10, 2018, <https://medium.com/war-is-boring/chinas-got-a-new-mountain-tank-678ab544021c>.

highly effective and adaptable armored fighting vehicles.²⁰⁷ A large number of the PLAA's fighting vehicles are amphibious and are equipped with technology such as night vision, communications systems, and satellite navigation.²⁰⁸ Of all the weapon categories, the PLAA's mechanized vehicles seems to have increased the most. APC numbers have surged from 3500 to over 5020 carriers from FY 2007.²⁰⁹

The PLAA has recently added 500 ZBL-09, an 8*8 APC that is fully amphibious and can be fitted with a 122mm howitzer.²¹⁰ This vehicle has also been updated multiple times to include the impressive VN1 with an unmanned turret and the "tank-destroyer" ST1.²¹¹ The PLAA also developed the ZBD-04A in 2007, a new and improved infantry fighting vehicle to provide exceptional fire support and to carry infantry safely into battle. These additions and improvements in lighter armored fighting vehicles and APCs are an indication of the PLAA's commitment to improving maneuverability and adaptability. In contrast, the U.S. Army is still struggling to develop an effective infantry fighting vehicle after the controversial M2 Bradley

²⁰⁷ Gaurav Sharma, "People's Liberation Army Ground Forces Modernisation - An Assessment," *Scholar Warrior*, Spring 2012, 47, accessed May 8, 2018, www.claws.in/images/journals_doc/SW J.62-84.pdf.

²⁰⁸ Gaurav Sharma, "People's Liberation Army Ground Forces Modernisation - An Assessment," *Scholar Warrior*, Spring 2012, 48, accessed May 8, 2018, www.claws.in/images/journals_doc/SW J.62-84.pdf.

²⁰⁹ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 347.

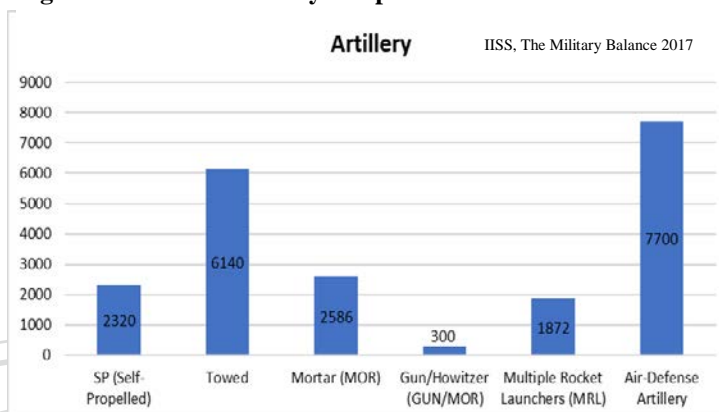
²¹⁰ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 280.

²¹¹ "Has Anyone Noticed China's New Tank Destroyers?" 21AAR, March 5, 2014, accessed May 10, 2018, <https://21stcenturyasianarmsrace.com/2014/03/05/has-anyone-noticed-chinas-new-tank-destroyer/>; "VN1 8*8 Armoured Vehicle," Army Recognition, March 26, 2018, accessed May 8, 2018, https://www.armyrecognition.com/chinese_china_army_wheeled_armoured_vehicle_uk/vn1_8x8_wheeled_armored_vehicle_apc_technical_data_pictures.html.

and the “Interim” Armored Vehicle known as the Stryker.²¹²

Artillery: “The artillery component has been working on new types of weapons, equipment, and ammunition with higher levels of informationization, forming an operational and tactical in-depth strike system, and developing the capacity to carry out precision operations with integrated reconnaissance, control, strike and assessment capabilities.”²¹³

Figure 12 - PLAA Artillery Graph



In 2008, the China’s *National Defense Policy* directed the PLAA to “give priority to the development of operational and tactical missile[s], ground-to-air missile.”²¹⁴ While the PLARF operates China’s ballistic missiles, the majority of the PLA’s conventional land missiles are commanded by the PLAA. The PLAA maintains a large equipment inventory of over 13,218 pieces of artillery. Since 2007, the entire inventory of PLAA artillery has been overhauled to include new generation self-propelled howitzers and multiple rocket launchers.²¹⁵

²¹² The Stryker was originally designed to be a temporary vehicle to bridge the gap between heavy and light IFV. However, it stayed due to cancellation of the Future Combat Systems program; S. Lucas, *HELL ON WHEELS: The U.S. Army’s Stryker Brigade Combat Team*, Report, Command and Staff College, Marine Corps University, February 8, 2005, accessed May 7, 2018, www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA505224&Location=U2&doc=GetTRDoc.pdf.

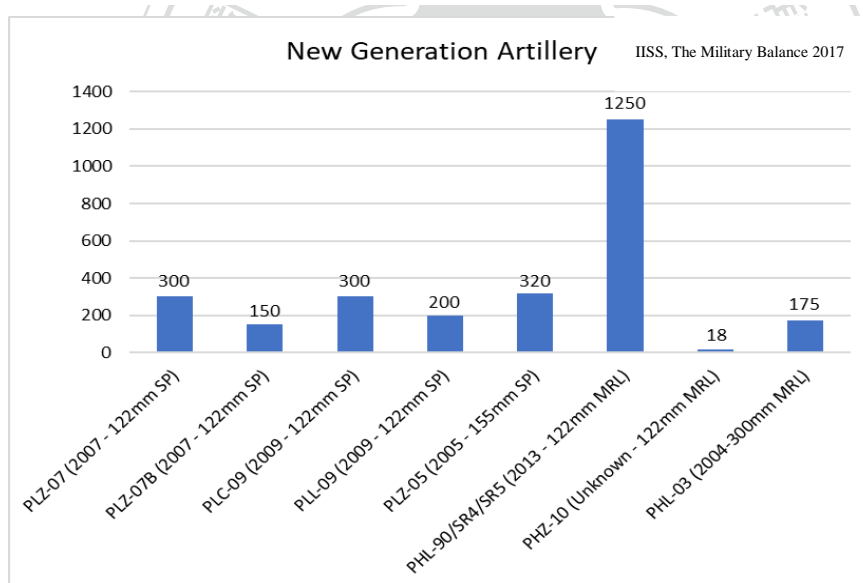
²¹³ “China’s National Defense in 2008,” Ministry of National Defense of the People’s Republic of China, January 2009, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778231.htm.

²¹⁴ “China’s National Defense in 2008,” Ministry of National Defense of the People’s Republic of China, January 2009, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778231.htm.

²¹⁵ International Institute for Strategic Studies (IISS), *The Military Balance 2017* (London: Institute for Strategic Studies), 280.

Towed artillery pieces have stayed relatively stagnant and have not been upgraded for several decades. For instance, there are still some 2,106 operational PL-66's, a towed Soviet-era howitzer built in the 1950s.²¹⁶ The emphasis on new generation SP artillery emphasize quickness, maneuverability, and firing range. In addition, many of these newly developed artillery systems are equipped with network controls to integrate into C4ISR systems. For instance, the PLZ-52 is the PLAA's flagship 155mm self-propelled gun howitzer and its fire control system allows it to be easily incorporated into C4ISR systems. The PLAA believes their new MRL systems to be some of the most advanced in the world, "strong in terms of automation, computerization, and firepower."²¹⁷

Figure 13 - PLAA New Generation Artillery Graph

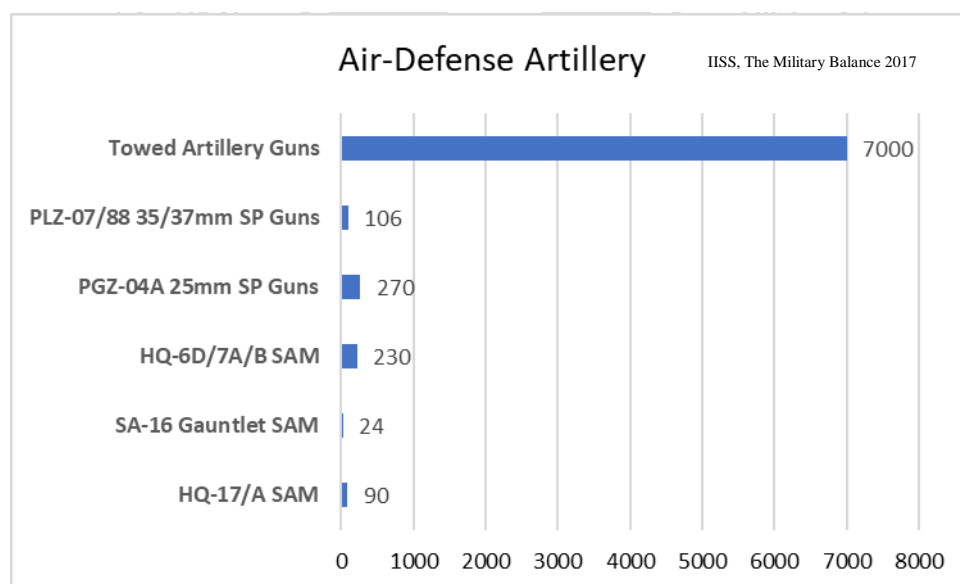


²¹⁶ "PL-66," Military-Today, accessed May 13, 2018, http://www.military-today.com/artillery/pl_66.htm; "Chinese Army China. Military Equipment Armoured Armored Vehicles Land Forces," Army Recognition, March 14, 2008, accessed May 8, 2018, http://www.armyrecognition.com/china/chinese_army_china._military_equipment_armoured_armored_vehicles_land_forces.html.

²¹⁷ Zhao Lei, "China's Artillery Force Boasts High Accuracy," AsiaOne, August 17, 2015, accessed May 15, 2018, <http://www.asiaone.com/asia/chinas-artillery-force-boasts-high-accuracy>.

The PLAA inventory of larger caliber weapons with 7,700 anti-aircraft artillery pieces is an impressive number. This inventory includes 270 dual 35mm PGZ-07, the HQ-7B defense system, and the self-propelled 25mm PGZ-04 which can take down helicopters and cruise missiles.²¹⁸ What is immediately noticeable from the Air-Defense Artillery graph is the high number of towed artillery guns which considered to be older and with low maneuverability ratings. However, the PLAA is investing heavily into Surface-to-Air Missiles (SAM) such as the HQ-16/17 which are designed to be, “modular and possess all-weather, all-direction and multidirectional interception capabilities, as well as resistant to electronic counter-measures (ECM).”²¹⁹

Figure 14 - PLAA ADA Graph



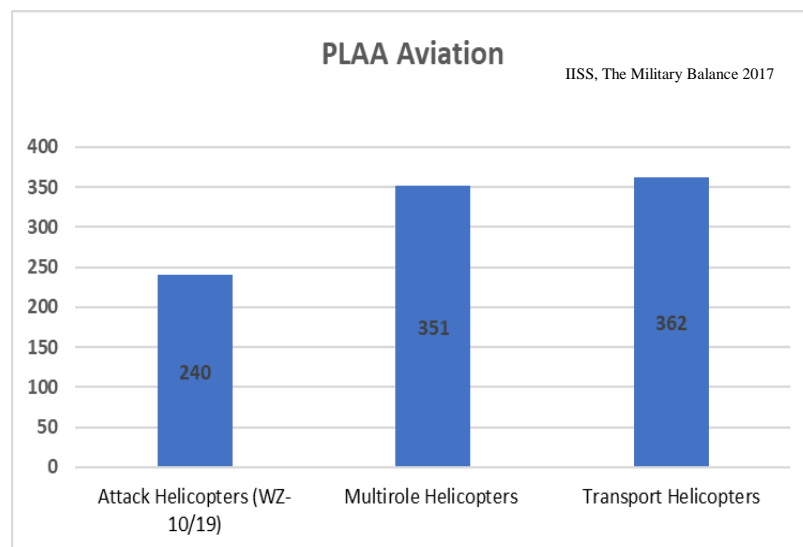
²¹⁸ Ben Lowsen, “Overview: China’s People’s Liberation Army Equipment at a Glance,” *The Diplomat*, March 9, 2016, accessed May 12, 2018, <https://thediplomat.com/2016/03/overview-chinas-peoples-liberation-army-equipment-at-a-glance/>.

²¹⁹ Gaurav Sharma, “People’s Liberation Army Ground Forces Modernisation - An Assessment,” *Scholar Warrior*, Spring 2012, 53, accessed May 8, 2018, www.claws.in/images/journals_doc/SW J.62-84.pdf.

Aviation

In accordance with directives from CMC White Papers, the PLAA has greatly accelerated the development of army aviation troops. From a strategic perspective, helicopter transportation provides rapid deployment of military forces, supporting PLAA objectives in maneuverability and trans-theater movement.

Figure 15 - PLAA Aviation Graph



“The PLAA aviation wing has worked to move from being a support force to being a main-battle assault force, further optimized its combat force structure, and conducted modularized grouping according to different tasks. It has upgraded armed helicopters, transport and service helicopters, and significantly improved its capabilities in air strike, force projection, and support.”²²⁰

Over the past decade, the PLAA has more than doubled its helicopter strength in the past decade. Said to be China’s first domestically designed heavy attack helicopter, the WZ-10 is the pride of the PLAA helicopter fleet since its debut in 2009. In addition to carrying HJ-10

²²⁰ "China's National Defense in 2010," Ministry of National Defense of the People's Republic of China, March 2011, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2017-04/11/content_4778206.htm.

anti-tank guided missiles (the equivalent of U.S. made Hellfire Missiles), the WZ-10 also carries electronic countermeasures and adapts the latest launching and communication systems.²²¹ More recently in 2012, the PLAA has also added 120 WZ-19 light attack helicopter to its inventory. With its speed and small size, the WZ-19 makes a suitable scout helicopter in armed reconnaissance and gathering intelligence.²²² In response to aging transport helicopters, the PLAA has recently introduced the new Z-8G transport helicopter in 2018 – capable of carrying up to 30 troops for over 1,000 km.²²³ The stated purpose for the helicopter is to perform in high altitude regions in western China. Multirole helicopters have seen multiple platforms added, to include 31 Z-9W; 10 Z-9WA, and 193 Z-9WZ. By providing both transportation and attack functions, these MRH built greater versatility within the PLAA.

²²¹ "Z-10 Attack Helicopter, China." Army Technology. Accessed May 10, 2018.
<https://www.army-technology.com/projects/z-10-attack-helicopter-china-liberation-army/>.

²²² "Z-19 Light Attack Helicopter, China," Air Force Technology, accessed May 10, 2018,
<https://www.airforce-technology.com/projects/harbin-z-19-light-attack-helicopter/>

²²³ Chen Chuanren, "China Introduces New Transport Helicopter," AIN Online, January 10, 2018, accessed May 10, 2018, <https://www.ainonline.com/aviation-news/defense/2018-01-10/china-introduces-new-transport-helicopter>

After analyzing PLAA military capabilities, it is useful to directly compare the PLAA with their greatest military threat, the U.S. Army:

Figure 16 - Comparison between U.S. Army and PLAA Capabilities

| | United States Army | PLA Army |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Budget | \$158,353,823,000 (2018) | \$174,500,000,000 (2018 for entire PLA) Unknown breakdown for PLAA |
| Manpower | Total Army End Strength: 1,042,000 Active Soldiers: 490,000 Army Reserve: 202,000 Army National guard: 350,000 | Active Army Strength: 600,000-800,000 Army Reserve: Unknown |
| Combat RDT&E Institutions | \$8,636,503,000 U.S. Military Academy at West Point, senior military colleges, R.O.T.C in majority of U.S. universities, U.S. Army war colleges, Government sponsored think tanks | Development of 依托国民教育 – use of top Chinese universities and decreasing the amount of military academies, many military think tanks such as PLAAMS (see below sections) |
| Defense Industrial Base | 100,000+ participating industries/subcontractors/some of the worlds best tech firms | Initiatives such as SASTIND to build up civil-military integration (see below sections) |
| Warfighting Inventory | 1,872 UH-60 Black Hawks, 596 AH-64 Apaches, 435 CH-47 Chinooks, 44 OH-58A Kiowas, 5,884 M1A1 and M1A2 Abrams, 35,275 Armored Fighting Vehicles, 963 Self-Propelled Artillery, 1242 Towed Artillery, and 600 Multiple Rocket Launchers | 7,390 tanks (50% modern), 9520 armored vehicles, 13,000+ artillery items, 1872 MRL, 6140 Towed Artillery, 2320 SP Artillery, 240 WZ10/19,351 MR Helicopters, 362 Transport Helicopters. (much of inventory is older technology) |
| Organization and Military Infrastructure | 72 posts in 33 domestic states, multiple posts all over the world | Restructuring into 5 military region, emulating brigade format in U.S. Army |

This figure demonstrates U.S. Army superiority in almost every quantifiable manner possible. They are better equipped, better manned, have a stronger defense industrial base, and are organized more efficiently. When considering the need for military reform and arms buildup in the PLAA, Chinese military strategists understand that they must develop the PLAA in such a way to be able to balance the overwhelming capabilities of the U.S. Army. With this line of reasoning, the security environment shaped by the United States in the Asia-Pacific region provides a rational justification for continued PLAA reform.

5.4: Research Development in PLA: Combat RDT&E and Defense Industrial Base

Combat research and training institutions provide a valuable resource for the PLA as a

whole, subsequently benefiting the PLAA. Since Combat RDT&E institutions are not fully separated by to support a specific service organ in particular, this section will only generally refer to how research and development facilities are benefitting the PLA as a whole. Combat RDT&E is the foundational element towards improving technological capabilities in military reform. Over the past decade, President Xi Jinping's administration has made multiple statements stressing the need to improve China's defense industrial base and training institutions primarily through civil-military integration. This trend is highlighted by the following excerpts from defense-related white papers:

Figure 17: PLA RDT&E Table

| White Paper Excerpts |
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| <p>China's National Defense 2008: "To meet the needs of weaponry and equipment development, as well as development of the socialist market economy, China is constantly reforming its management system of defense-related science, technology and industry. According to the Plan for Restructuring the State Council passed by the First Session of the Eleventh National People's Congress in 2008, the Science, Technology and Industry Commission for National Defense of the People's Republic of China has been superseded by the State Administration of Science, Technology and Industry for National Defense. In 2007, the State Council approved Some Opinions on Deepening the Reform of the Investment System of Science, Technology and Industry for National Defense, which explicitly proposes a new investment system featuring effective government regulation and control, participation of social capital, standardized intermediary services, vigorous supervision and management, and positive military-civilian interaction...is in the initial stage of establishing a new system of defense-related science, technology and industry that features a small core, extensive cooperation and a large military potential reserve among civilians. Structural contradictions in defense-related science, technology and industry have been gradually and fundamentally solved through strategic restructuring and the streamlining of the main body of the defense industry... Relevant laws and regulations have been improved to standardize and supervise the process of reorganizing the defense industry enterprises and getting them listed on the stock market... Enhancing the basic capabilities of weaponry and equipment research and production. Defense-related science, technology and industry are striving to enhance the informationization of weaponry and equipment design and development, and to render product design more digitalized, modularized, standardized and reliable... This sector has also increased final assembly and integration capabilities, and a number of key enterprises have realized systems integration of assembly, experimentation and testing. This has substantially raised core manufacturing capabilities by giving priority to resolving processing and technical issues in complex parts processing, precision manufacturing and special welding."</p> |
| <p>China's National Defense 2010: "The PLA is working to improve its capabilities in managing, maintaining and supporting equipment. It widely applies modern management techniques and enhances standardized and meticulous management of equipment. Educational institutions, research institutes and manufacturers are encouraged to recruit and train more experts in new equipment. The PLA works in coordination with R&D institutes and defense industry manufacturers to enhance its maintenance and support for high-tech equipment and develops an integrated civilian-military maintenance and support system. The PLA has developed comprehensive capabilities in equipment maintenance which cover multi-functional testing, mobile rescue and rush repair, and long-distance technical support."</p> |
| <p>China's Military Strategy 2015: "Developing advanced weaponry and equipment. Persevering in information dominance, systems building, independent innovation, sustainable development, overall planning, and emphasis on priorities, China's armed forces will speed up to upgrade weaponry and equipment, and work to develop a weaponry and equipment system which can effectively respond to informationized warfare and help fulfill the missions and tasks."</p> |

19th Party Congress by President Xi Jinping: “We will speed up implementation of major projects, deepen reform of defense-related science, technology, and industry, achieve greater military-civilian integration, and build integrated national strategies and strategic capabilities.”

The 13th Five-Year Plan (Economic/Social Development of PRC): “We will explore the establishment of a mechanism for funding integrated military-civilian development projects. We will deepen institutional reform of defense-related science and technology industries...We will reform systems and mechanism concerning defense-related research, production, and weapons and equipment procurement, move faster in opening military industries to competition and...guide private businesses with a competitive advantage in entering the fields of research and development, production, and maintenance of military products.

There is a common theme from these white papers: the importance of bringing together military and private sectors to achieve the common task of improving the defense industrial base. Under President Xi Jinping’s guidance, defense industrial leaders have created a number of new initiatives to develop weapon innovation and integrate the private sector. In 2008, the State Administration for Science, Technology, and Industry for National Defense (SASTIND) was set up to advance military technological capabilities and to carry out defense technological directives from the CCP. Since then, the SASTIND has initiated the 2025 Defense Science and Technology Plan to complement the Made in China 2025 strategic manufacturing plan to bolster domestic high-tech industries. SASTIND has also established a defense S&T Development Strategy Committee to conduct defense research to help advise the government’s strategy on technological development.²²⁴ Combined with the PLA’s private research institutions, these organizations have greatly expanded Chinese abilities to collect intelligence, make technological breakthroughs, and provide policy advice to relevant leaders.²²⁵

Major steps in civil-military integration include periodic SASTIND Strategic Action

²²⁴ Tai Ming Cheung, Eric Anderson, and Fan Yang, *EScholarship.org*, Series 9, Institute of Global Conflict and Cooperation, University of California, February 28, 2017, 2, accessed May 11, 2018, <https://cloudfront.escholarship.org/dist/prd/content/qt84v3d66k/qt84v3d66k.pdf?t=om3n7r&v=lg>.

²²⁵ Bates Gill, and James Mulvenon, "Chinese Military-Related Think Tanks and Research Institutions," *The China Quarterly* 171 (2002): 617, doi:10.1017/s0009443902000384.

Plans (SAP) intended to create short-term and attainable goals.²²⁶ These actions demonstrate an eventual goal of transitioning traditionally state-owned defense enterprises into a mixed-ownership status to fully leverage the knowledge of civilian technological sectors to achieve military reform goals. The implications of this transition could be far reaching, opening up Chinese defense sectors to be more autonomous and while simultaneous opening up the sector to foreign investment.²²⁷ Given the current PLAA need for advanced missile technologies and greater C4ISR capabilities, a more robust and efficient defense sector could greatly accelerate military reform goals.

Leadership Development Reforms

China's ambitions to build up technological competence have pushed forth a need for a more professional officer corps and a professional non-commissioned officer corps capable of handling specialized technical knowledge.²²⁸ China's Military Strategy in 2015 called for:

“Cultivating new-type military personnel. China's armed forces will continue with the strategic project for personnel training and perfect the system for military human resources. They will deepen the reform of military educational institutions and improve the triad training system for new-type military personnel - institutional education, unit training and military professional education, so as to pool more talented people and cultivate more personnel who can meet the demands of informationized warfare.”

The PLA and PLAA has traditionally relied on their 100+ military academies to train their

²²⁶ Tai Ming Cheung, Eric Anderson, and Fan Yang, *EScholarship.org*, Series 9, Institute of Global Conflict and Cooperation, University of California, February 28, 2017, 2, accessed May 11, 2018, <https://cloudfront.escholarship.org/dist/prd/content/qt84v3d66k/qt84v3d66k.pdf?t=om3n7r&v=lg>.

²²⁷ *Ibid.*, 4.

²²⁸ *Ibid.*, 4-5.

military officers to meet the demands of warfare domains.²²⁹ Unfortunately, the military academy system has two significant issues: (1) they divert a large amount of military personnel/technological capital (2) they lack the funding or resources to keep cadets up to speed with the advancements of current technology. By 2007, several of these academies were shut down and the “依托国民教育” was properly implemented. Since then, China’s top universities have graduated thousands of military officers – providing them with a world class education and supporting the PLA’s goal of technically proficient military officers.

5.5: Combat Experience, Readiness and Doctrine: Training

Combat experience and readiness has been a constant issue for the PLAA. Aside from minor roles in NATO and UN related missions, the PLAA has not actively engaged in combat since the Sino-Vietnamese War in 1979 – which lasted a month. Combat experience can be an abstract concept but has tangible psychological effects on fighting capabilities such as effective leadership under duress, stress management, situational awareness, and a vigilant cautiousness. Without combat experience, it is unclear how PLAA troops would perform in actual conflicts.

In order to deal with these shortcomings, the PLA has set out directives for all their forces to actively engage in “realistic military training.”²³⁰ The following table lists directives and guidelines on PLA training from major defense white papers 2008 - 2018.

²²⁹ Roy D. Kamphausen, "ROTC with Chinese Characteristics: Training the PLA in Civilian Universities," *China Brief* 7, no. 6 (April 13, 2007), accessed March 15, 2018, <https://jamestown.org/program/rotc-with-chinese-characteristics-training-the-pla-in-civilian-universities/>.

²³⁰ "China’s Military Strategy," Ministry of National Defense of the People's Republic of China, 2015, accessed May 10, 2018, http://eng.mod.gov.cn/publications/2016-07/13/content_4768294.htm.

Figure 18 - White Paper Excerpts on PLAA Training

| White Paper Excerpts on PLAA Training |
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| <p>China's National Defense in 2008: Regarding military training as the basic approach to furthering the comprehensive development of the military and raising combat effectiveness, the PLA is working to reform training programs, methods, management and support, and create a scientific system for military training in conditions of informationization.</p> <p><i>Increasing training tasks.</i> The PLA is intensifying strategic- and operational-level command post training and troop training in conditions of informationization, holding trans-regional evaluation exercises with opposing players, conducting whole-unit night training and carrying out integrated exercises for logistical and equipment support. Moreover, it is attaching more importance to MOOTW training in counter-terrorism, stability maintenance, emergency response, peacekeeping, emergency rescue and disaster relief.</p> <p><i>Deepening training reform.</i> The PLA is creating a task list for military training in conditions of informationization, developing a new edition of the Outline for Military Training and Evaluation, and promoting the application of innovations made in training reform. It is also reinforcing the joint training of the services and arms, strengthening functional training, giving prominence to command and coordinate training and the studies of ways of fighting, and improving training in regional cooperation. It is improving on-base training and simulated training, promoting web-based training, and conducting training with opposing players. It is also reforming training evaluation mechanisms, making training standards stricter, and enforcing meticulous management of the whole process and all aspects of military training.</p> |
| <p>China's National Defense in 2010: Innovating training methodologies. With a top-down approach to training, the PLA organizes campaign-level training within the framework of strategic-level training, service campaign-level training in accordance with the joint campaign-level training, and unit training within the framework of campaign-level command post training, in an effort to merge training at different levels into an organic whole. Based on and supported by command information systems, the PLA organizes combined training of different combat components, assembly training of various combat elements, and joint training of all systems and all components. It intensifies joint training of task formations and confrontational training, and places emphasis on training in complex electromagnetic environments, unfamiliar terrain, and complex weather conditions. The PLA holds trans-regional exercises for organic divisions (brigades) led by campaign-level command organs, raises training evaluation standards, and organizes training based on the needs, formations and procedures of actual combat.</p> <p><i>Improving military training means.</i> The PLA speeds up the construction of large-scale integrated training bases which meet the requirements raised by joint training, as well as IT-based upgrading of combined tactical training bases, with the priority being given to the construction of complex electromagnetic environments. The PLA strives to develop simulation training devices and systems, and improve training information network.</p> |
| <p>The Diversified Employment of China's Armed Forces 2013: The PLA takes scenario-based exercises and drills as the basic means to accelerate the transition in military training and raise combat capabilities. It widely practices in training such operational concepts in conditions of informationization as information dominance, confrontation between different systems, precision strike, fusion, integration and jointness. It organizes training based on real combat needs, formations and procedures. It pays special attention to confrontational command training, live independent force-on-force training and training in complex battlefield environments. Thus, the warfighting capabilities based on information systems have been thoroughly improved.</p> <p><i>Carrying out trans-MAC training.</i> To develop rapid-response and joint-operation capabilities in unfamiliar environments and complex conditions, the divisions and brigades of the same specialty with similar tasks and tailored operational environments are organized to carry out a series of trans-MAC live verification-oriented exercises and drills in the combined tactical training bases. In 2009, the Shenyang, Lanzhou, Jinan and Guangzhou MACs each sent one division to join long-distance maneuvers and confrontational drills. Since 2010, a series of campaign-level exercises and drills code-named "Mission Action" for trans-MAC maneuvers have been carried out. Specifically, in 2010 the Beijing, Lanzhou and Chengdu MACs each sent one division (brigade) led by corps headquarters, together with</p> |

some PLAAF units, to participate in the exercise. In 2011, relevant troops from the Chengdu and Jinan MACs were organized and carried out the exercise in plateau areas. In 2012, the Chengdu, Jinan and Lanzhou MACs and relevant PLAAF troops were organized and carried out the exercise in southwestern China.

Science of Military Strategy 2013: 推动陆军军事训练转型。加快陆军部队由机械化条件下军事训练向信息化条件下军事训练转变。一是突出实战化训练。摒弃"依据想定、单方作业"的方法,展开"敌对"双方自主互动的"真打实抗",在强度高、变化多、不确定性大的情况下真正达到练谋略、练指挥、练协同、练保障的效果。针对未来作战任务的多样性和战场环境的复杂性,既要强化复杂电磁环境下训练,提高部队与强敌争夺制电磁权的能力,又要强化复杂地形环境下训练,使部队能够适应山地、高原、荒漠、平原、水网地带和城市作战,还要强化复杂气象本文条件下的训练,磨喷部队在恶劣天气下完成作战任务的意志作风和战术技术水平。二是突出投送机动训练。要改进投送机动训练方式、提高投送机动训练标准、增大投送机动训练频率。在抓好地面投送机动训练的基础上,大力开展陆海空协同投送机动训练;在抓好自主投送机动训练的基础上,大力开展军地联合投送机动训练;在抓好和平环境下投送机动训练的基础上,大力开展近实战对抗条件下投送机动训练;在抓好战区内投送机动训练的基础上,大力开展跨战区投送机动训练。三是突出联合训练。(pg. 203)

2015 China's Military Strategy: The PLA will continue to attach strategic importance to combat training in realistic conditions, and strictly temper the troops according to the Outline of Military Training and Evaluation (OMTE). It will constantly innovate operational and training methods, improve military training criteria and regulations, and work to build large-scale comprehensive training bases in an effort to provide real-combat environments for training. The PLA will continue to conduct live-setting training, IT-based simulated training, and face-on-face confrontation training in line with real-combat criteria, and strengthen command post training and joint and combined training. It will intensify training in complex electro-magnetic environments, complex and unfamiliar terrains, and complex weather conditions. It will also set up a training supervision and inspection system, so as to incorporate real-combat requirements into training."

Military Doctrine Evolution: Prior to making any specific training changes, the PLA has taken steps to rewrite their training manuals. From 2013 to 2018, the PLA OMTE has been rewritten biannually to provide a continuously updated and relevant system for military training.²³¹ The purpose of the OMTE to constantly provide an innovative document that can specify specific training criteria and techniques to achieve training objectives. Detailed PLAA manuals are unavailable for public consumption but it is likely that these documents have been rewritten several times in the past to accommodate for the OMTE.

Learning from Observing: In a research paper on Chinese military reforms, Susan M. Puska reaches the conclusion that PLA observations of American conflicts provides a sense of urgency for PLA reforms. Most recently, the U.S. military demonstration of tactical

²³¹ "PLA Publishes New Military Training Outline, Highlights Combat." Xinhua.net. January 27, 2018. Accessed May 16, 2018. http://www.xinhuanet.com/english/2018-01/27/c_136929690.htm.

dominance during the Iraq and Afghanistan war has emphasized the need for “advanced technology, professionalism, and specialization to develop a modern military.”²³² While defense white papers do not directly refer to external engagements such as the Iraq war, Puska lists several papers and articles written by Chinese military strategists and journalists on the success and failures of the U.S. military.

Learning from Doing: In an attempt to merge PLAA objectives, PLAA observations, and PLAA training doctrine: the 2013 SMS has highlighted three major tasks to promote the transformation of Army military training:

- 一是突出实战化训练: the first is to highlight practical, realistic training
- 二是突出投送机动训练: the second is to highlight the mobile training maneuvers
- 三是突出联合训练: the third to highlight joint training

In a chapter on PLA Army transregional exercises conducted from 2006-2011, Dennis J. Blasko identifies several major training exercises as reported by Chinese media that emphasize the movement of larger units from one military region to another in response to a theoretical threat. He concludes that these transregional exercises are an attempt to create a realistic scenario in which PLAA forces work together with other service organs to repel attacks on border areas of China.²³³ In doing so, these exercises are able to accomplish the stated tasks: practical, realistic, mobile, joint training. These types of exercises also

²³² Susan M. Puska, "Assessing America at War: Implications for China's Military Modernization and National Security," in *Shaping China's Security Environment: The Role of the People's Liberation Army*, ed. by Andrew Scobell and Larry M. Wortzel (Carlisle, PA: Strategic Studies Institute, 2006), 67.

²³³ Dennis J. Blasko, "Clarity of Intentions: People's Liberation Army Transregional Exercises To Defend China's Borders," in *Learning by Doing: The PLA Trains at Home and Abroad*, edited by Roy Kamphausen, David Lai, and Travis Tanner (Carlisle, PA: Strategic Studies Institute, 2012), 197.

reemphasize the original security threats to China's border defenses that the PLAA envisions facing: focusing the potential violation of border demarcations, foreign intrusions, and provocations by neighboring countries.

Overview: A qualitative analysis of PLAA's military reforms produces several trends amongst traditional measures of military capabilities. First, structural and professional advances in organizational structure has been critical to PLAA military reform by promoting modularity and transregional mobility. This reform trend is in direct support of combatting land-based security threats on China's borders. Second, technological advances in PLAA equipment also support reform objectives of mobility in rugged terrain and protective missile capabilities. Advancements in this trend are aligned with the China's goal of a modern army and provide a direct comparison against other military powers. In consideration of the combined forces of major border threats and the U.S. Army, the PLAA still lacks the capabilities to properly defend against all security risks. Third, China's defense industrial base highlights several economic inefficiencies. The current movement towards opening up the industry to private defense companies indicate a general desire to become more transparent and more relevant amongst modern defense sectors. Finally, training exercises and doctrinal changes have highlighted increased professionalization and situational specific training on transregional exercise and potential border threats.

Chapter 6: Conclusion - PLA Army Reform

When referring back to Figure 1, the current PLAA arms buildup limits China's policy options to two choices: optimal arming from necessary races, or suboptimal arming for dangerous races. Throughout Chapter 4 and 5, this thesis has explored the external threat environment and the resulting arms buildup and reform conducted by the PLAA. This analysis has found a strong relationship between listed strategic objectives of homeland defense, observed security threats from bordering nations, and PLAA military reforms from China white papers. Chapter 4 illuminated the various traditional and non-traditional security threats on their land/maritime borders. The U.S. Army presence in the Asia-Pacific region presents an intimidating force, the rapidly modernizing Indian Army is bolstering up defenses on the border of Tibet, Japan's GSDF demonstrates a degree of hostility with their U.S. alignment, the ROC Army is preparing for the possibility of invasion, and the Vietnam VPA regulates one of China's most exposed land borders. Collectively, the military land power of all these nations represent a remarkable risk to the PLAA.

As shown in Chapter 5, much of the specific training exercises, organizational shifts, and weapons reforms are being conducted under direct guidance from strategic objectives to defend China. These objectives are explicitly listed in white papers and repeated in President Xi Jinping's public statements. Organization advances are being conducted in support of modularity and transregional mobility in preparation of land-based security threats on China's borders; technological advances are supporting terrain mobility; defense industrial base development and doctrinal changes are promoting professionalization. The published strategic objectives and resulting reforms directly reflect the external security environment from Chapter 4.

The flowchart from the theoretical framework lists two "question marks" between the stated objectives from white papers and the analysis of ongoing reform, based on the land-

based security environment and the active arms building. This thesis has demonstrated a clear relationship between the objectives and reform of the PLAA. In consideration of China's military reform goals and the various risks of land-based international security environment, this thesis comes to the conclusion that the PLAA should continue to conduct military reform to improve combat capabilities. According to Figure 2 and Prof. Glaser's arms race theories, since the PLAA should be arming, and the PLAA consequently did decide to arm; these actions were the optimal policy choice and a necessary decision. As the most optimal policy choice, military reform and arms building will continue to progress in the PLAA. Consequently, external countries will find more common ground for cooperation on the topic of China's external land-based security environment in an attempt to reduce risk perceptions and ease the necessity for continued PLAA reform.

6.1: Future Research

From my literature review, it would seem as if I intended to write from one of the three major perspectives explored: offensive realism, defensive realism, or Confucian pacifism. I certainly planned on it. In spite of my intentions, I found many of these theories increasingly subjective and open to interpretation on the matter of China's military growth. Of course, these perspectives have certain merit and provide definitive positions on policy making. Prof. Glaser's arms race theories are based on many of the same assumptions that realism relies on but avoids reaching overgeneralizing conclusions. Simultaneously, the narrow scope of my thesis on the PLAA provides specificity at the cost of overlooking the rest of China's military forces. Consequently, the conclusion of this thesis is only applicable to the PLAA and the land forces of the Chinese military. To properly understand and rationalize the arms buildup and military reform of the entire PLA, each branch must be considered individually with their

respective security threats.

Furthermore, this thesis only utilizes half of Glaser's theories. The practical side of researching PLAA reforms requires an understanding of the implications of China's activities on the probability of war. Future research should consider the offense-defense balance, internal causes of military reform, and other domestic/external issues that affect the decision to develop China's military.

6.2: Implications of Research on Relevant Countries

This thesis is only a small step in the process to better understand military reform in the PLA. My contribution is a careful examination of China's stated objectives in their white papers and rhetoric specific to the PLAA. Proper analysis of these primary sources should be set as the precedence of PLA analysis. I caution readers from approaching the controversial topic of arms building from the narrow perspective of any one international theory. Offensive realism, defensive realism, Confucian pacifism all play some role in China's military reform. Due to the listed reasons in the "future research" section, the conclusion of PLAA's optimal arming decision is constrained to the current security environment for land-based forces. Therefore, questions about the United States and China escaping the Thucydides Trap would require far more research and insight. However, the conclusion that the PLAA faces a dangerous security environment and should arm itself still has meaningful implications for U.S. sentiment and responses to PLAA military reforms.

By clearly defining the land-based traditional security threats, the United States and other threatening countries on China's borders are able to better understand the antagonizing factors behind China's military reform. This study demonstrates that Chinese military reform in the PLAA does not have to be actively viewed as a detriment to the security of other countries. PLAA military reform is a product of the external land-based security environment.

Amongst western nations and especially the United States, fearful and irrational expectations of dangerous Chinese intentions produce the spiral down of an avoidable security dilemma.

The aggressive rhetoric against Chinese military reform espoused by the Trump administration through the various white papers have prompted increased tensions on both sides. By exploring diplomatic dialogue, external countries can reduce the risk perception of certain security threats and even provide aid if possible. By understanding the reasons behind PLAA reform, external countries have an increased ability to shape the type of reform the PLAA conducts.

Without a doubt, the PRC will continue to improve their military capabilities along with their economic prowess and international standings in many aspects. How the world chooses to react to these changes will set the stage for increased cooperation or conflict. From a strict military and zero-sum security perspective, any improvements in China's PLA is a threat against the world. It then becomes crucial that researchers, policymakers, and diplomats look past military advancements, and instead, try to understand why China is building up the PLA. It is possible that China's reasons have a rational and positive purpose. The thesis title presents a clear end date on the topic of PLAA military reform: 2007 to 2018. Continued arms building will persist for several decades, during which many external countries outside of China will have the ability to affect change in the PLA and PLAA. The hope is that these countries, in particular the United States and China, will use military reform as a tool to increase shared security and peace.

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Appendix

As a military officer, I cannot overstate the importance of doctrine. The U.S. military is a rules-driven organization, and doctrine provides the rules to be followed. Military doctrine plays a direct role in the employment of military resources, providing soldiers with guidance on almost all aspects. Regrettably, branch specific PLA doctrine is not readily available for investigation. As a result, this study will use the next best option, U.S. military doctrine – which is considered the standard for militaries around the world.

Operational U.S. military doctrine has yet to be used to analyze another foreign armed service. Randall G. Bowdish, a retired Navy Captain, wrote his dissertation on the possibility that “concepts of employment” can be applied to military strategy.²³⁴ In his writings, Bowdish argues that “concepts are the building blocks of strategy.”²³⁵ While he ultimately attempts to provide a new grant theory of strategy, Bowdish still recognized the concepts of employments as the ideas that builds the foundation of new strategy. Operational definitions can therefore provide a less biased explanation of how a military branch or unit actually achieves their objective. For example, Bowdish explains that characteristics such as “surprise, concentration, tempo, audacity” described offensive operations while “preparation, security, disruption, massing effects, and flexibility” represent defensive operations.²³⁶ Following this logic, U.S. operational doctrine can also provide valuable insight on the offensive or defensive nature of Chinese capabilities and the overarching state of Chinese military strategy.

The U.S. Army is divided into 17 different branches, six of which are combat arms. Of

²³⁴ Randall G. Bowdish, "Military Strategy: Theory and Concepts" (PhD diss., University of Nebraska, 2013), 3.

²³⁵ *Ibid.*, 133.

²³⁶ *Ibid.*, 170.

these six branches, five will be examined. The Engineer branch will be left out since its primary mission is support based. The other five branches have a unique set of doctrine and field manuals specific to its mission. This study will match up the U.S Infantry branch with the PLAGF Infantry, the U.S. Armor branch with the PLAGF Armor, and so on. Field manuals that define offensive and defensive operations for each branch will be used to analyze the modernization of each PLAGF branches' capabilities. The following tables will reference FM 3-01, FM 3-04, FM 3-09, FM 3-21.8, and FM 3-20.15 Please see bibliography for citation.

The Infantry, U.S. Army

| Hail, oh hail the Infantry. Queen of battle, follow me. The infantry is the lifeblood of the entire military. Field Manual (FM) 3-21.8 lists their primary role as close quarters combat. As such, Infantry units have a unique station in combat – they operate at the point of decision, face to face with the enemy. | | |
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| | Types of Operation | Characteristics |
| Offensive Operations has the objective of seizing terrain and destroying the adversary. | “movement to contact, attack, exploitation, and pursuit” | “surprise, concentration, tempo, and audacity” |
| Defensive Operations denies an area to the adversary and protect friendly forces for future operations. | “reconnaissance, security operations, enemy preparatory fires, occupation, counterattack, consolidation and reorganization, fix obstacle, blocking” | “preparation, security, disruption, massing effects, flexibility” |

Armor, U.S. Army

| The fundamental mission of the Armor branch is to close with and destroy the enemy. The platoon's ability to move, shoot, and communicate and do so with the armored protection provided by the Abrams tank is a decisive factor on the modern battlefield. | | |
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| | Types of Operations | Characteristics |
| <p>Offensive operations are conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers. They impose the commander's will on the enemy. Offensive tasks may also be conducted to deprive the enemy of resources, seize decisive terrain, deceive or divert the enemy, develop intelligence, or hold an enemy in position</p> | <p>Movement to contact, attack, exploitation, and pursuit, envelopment, turning movement, frontal attack, penetration, infiltration</p> | <p>Surprise, concentration, tempo, audacity</p> |
| <p>Defensive operations defeat an enemy attack, buy time, economize forces, or develop conditions favorable for offensive operations. Their purpose is to create conditions for a counteroffensive that allows Army forces to regain the initiative. Defensive tasks may also be conducted to retain decisive terrain or deny a vital area to the enemy, attrition, or fix the enemy as prelude to offensive operations, in response to a surprise action by the enemy, or to increase the enemy's vulnerability by forcing him to concentrate his forces.</p> | <p>Area Defensive, Mobile Defense, Retrograde</p> | <p>Preparation, disruption, massing effects, flexibility, maneuver, operations in depth</p> |

Aviation, U.S. Army

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| The Mission of the U.S. Army Aviation unit is to find, fix and destroy enemies through fire and maneuver and to provide combat support and combat service support coordinated operations. | | |
| | Type of Operation | Operation Characteristics |
| Offensive Operations | Movement to Contact | Offensive task designed to develop the situation and establish/regain contact |
| | Attack | Attack units are conducted in support of ground maneuver troops to seize, retain, or exploit the initiative. |
| | Air Assault | The movement of friendly assault forces by rotary-wing aircraft to engage and destroy enemy forces or to seize and hold key terrain |
| Defensive Operations | Security | Operations undertaken to provide early and accurate warning of enemy operations to provide the force being protected with the time and maneuver space to react to the enemy, and to develop the situation. Security operations encompass five tasks: screen, guard, cover, area security, and local security. |
| | Reconnaissance | Undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. |
| Support Operations | Air Movement | An air movement is the air transport of units, personnel, supplies, and equipment including airdrops and air landings |
| | Aeromedical Evacuation/ Mission Command Support | Supports the overall Army Health System mission. Assets locate, acquire, treat and evacuate patients from the point of injury to an appropriate medical treatment facility |

Air Defense Artillery, U.S. Army

| <p>The Mission of U.S. Army ADA organizations and elements is to protect the force and selected geopolitical assets from aerial attack, missile attack, and surveillance. ADA forces accomplish this mission by: providing AMD, contributing to situational awareness/situational understanding (SA/SU), contributing to Army airspace command and control (AC2), and contributing to operational protection.</p> | | | | | | | | | | | | |
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| <table border="1"> <thead> <tr> <th></th><th>Primary role</th><th>Types of Operation</th></tr> </thead> <tbody> <tr> <td rowspan="2"> Offensive operations defeat the enemy decisively by using overwhelming, aggressive force. </td><td rowspan="2"> The primary role of Army ADA in attack operations is identifying, planning, and coordinating enemy targets. </td><td> Offensive Counterair operations destroy, disrupt, or neutralize enemy aircraft, missiles, launch platforms, and their supporting structures. </td></tr> <tr> <td> Passive Air Defense: camouflage, concealment, deception, reconstitution, detection and warning systems, dispersal, mobility Missile defense, Area defense, Point defense, Self defense, High value airborne asset protection </td></tr> <tr> <td> Defensive operations defeat an enemy attack, buy back time, economize forces, and/or develop conditions favorable for offensive operations. </td><td> Air and missile defense operations provide a secure area from which all elements of the joint force can operate. To accomplish this, defensive counterair operations protect friendly land and naval forces, bases, lines of communications, and other assets while denying the enemy the freedom to carry out offensive air operations. </td><td></td></tr> </tbody> </table> | | | | Primary role | Types of Operation | Offensive operations defeat the enemy decisively by using overwhelming, aggressive force. | The primary role of Army ADA in attack operations is identifying, planning, and coordinating enemy targets. | Offensive Counterair operations destroy, disrupt, or neutralize enemy aircraft, missiles, launch platforms, and their supporting structures. | Passive Air Defense: camouflage, concealment, deception, reconstitution, detection and warning systems, dispersal, mobility Missile defense, Area defense, Point defense, Self defense, High value airborne asset protection | Defensive operations defeat an enemy attack, buy back time, economize forces, and/or develop conditions favorable for offensive operations. | Air and missile defense operations provide a secure area from which all elements of the joint force can operate. To accomplish this, defensive counterair operations protect friendly land and naval forces, bases, lines of communications, and other assets while denying the enemy the freedom to carry out offensive air operations. | |
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Field Artillery, U.S. Army

| The mission of the Field Artillery is to destroy, defeat, or disrupt the enemy with integrated fires to enable maneuver commanders to dominate in unified land operations (ADRP 3-09). | | |
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| | Primary role | Types of Operation |
| Offensive operations are tasks conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers (ADRP 3-0) | FAB fires during offense tasks are fundamental to the success of the supported unit. Fires throughout the enemy's depth destroy enemy artillery, separate enemy echelons, and defeat enemy maneuver elements as they move forward. | Suppression of enemy air defenses, Offensive counterair to destroy, disrupt, neutralize enemy air craft/missiles before launch, attack, exploitation, and pursuit |
| Defensive operations are tasks conducted to defeat an attacking enemy force, retain key terrain, gain time, economize forces, and develop conditions favorable for offensive or stability tasks. (ADRP 3-0) | <p>FAB fires during defensive tasks are fundamental to the success of the supported unit. Fires throughout the enemy's depth destroy enemy artillery, separate enemy echelons, and defeat enemy maneuver elements as they move forward.</p> <p>Fires can be critical to offsetting a lack of maneuver assets for defense of large areas</p> | <ul style="list-style-type: none"> -Providing counterfire, counterpreparation fire and suppression of enemy air defenses. -Providing fires in support of the unit's security operations. -Providing field artillery fires in support of close combat and in depth to support maneuver operations. -Neutralizing enemy forces that have penetrated the defensive area. -Relocating field artillery units after identifying the enemy's main effort. -Providing rapid delivery of scatterable mines to support maneuver operations. -Planning for obscuration or screening smoke. -Coordinating for meteorological and survey data. -Providing precision munitions. -Designating firing units for final protective fires. -Delivering field artillery fires at maximum range. - Area/Mobile/Retrograde defense |