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By
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ABSTRACT

At the Third Plenum of the 18th Central Committee of the Chinese Communist Party (CCP) in November 2013, major reforms to the Chinese People's Liberation Army (PLA) were announced. Beginning in September 2015, elements of the reform programme were made public and the process is scheduled for completion by 2020. These reform measures and the restructuring of the PLA are being considered as the most significant since 1949 because the past reorganizations of the PLA had been aimed at downsizing the force such as in 1985, 1997 and 2003, or creating new tactical level units (such as group armies in 1980s) or adding a new national level headquarters to the legacy organizational framework (as in 1998). The planned changes are so substantial that the latest U.S. Department of Defense Report on China has observed these as "most significant reforms of the PLA in at least three decades."

Through these ambitious reforms, China wants to restructure a politically reliable and modern force capable of joint operations, which will have huge implications for China's future international behaviour and global order.

<u>Introduction</u>

Since its inception on 01 August 1927, when it was known as the Red Army (hongjun), the People's Liberation Army (PLA) had served as the military wing of the Chinese Communist Party (CCP) and the party's Central Military Commission exercised authority over the armed forces. The Chinese constitution of 1982 created a state Central Military Commission to increase civilian control over the military and create another layer of oversight. However, the two commissions have the same leadership and the party retains its traditional leadership role¹.

With the aim to tighten CCP supervision over the PLA, which was being seen as increasingly corrupt and unaccountable and to build this force into a credible joint war fighting entity, China has announced a series of major reforms to the organizational structure of the PLA.

In November 2013, the Third Plenum of the 18th Central Committee of the CCP announced the decision to "optimise the size and structure of the army, adjust and improve the balance between the services and branches. and reduce non-combat institutions and personnel". This rebalance is meant to correct the domination of the PLA Army, which with the Second Artillery had 73 percent of the PLA's total troops, followed by 17 percent for the Air Force (PLAAF) and 10 percent for the Navy (PLAN). The Central Committee also announced creation of a "joint operation command authority under the Central Military Commission and theatre joint operation command system" and to "accelerate the building of new combat powers, and deepen the reform of military colleges"2. Beginning in September 2015, elements of the reform programme had been made public and the process is expected to last until 2020.

These reform measures and the restructuring of the PLA are being considered as the most significant since 1949 because the past reorganizations of the PLA had been aimed at downsizing the force such as in 1985 (1 million troops), 1997 (500,000 troops) and 2003 (200,000 troops), or creating new tactical level units (such as group armies, *jituanjun* in the 1980s) or adding a new national level headquarters to the legacy organizational framework (as in 1998,when the General Armaments Department was created). The planned changes are so substantial that the April 2016 U.S. Department of Defense (DoD) Report on China has observed these as "most significant reforms of the PLA in at least three decades."

Through these ambitious reforms, China wants to restructure a politically reliable and modern force capable of joint operations, which will have huge implications for China's future international behaviour and global order. The aim of this paper is to study the breadth and depth of reform measures and restructuring of the PLA having been undertaken, deliberate over the underlying reasons for the current reforms, assess the transformation of the PLA taking into account the effectiveness and progress of reform measures versus the likely obstacles and finally the strategic implications of reforms for India in particular and for the world at large. To achieve that aim, this paper addresses the subject in following sequence:-

First, Historical Retrospect.

Second, Genesis of Current Reforms.

Third, Reasons for Reforms.

Fourth, Key Areas of PLA's Upcoming Organizational Reforms.

Fifth, China's Military Parade - 3 September 2015 : Display of Military Hardware & China's Ongoing Military Modernization.

Sixth, Resistance to Reforms.
Seventh, Effectiveness of Reforms and "Areas" to be Watched.
Eighth, Implications.

Historical Retrospect

The PLA has gone through five cycles of similar military reforms since the founding of the communist state in 1949. In 1949, the PLA's strength stood at 6.27 million personnel. China's military has subsequently undergone eleven reductions, including the current reform.⁴

The first major structural change for the PLA took place in the mid-1950s, when China introduced the Soviet military system in totality to the PLA under the supervision of Mao Zedong's able defence minister, Marshal Peng Dehuai, with the sole objective of transforming China's semi-rag-tag peasant army to a Soviet-style professional defence force.⁵

By the mid-1970s concerns among Chinese leaders about military weakness, especially vis-à-vis the Soviet Union, resulted in a decision to modernize the PLA. Two initial steps were taken to promote military modernization. First, in 1975 vacant key positions in the military structure and the party Central Military Commission were filled. With a view to ensure party control of the PLA, civilians were appointed to key positions such as Deng Xiaoping was appointed as Chief of General Staff. Second, in the summer following Premier Zhou Enlai's January 1975 proclamation of the Four Modernizations as national policy, the party Central Military Commission convened an enlarged meeting to evolve the military modernization programme, which got codified as Directive No. 18 of 1975, wherein the military was instructed to withdraw from politics and to concentrate on military

training and other defence matters. Factional struggles between party moderates and radicals in 1975 and 1976, however led to the dismissal of Deng from all his posts and the delay of military modernization until after the death of Mao Zedong in September 1976.⁶

The Chinese leadership resumed the military modernization programme in early 1977. Three crucial events in the late 1970s shaped the course of this programme: the second rehabilitation of Deng Xiaoping, the major civilian proponent of military modernization; the re-ordering of priorities in the Four Modernizations, relegating national defence from third to fourth place (following agriculture, industry, and science and technology); and the Sino-Vietnamese border war of 1979 - although only sixteen days long, the war revealed specific shortcomings in military capabilities and thus provided an additional impetus to the military modernization effort. Though it was the PLA's largest military operation since the Korean War and the numerically superior Chinese Forces penetrated about 50 km into Vietnam but the PLA suffered heavy casualties.7 PLA performance suffered from poor mobility, weak logistics and outdated weaponry. Inadequate communications, an unclear chain of command and the lack of military ranks also created confusion and adversely affected PLA's combat effectiveness. The military modernization begun in the late 1970s had three main focuses:

 First, under the political leadership of Deng Xiaoping, the military became disengaged from civilian politics.
 Deng re-established civilian control over the military by appointing his supporters to key military leadership positions and by reducing the scope of the PLA's domestic non military role.

- Second, doctrine, strategy and tactics were revised under the rubric of "people's war under modern conditions", which envisaged a forward defence at selected locations near China's borders, to prevent attack on Chinese cities and industrial sites, and emphasized operations using combined-arms tactics. Military skills and education levels of officers and troops were to be raised through reforms in education and training.
- The third focus of military modernization was the transformation of the defence establishment into a system capable of independently maintaining a modern military force. This involved reorganizing the defence research and development and industrial base to integrate civilian and military science and industry more closely. Foreign technology was used selectively to upgrade weapons.⁸

In 1985, after multiple military clashes with Vietnam, including a full-scale war that exposed the PLA'S backwardness for modern war, Deng Xiaoping initiated the third major restructuring of the PLA, with a massive troop reduction, by one million military personnel, and the start of military modernization drive which lasted from the mid-1980s to the mid-1990s. The focus was to prepare for a "local war under high-tech conditions", and developing elite troops and combined-arms warfare. Combined-arms Group Armies were formed and there was a further reduction from 3.23 to 3.19 million troops by 1990.9

Impressed by the sterling performance and devastating lethality of the United States' information-and spaceage advanced weapons in the 1990s, especially in the first Gulf War and the Kosovo War, a revolutionary fourth round of structural and doctrinal reform to the PLA took

place around 2000, soon after the accidental bombing of the Chinese embassy in Belgrade. PLA modernization focused on winning a "local war under informationized conditions". Modernization driven by emerging scientific and technological developments focused on building an informationized military to support national strategic interests and comprehensive national strength. This entailed a new type of mechanization of the force, with integration of networked command information systems and joint force groupings down to the tactical level as a main feature. Beginning in 1997, a 500,000-troop reduction occurred. Low-strength units were either demobilized or transferred to form a new national-level People's Armed Police (PAP) force to respond to internal emergencies. Another reduction took place between 2003 and 2005, with 200,000 troops cut, drawing down the PLA from 2.5 to 2.3 million. Many of these troops were non-combat personnel, redundant staff and administrative billets. 10

The Fifth, and the current, round of military reform announced in 2015-2016 is indeed far-reaching and revolutionary.

Genesis of Current Reforms

China watchers had long been expecting a structural reform of the Chinese military akin to Goldwater-Nichols Act (or the Goldwater-Nichols Department of Defence Reorganisation Act of 1986 or "GNA") as the United States also faced similar problems, albeit of a different degree and scale before 1986 and were suitably addressed by this act. PLA scholars have publicly debated the merits of instituting a true joint operational command modeled on the United States and GNA. In many ways, the process of "Goldwater-Nicholizing" the Chinese military began in earnest two decades ago, when the PLA adopted a vaguely defined Chinese military term (in the mid-nineties) — " informatization", that is part "network-centric warfare" and "integrated C41SR".¹¹

The current round of PLA reforms was launched at the Third Plenum of the 18th Party Congress in November 2013, in which the party elite adopted a sweeping programme of national reform. Military reforms were discussed as an integral part of the overall reform programme, with advocates arguing that China could not achieve prosperity without a strong military.

After the Third Plenum, the PLA embarked upon drawing a specific reform plan. This process was led by CMC's "Leading Small Group for Deepening the Reform of National Defence and the Armed Forces" (hereafter LSG). This group was established in March 2014 and is chaired by Xi Jinping himself. In coming up with the reform measures, the LSG organized workshops and debates (more than 860 within 690 military research units), heard from 900 active and retired military officers and experts and surveyed more than 2,000 servicemen from local brigades and units.¹²

Intellectually, PLA analysts from organizations such as the Academy of Military Sciences and National Defense University studied lessons from Chinese history and assessed how foreign militaries, especially the U.S. and Russian armed forces, are organized for modern warfare. It has been observed that the experience of Russia's military reforms in the wake of the 2008 invasion of Georgia had been of particular interest, and Chinese planners closely followed Russia's reforms and adopted some of their signature concepts.¹³

An amalgamation of propaganda-cum-coercion and compromise preceded implementation of the reforms. The PLA carried out a major propaganda offensive to cultivate a reform mindset among rank-and-file of PLA. An anti-corruption campaign was also launched within the PLA, targeting both senior and more junior officers (known colloquially as "tigers" and flies"). The latter effort served

to put the PLA on notice that resistance to reform would not be tolerated.¹⁴ The appearance of veteran CCP leader Jiang Zemin on the rostrum at the "grand military parade" on 3 September 2015, was suggestive of high level compromise. So also was the discarding of original plans to downsize the PLA by 800,000 personnel and opt instead for reducing troop strength by 300,000.¹⁵

A reform plan was ultimately agreed on at a CMC reform work meeting in November 2015 and codified in a CMC document published on January 1, 2016 titled "CMC Opinions on Deepening National Defense and Military Reforms" (hereafter CMC Opinion). The document makes it clear that the PLA's organizational changes are only the first steps in a 5-year reform agenda and provides the rationale. objectives and priority areas for the reform programme. This document states that the reforms represent the only way to achieve the rejuvenation of the military as well as China's national-level goals, including the goals of becoming a "moderately prosperous society" (xiaokang shehui) by 2021, and becoming a "modern socialist country" by 2049. The reforms are also necessary to overcome the structural and policy barriers that exist in the current national defence system.

According to the "CMC Opinion", the main principles of the reforms are :-

- To reorient the PLA to the "correct political direction" of Party control.
- To improve combat capability by creating an integrated joint operations system that can fight and win wars.
- To strengthen innovation and promote a "rule by law" mindset, so that the reforms are seen within the context of a system of laws and regulations.

- Policy changes are to be complemented with reforms to organizational systems; and
- These reforms are to be introduced incrementally, so as to ensure the stability of the armed forces and effective integration with them.¹⁶

The PLA's reform agenda 2015-2020 is reproduced in the Table 1 shown at Annexure 1.

Reasons for Current Reforms

Before we elaborate upon the details of the sweeping reforms, the obvious question raised is why China is reforming its military in such a comprehensive manner. Although there are many possible explanations, but David M. Finkelstein in his seminal work in 'CNA CHINA STUDIES' has analysed "The reorganization and reform of the PLA is being driven by three imperatives, all of which are considered to be vital and mutually supporting by top Party and PLA leaders. These imperatives are political, institutional and operational":

First, Necessity to "perfect and enhance" civilian political control over the PLA to deal with rampant corruption and other internal problems;

Second, Institutionally, enhance the professionalism of the force, to overcome the "organizational and institutional contradictions" inhibiting the generation of combat power and force modernization;

Third, operationally, the need is to streamline and clarify command and control authorities and responsibilities in order to better prosecute modern, information-intensive joint campaigns - especially in the maritime-aerospace battle space domains.¹⁷ In fact, the future battlefield is projected to be dynamic and more fast paced, requiring subordinate commanders to take greater initiative and

make battlefield decisions without having to wait for orders from his superiors up the chain of command. The joint operations, which the PLA envisions conducting in the future require faster decision-making loops and shortened time gaps between sensors and shooters, both of which could be gained by giving lower level officers more authority to command.¹⁸

There is a tacit acknowledgement in Beijing that the legacy organizational structure of the PLA and its attendant command and control arrangements were deemed ill-suited to conduct 21st Century warfare. After working assiduously since the mid-1990s to develop the capacity to prosecute joint operations, it is likely that the PLA just could not effectively superimpose adhoc joint warfighting command and control architectures on to the Military Regions - the entities that have been joint in name only.¹⁹

And ultimately, China has to address the emerging international and regional security environment.

• Enhance Civilian Political Control. In spite of the political rhetoric claiming that the civilian leadership supervises the military, two highest ranking military generals Guo Boxiong and Xu Caihou in fact controlled the personnel affairs of the PLA for a decade (2002-2012). Xi Jinping, when he became the Central Military Commission's third Vice-Chairman in 2010, witnessed how his fellow Vice-Chairmen Xu Caihou and Guo Boxiong took over the army's staff affairs right under Hu's nose. China watchers had long suspected that Hu's grip on the army was weak. He succeeded former president Jiang Zemin as CMC Chairman only in 2004, two years after he took over from Jiang as party secretary. Even then, Jiang remained influential,

installing his trusted aides Xu and Guo as Hu's deputies. In fact, Jiang continued to wield influence over military decisions through Xu and Guo. Even the Americans also doubted Hu's control. So when Xi Jinping took over from Hu Jintao in 2012, he made sure that he assumed all three key positions - president, party secretary and CMC chairman - at once and launched a sweeping anti-corruption crackdown soon after.²⁰

In a widely publicized interview in March 2015, three former PLA major generals revealed that Xu Caihou solicited 20 million Yuan (approximately US \$ 3.25 million) for the "sale" of the post of commander of a military region. Selling military ranks and officer positions was a widespread phenomenon in the PLA while Guo and Xu were in charge. These corrupt top military leaders made "CCP leader Hu Jintao a mere figurehead". As for Guo Boxiong, about nine months before his arrest, Chinese media was told that in addition to receiving bribes through personnel appointments, General Guo Boxiong even embezzled China's military funds.²¹ Incidentally, Xu Caihou died this year, while awaiting prosecution for corruption.

It is apparent that Xi Jinping had decided to avert the same awful treatment that his predecessor received from these two top military generals. In November 2014, Xi Jinping convened the conference on political affairs of the PLA in Gutian Town, Fujian Province. Gutian is a historical site of the Chinese Communist Revolution because a meeting of the Red Army Branch No 4 was held there in December 1929, wherein the principle that "the party commands the gun" was established and Mao Zedong himself established his leadership. Not surprisingly, the Chinese official media now refer to this meeting chaired by Xi in Gutian as

"the New Gutian Conference". Xi addressed the 420 generals and senior military officials in attendance for the two-day meeting, reminding them of Mao's dictum about party control of the military and connecting the themes of his current anti-corruption campaign.²²

- Xi Jinping: Enlarging his Power Circle within the PLA. The Xi Administration actually has purged on corruption charges as many as 42 senior officers ranked at the vice-army level or above. This PLA purge is apparently the largest since the famous Lin Biao Incident in 1971. The purged 42 high-ranking officers constitute only a very small portion of PLA leaders as a large number of protégés of Guo and Xu have presumably remained in power. In handling this challenge, Xi Jinping has adopted the same method that Mao Zedong and Deng Xiaoping employed to prevent military factionalism or even a military coup i.e. large scale reshuffling of senior military officers as also creating his own power circle within the PLA:-
 - Within roughly, two and a half years under his leadership, Xi Jinping has reshuffled senior-level military officers in a substantial way. Among the 91 highest-ranking military leaders in the PLA, 57 (62.6%) are newcomers who emerged after the 18th Party Congress in November 2012. In the PLAAF, with the exception of Commander Ma Xiaotian (born in 1949) all top leaders, were new appointees assigned during Xi's presidency. In addition, the PLA's 18 group armies also experienced a large-scale reshuffle in 2014.
 - While part of this reshuffle reflects Xi's vision of enhancing the PLA's capacity for a more integrated military operation and his desire to promote "young

- guards", another part of this reshuffle was intended to remove the protégés of Xu and Guo, and other potential political rivals.
- The current top leadership of the Beijing Military Region – all except Political Commissar Liu Fulian (born 1953) were appointed to their current positions during Xi's leadership. The appointment of Song Puxuan (born 1954) to commander of the Beijing Military Region was a surprise to many analysts because Song is not a member of the 18th Central Committee of the CCP. His predecessors were all members of the Central Committee when they were appointed to this position. This extraordinary appointment reflects Xi's determination to place his own generals in key positions in the PLA and his heavy reliance on senior officers who advanced their careers from the Nanjing Military Region, especially from the 31st Group Army, which is based in Fujian Province, where Xi served as a municipal and provincial leader for 17 years. Among the 44 highest ranking officers in China's seven military regions, 14 (13.8 percent) advanced their careers primarily from Nanjing Military Region. Several of them were from the 31st Group Army, which is now called Xi's "royal army" by some Chinese analysts. In 2015 alone, several military leaders who had served in the 31st Group Army received major promotions.²³
- Xi Jinping has apparently boosted up the promotion process for his protégés. This is particularly noticeable in the promotion of full generals in 2015. According to the 'Regulations on the promotions of Officers of the PLA (Article 17 to 23), any Lieutenant General will not be considered for further promotion unless and until he or she has held this rank for at

least four years and served as a chief in full military region level leadership for two years.²⁴ Wang Ning and Miao Hua did not meet these two criteria, as Wang Ning held the rank of Lt Gen for three years and Miao Hua held the rank of Lt Gen for only two years. Miao had served as a chief in full military region level leadership for only one year. The promotions to the rank of full general for Miao Hua and Wang Ning have made them the youngest full generals in the PLA. Alongwith Cai Yingting (one of Xi's most trusted friends in the military) they are strong candidates for membership in the next CMC.²⁵

"CMC Chairmanship Responsibility System" (junwei zhuxi fuze zhi). Another problem was inadequate supervision of the PLA by top party leaders or ineffective exercise of party control. To overcome these aspects, Xi has emphasized the need for centralizing authority and in the "CMC Opinion", it is advocated to comprehensively implement the 'CMC chairmanship responsibility system'. In this, "all significant issues in national defence and army building [are] planned and decided by the CMC chairman," and "once the decision has been made, the chairman conducts 'concentrated' unified leadership' and 'efficient command' of the entire military."26 This concept is another piece of Xi Jinping's ongoing effort to consolidate his leadership power, with specific focus on consolidating his actual control over the PLA. A series of messages in the military propaganda are designed to portray Xi Jinping as the strongest Chinese leader since Chairman Mao. Interestingly, in contrast to Hu Jintao - who, according to some Hong Kong based analysts, seldom worked in the office of the CMC - Xi Jinping spends at least half

- a day every week in his office in the CMC, handling military affairs including personnel matters.²⁷
- **Enhancing the Military's Ability to Conduct Joint** Operations. Initially inspired by the U.S. military's successful joint operations during the first Gulf War, this has long been a goal for Chinese military planners to increase the PLA's ability to carry out joint operations on a modern, high-tech battlefield. The PLA subsequently developed joint campaign doctrine, created a joint logistics system, and conducted an increasing number of cross-service exercises. However, PLA analysts contend that the absence of a permanent joint command & control mechanism, combined with the continued dominance of the ground forces, has retarded progress towards achieving a true joint war fighting capability. Xi Jinping himself noted, in 2013, that establishing a joint command & control system should be given "prime importance", explaining that "we have given much consideration to joint command & control, but fundamental problems remain...... establishing a CMC and theater command joint command & control system requires urgency and should not be delayed".28
- Address the Emerging International and Regional Security Environment. The deeper reason for China's sweeping military reforms include its increasingly deteriorating security environment. It might sound strange because China is currently the second largest economy in the world and its military is also one of the biggest in the world. China now possesses more material prowess to fight and win a modern war. But there is a weaker side for the PLA's capabilities:
 - First, China is involved in multiple territorial disputes with other Asian countries. This means that it is at least theoretically possible that China's military

might one day face two enemies simultaneously, possibly in the East China Sea and the South China Sea. But China's Navy is not yet mature enough to fight two wars simultaneously.

Second, there is also the problem of information gathering capabilities and experience. The PLA has not fought a war for nearly 30 years whereas the United States has been indulging in war fighting for the most part since the end of the Cold War. The PLA's true war-fighting capabilities are questionable.²⁹

According to Major General Xiao Dongsong, Director, Department of Marxism Studies at the National Defence University, President Xi Jinping emphasized in a speech(4 January 2016) that China is faced with "three unprecedented situations" (sange qiansuo weiyou) as well as "three dangers" (sange weixian). China is closer than ever before to being the centre of the world stage; it is closer to achieving its goals; and it now has the ability and the self-confidence to achieve its objectives. At the same time, China must deal with the danger of aggression, subversion, and division, the danger that its steady economic development may not last, and the danger of interrupting the development of socialism with Chinese characteristics. Xiao says that to address these risks and achieve the goal of "the great rejuvenation of the Chinese nation", Xi Jinping needs to build a strong army.30

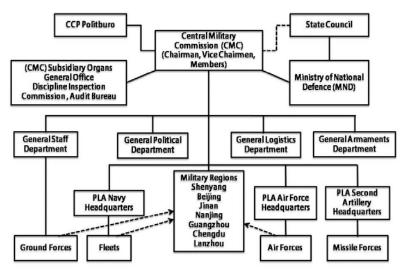
Key Areas of PLA's Upcoming Organizational Reforms

Prior to the reforms, the PLA's organization was based on a model imported from the Soviet Union in the early 1950's ³¹ It had three main constituents:

- three services army, navy and airforce and the Second Artillery Force (SAF), an independent branch responsible for China's conventional and nuclear missiles;
- four general headquarters namely General Staff Department (GSD), General Political Department (GPD), General Logistics Department (GLD), and General Armaments Department (GAD); and
- seven geographic Military Regions (MRs), listed in protocol order: Shenyang, Beijing, Jinan, Nanjing, Guangzhou, Chengdu and Lanzhou, with subsidiary units drawn from the services.³²

The CMC being the highest command authority in the PLA, exercised command and control over the seven MRs, the Army, the Navy, the Air Force and the SAF through the four general departments. This structure is illustrated in figure 1.

Figure 1: PLA Organizational Structure Prior to Reforms



Source: Phillip C. Saunders and Joel Wuthnow, "China's Goldwater-Nichols? Assessing PLA Organizational Reforms", National Defense University, April 2016, available at http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-294.pdf, p.2

Over the years, only incremental changes had been made to this system. Reforms in the previous years revised the MR system from originally 13 MRs in 1995 to 11 MRs in 1969 and then reduced to 7 MRs in 1985, created new general departments (the General Equipment Department or later renamed as General Armaments Department in 1998), and added an independent branch (the SAF in 1966).33 The General Staff Department of the CMC was the nerve centre - processing all CMC communications and documents, coordinating meetings, and conveyed orders and directives to other subordinate organs. It was also responsible for daily administrative duties of the CMC. With the PLA's Army Headquarters having been subsumed as a part of General Staff Department, the PLA Army, over a period of time has acquired considerable power and authority over the other services of the PLA. The PLA Army has a predominant role in the functioning and decisions emanating from CMC, due to which the PLA remained a fundamentally ground force centric organization lending itself to single-service operations. The PLA Army embedded in the CMC has been considered by the political leadership as a "structural and policy barrier" as also a threat to its authority.34

Further, a key weakness was an outdated command and control structure in which the services, rather than theatre commanders, possessed operational authority during peacetime. This hindered the development of a force capable of conducting modern joint operations.³⁵

The reforms announced by Xi Jinping in late 2015 and early 2016 are aimed at the most wide-ranging restructuring of the PLA. The new PLA organizational structure envisaged after the Reforms is given in Figure 2. The reforms include the following changes to the PLA's three main constituents:

- <u>Service Reforms.</u> On 31 December 2015, Xi announced three changes to the services:
- First, establishment of national- and theatre-level headquarters for the PLA Army (PLAA), which previously had been collectively led and administered by the general departments;
- Second, elevation of the SAF to the status of a fullfledged service and renamed it as the PLA Rocket Force (PLARF); and
- Third, establishment of a new Strategic Support Force (SSF), whose major mission, according to military expert Yin Zhou is "to give support to the combat operations so that the PLA can gain regional advantages in the astronautic war, space war, network war and electromagnetic space war and ensure smooth operations." 36

Thus the PLAA now has an official headquarters at the same level as the PLAN, PLAAF and PLARF. Previously, the four General Departments served as the Army Headquarters and the Joint Headquarters for all the PLA. The PLASAF, which was previously an independent [Army] branch treated as a service, is now a full service equal to the PLAA, PLAN and PLAAF. The PLASSF does not appear to be a "service". It is an independent "force" along the same lines as the former PLASAF ³⁷

 CMC Reforms. On 11 January 2016, CMC Chairman Xi Jinping revealed that the general departments had been replaced by a new CMC structure composed of 15 functional sections - seven departments (including the important General Office), three commissions, and five directly affiliated offices. (Details are shown in the Table 2 at Annexure 2)38. The GSD's extensive portfolio got dispersed among several new CMC departments. Its core command and control function was transferred to a New Joint Staff Department (JSD), while its sub-departments responsible for training and administration, and mobilization each became first-level departments directly under the CMC. The GPD, GLD and GAD became the CMC Political Work, Logistical Support, and Equipment Development Departments, respectively. The new Political Work Department is responsible for "human resource management", which implies that it has taken over the GSD's oversight of enlisted personnel in the former Military Affairs Department. In that case, the new Political Work Department will now be responsible for all personnel matters concerning both cadre and enlisted personnel. The GPD's law enforcement functions were transferred to a new Political and Legal Affairs Commission (or Politics and Law Commission), while its oversight of Party discipline in the PLA moved to a strengthened CMC Discipline Inspection Commission. The GAD's Science and Technology Commission, responsible for defense innovation, was placed under direct CMC oversight.39

• Theatre Reforms. On 1 February 2016, CMC Chairman Xi Jinping presided over the inauguration ceremony formally establishing the five new "theatre commands" or "Zhanqu", replacing the previous seven Military Regions. Table 3 at Annexure 3 elucidates the five new theatre commands in protocol order along with the new commanders' and political commissars' names and rank, as well as their previous position and grade. These commands are headquartered in Nanjing, Guangzhou, Chengdu, Shenyang and Beijing.

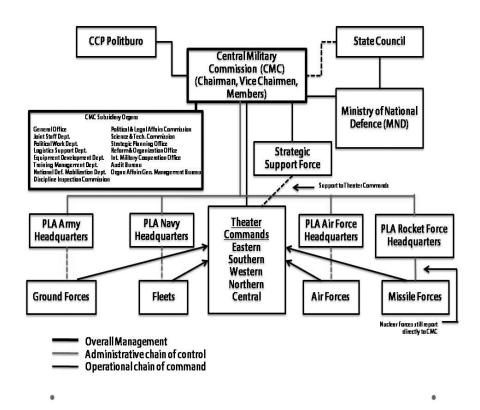
The geographical boundaries of the erstwhile MRs and planned Theatre commands are shown on maps in Annexure 4.41 The most noticeable fact is that four of the five commanders came from an MR that was not part of the new theatre command, while four of the five political commissars came from the same MR that formed the base for the new theatre commands.

The theatres are aligned against land and, where applicable, maritime security challenges in their respective geographic areas; for instance, the Eastern Theatre Command covers the Taiwan Strait and East China Sea, while the Southern Theatre Command covers the South China Sea.⁴² As it was followed in case of MRs, theatres have subordinate units drawn from the individual services.

The new headquarters have been tasked to respond to security threats from their strategic directions, maintain peace, deter wars and win battles, and assist in "safeguarding the overall situations concerning the national security strategy and the military strategy."

According to Chinese sources, CMC and its subsidiary departments will provide overall management, the theatres will focus on operations, and the services will manage force building *(junwei guan zong, zhanqu zhu zhan, junzhong zhu jian)*. In fact, the PLA will have two distinct chains of command: an operational chain from the CMC to the theatres to the troops; and an administrative chain from the CMC to the service headquarters to the troops.⁴³ Xi said the move to establish the theatre commands and form the joint battle command system was a strategic decision by the CCP Central Committee to realize the Chinese dream of a strong military.⁴⁴

Figure 2: PLA Organizational Structure After the Reforms



Source: Phillip C. Saunders and Joel Wuthnow, "China's Goldwater-Nichols? Assessing PLA Organizational Reforms", National Defense University, April 2016, available at http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-294.pdf, p.3.

Emulating American or Russian Model?

The nature of the reforms suggests that the PLA is adopting a modular, U.S. type command & control arrangement in which the operational commanders develop force packages from units, which are trained and equipped by the services. Consequent to the Goldwater-Nichols Department of Defence Reorganisation Act of 1986, the US military has adopted a command & control structure in which the authority flows from the President and Secretary of Defense to the commanders of the regional unified combatant commands, who lead joint forces within their respective theatres. Service chiefs were given an advisory role, with responsibilities to "organize, train and equip" troops. The emerging PLA's distinct operational chain of command and administrative chain of control appears to be a replica of US command & control structure. However, the major difference is that the US combatant commands span the whole globe while China's theatre commands cover territory only within China. Operations far beyond China's borders will apparently be centrally directed by the JSD in Beijing.45 Further, the PLA still retains its soviet orientation, with primary responsibility to defend CCP rule. In the U.S. system, Unit commanders exercise sole authority, while the PLA retains political commissars and Party committees - playing a role in all key decisions. Therefore, the western analysts describe the new PLA command & control structure at best as "Goldwater Nichols with Chinese characteristics".(A diagrammatic comparison of two systems is shown at Annexure 5).

There are contrasting views also, which state that the Chinese are unlikely to model themselves on the U.S. military, which has not exactly distinguished itself in wars in Iraq and Afghanistan. On the other hand, the impact of Russian military reforms was visible in the professional performance of its military in Syria. Russia's successful overhaul of its

once bloated military would have been duly noticed by the Chinese leadership. Indeed, it would be traditionally logical for Beijing to follow into the footsteps of Moscow rather than graft a Western style system onto the PLA. China's existing strategy of anti-access / area denial (A2/AD), which seeks to attack US carrier battle groups in the Pacific and deny the American military access to coastal waters closer to China's eastern seaboard, is similar to the strategy, which the Russian Navy successfully employed during the Cold War.⁴⁶

Possible Changes to the PLA's System of Grade and Ranks: Realistic Speculation. To meet the requirements of the reorganized PLA, it is speculated that the cumbersome grade and rank system being followed by the PLA will have to undergo a transformation. This is likely to be a challenging process as it will affect every member and organization in the PLA; some will benefit and some will not.

grade structure originated with the PLA's predecessor, the Red Army, in the 1920s and underwent several adjustments since then. (For the genesis of PLA's officers' grade and rank system see Annexure 6). In the PLA, every organization and officer is assigned a grade from the platoon level to the CMC to designate their position in the military hierarchy. Organizationally, units can only command other units of lesser grade levels. For example, a corps leader grade unit is authorized to command divisions, but not vice versa. Officers are assigned grades along with military ranks. Each grade from military region leader down has two assigned ranks, while some ranks, such as major general, can be assigned to up to four grades. On average officers up to the rank of senior colonel are promoted in grade every three years, while they are promoted in rank approximately every four years. One

of the most defining feature of PLA is that an officer's grade is more important than his rank.⁴⁷ PLA's 15 - grade structure, last modified in 1988 is shown in Table 4 at Annexure 7.

Although, there are no official reports linking reorganization with the change to the grade system but one of the driving forces to change the grade structure is presumably the result of a previous round of reforms. In 2003, 200,000 personnel (85 percent of whom were officers) were downsized, their positions taken by an expanded corps of tens of thousands of non commissioned officers (NCOs). Though, they filled an important personnel gap, they currently have no grade for themselves and are referred to as "acting" leaders.⁴⁸

Various possible adjustments to the grade system which are being speculated or they are in the process of implementation are:

- First, the Military Region (MR) Leader and Deputy Leader grades to be renamed as Theatre Leader and Deputy Leader, respectively;
- Second, the Division Deputy Leader grade may be renamed as Brigade Leader. Since over the past decade the PLA has been shifting several components from a division and subordinate regiment structure to a brigade structure with subordinate battalions;
- Third, there is a possibility of the entire structure being reorganized by adding or eliminating both a Leader and Deputy Leader grade or adjusting units from one grade to another e.g., all Corps Leader- and Deputy Leader-grade operational and support organizations, such as group armies and the 15th Airborne Corps will be downgraded to Division Leader;

- Fourth, It is possible to abolish the entire grade structure and rely solely on ranks;
- Fifth, It is also being speculated that the entire rank structure may be altered with a view to simplify the personnel system and make seniority, authority and responsibility levels more transparent.⁴⁹

<u>One Grade - One Rank</u>: In 1985, when the PLA commenced its eighth force reduction of one million personnel, as part of these reforms, not only it reduced the number of MRs from 11 to 7 but simultaneously transitioned from 18 grades to 15 and re-established ranks in the PLA in 1988. From 1988-1994, each grade had three ranks, before the system was simplified to two grades per rank. According to various unofficial media reports, there is a likelihood that the PLA will cease to have two grades per rank, ⁵⁰ where in one rank can be assigned to more than one grade and it appears quite logical.

Another possible rank structure reform involves the abolition of the senior colonel rank, or that the PLA will re-introduce a new 4-star flag officer rank - or both. Senior colonels currently may have positions in the grades of division deputy leader, division leader, or corps deputy leader level and their retirement age ranges from 50-58 years. The driving force behind adoption of a "4-star" flag officer is the PLA's growing foreign military relations programme, so that a "4-star" general or admiral meets with his "4-star counterpart". 51

Reduction of Troops. During the massive military parade held in Beijing on 3rd September 2015, to mark the 70th anniversary of the defeat of Japan in World War II, Xi Jinping announced a reduction of 300,000 PLA personnel, bringing the size of the active duty PLA down to two million.⁵² An MND spokesman later clarified the cuts would be completed by the end of 2017 and would mainly affect "troops equipped with outdated armaments, administrative staff, and non-combatant personnel, while optimizing the structure of Chinese forces."⁵³

- **❖** The PLA Rocket Force (PLARF): A New Service. On 31 December 2015, the former Second Artillery Force (er pao), a branch (bingzhong) of the PLA ground forces was disestablished and in its place, a new service (junzhong) co-equal to the Army, Navy and Air Force was established : the PLA Rocket Force (PLARF).54 It is believed that the rocket force will not only control long-range missiles with both conventional and nuclear warheads, but also command the navy's strategic submarine fleet and strategic aviation such as air force bombers. By combining both conventional and nuclear missiles under the PLARF and extending its control over naval and air strategic delivery platforms, China's reform strategy would differ from both the Russian and American manner of commanding strategic nuclear forces. The Russian military's Strategic Rocket Forces comprise only nuclear armed long-range missiles, while in the U.S. system, the Air Force and Navy share operational-control functions of U.S. nuclear platforms with the Strategic Command. The PLARF's conventional missiles are a major pillar of China's A2/AD strategy, meant to target adversaries' planes, ships and facilities that could threaten Chinese territory. While its nuclear component will continue to function as a strategic deterrent by threatening massive retaliation against any major attack on China.55
- ❖ The PLA Strategic Support Force (PLASSF). Having been established on 31 December 2015, the

Strategic Support Force (Zhanlue Zhiyuan Budui) is a completely new entity. Of all the official information released by Beijing, the PLA has been most vague about the missions, organization, and composition of this new force. It is assessed to fall under the category of "new type operational forces" (xinxing zuozhan liliang), which in the parlance of the PLA, generally refers to those key capabilities or units which are characterized by cutting-edge technologies and are deemed essential for prosecuting modern, high-technology, and information-intensive campaigns. According to PLA writings, this force would encompass cyber space, outer space, the electro-magnetic spectrum, Intelligence, reconnaissance (ISR) surveillance and precision guided munitions, special operations forces, special aviation and maritime assets like unmanned aerial and underwater vehicles (UAVs, UUVs), and electronic counter-measure units. These capabilities and units reside at the heart of what the PLA refers to as "informationized local wars" (xinxihua **zhanzheng**)⁵⁶, which the PLA's new military strategy (May 2015) has identified as the type of modern warfare that the Chinese armed forces must be able to prosecute,57 and which, from an operational perspective, this entire reorganization is meant to facilitate. For years, China has been developing the so-called Assassin's Mace capabilities,58 designed to negate U.S. technological strengths and exploit asymmetrical vulnerabilities in U.S. military systems and presumably this would fall under the ambit of Strategic Support Force.59

Three New Organizations to Strengthen CMC's Control over the Armed Forces: THe Commission for Discipline Inspection (junweijiwei), The Politics and Law Commission (junwei zheng fawei) and the Audit Office (junwei shenjishu). In a speech introducing the reforms, Xi Jinping had stressed the importance of regulating power within the military, stating that "decision-making, enforcement, and supervision powers should be separated and distributed in a manner that ensures they serve as checks and balances on each other but also run in parallel". Thus the supervision mechanisms like auditing and discipline inspection have been moved to the CMC level, where they can be more independent of potential "command influence" and thus become more effective and truthful.

The CMC's Commission for Discipline Inspection (CDI) is a replica of the Central CDI, which is under the supervision of the Politburo Standing Committee and is the organization leading Xi Jinping's anticorruption campaign. The CMC CDI was previously part of the PLA's GPD, but is now an autonomous commission directly under the supervision of the CMC. It is headed by Du Jincai, former vice-director of the GPD. Following the civilian CDI's organizational model, the new military CDI is represented at every level of the army. The mission of CMC CDI is to fight against corruption and promote the Party's ideology within the army. After having been established in December 2015, it released its strategy (during the Spring Festival in February 2016) of "open inquiries and secret investigation" (mingcha anfang). Under this strategy, the CDI has provided phone numbers for anyone to call to report behaviour that does not comply with Party law, and especially behaviour that conforms to the "four undesirable working styles": formalism, bureaucratism, hedonism and extravagance. The CDI provided some examples of these "undesirable working styles", such as using

- public funds for banquets, travel, or entertainment, organizing luxurious and extravagant ceremonies, receiving illegal gifts, or using army vehicles for personal use.⁶¹
- The CMC Politics and Law Commission (PLC) is akin to the Central Politics and Law Commission (under Politburo supervision), which is China's prime institution for the supervision and control of state-run public security, justice and judiciary organs, from central to local levels. Until December 2015, out of the 11 members of the Central PLC. only two were from the PLA. Within the PLA, the Military Procurator General and the President of the Military Court were also part of the Central PLC. But from now on, the CMC PLC is in charge of the military judicial courts and procuratorates at every hierarchical level, with the brief of ensuring "legal proceedings" within the army. The new president of the CMC PLC is the former Military Procurator General, Li Xiaofeng.62
- Until November 2014, the Audit Bureau was under the GLD, which was responsible for most PLA expenditure and was one of the most corrupt parts of the system. The CMC Audit Office, now created, is headed by the former president, PLA Logistics Academy, Guo Chunfu. The restructuring would ensure reliable auditing and it is a key measure to push forward innovation in the army's auditing system, providing a new "results-based" management system to better monitor spending within the PLA.⁶³
- Ruling the Army by the Law. The increasing employment of political control in legal terms has

been characteristic of Xi Jinping's ruling style since he came to power in 2012. The Third Plenum of the CCP 18th Congress in November 2013 confirmed this policy of "ruling the country by the law" (yifa zhiguo), in the sense of exercising power through a strict legal framework with which every administration and individual must comply. The legal framework, in fact, is the "Party law", which aims above all to safeguard the CCP. This is equally applicable to the PLA as also to civilian institutions, and to all three of the new control bodies to enforce Party Law. "Ruling the Army by the Law" (yifa zhijun) implies that servicemen must now work and behave in compliance with the "law and the system", instead of relying on past habits, previous experience, and executive orders.⁶⁴

<u>China's Military Parade - 3 September 2015: Display of Military Hardware & China's Ongoing Military Modernization</u>

On 3rd September 2015, China's paramount leader Xi Jinping presided over a military parade involving 12,000 Chinese troops, 500 pieces of military hardware and 200 aircraft. They were joined by around 1,000 troops from 17 other countries.⁶⁵ The greatest military parade in Chinese history sent strong messages to multiple audiences.

The actual military purpose of the parade should not be overlooked. Military reviews are one way in which China engages in what authoritative PLA sources describe as "strategic deterrence", which does not refer narrowly only to nuclear deterrence. Rather, it describes more broadly all the ways that displays of military capabilities can be used to show strength and deter others from challenging China's interests. In the 1984 parade, for example, the Dongfeng-5 intercontinental ballistic missile was displayed for the first

time to show the world that China possessed a nuclear retaliatory capability.⁶⁶

It was only China's fourth military parade since the Mao's era and it was the first time China had held a parade that did not commemorate the founding of the PRC in 1949. It was the first such parade where the world's heads of state were invited. Such an overt display of military might clashed with the concept of China's 'peaceful rise'. It also signalled the definitive departure from Deng Xiaoping's strategy of downplaying its military capabilities - China showcased its most advanced weaponry, something it had refrained from doing in previous parades.⁶⁷

- Advanced Hardware: Missiles and Space Systems.
 Following a decade-long pattern, China's space and ballistic and cruise missile sector remains firmly in the lead. No fewer than seven missiles on parade were from China's foremost set of major missiles, the Dongfeng (DF) series:
- DF-21D (CSS-5 Mod 5): Range 1450 Km, Anti-Ship Ballistic Missile (ASBM). China displayed its DF-21D for the first time ever and announced it as an "Assassin's Mace" at the parade. If properly targeted, this missile has the potential to disable ships including U.S. carrier strike groups. Fielded in small numbers, it gives the PLAN the capability to attack ships in the Western Pacific Ocean, within 900 nm of the Chinese coastline.
- DF-26 Intermediate Range Ballistic Missile (IRBM). With a range of 4000 Km, it is called the "Guam Killer" by news media. Paraded for the first time, the DF-26 is China's first missile capable of striking Guam with a conventional warhead from a homeland-based

launcher. It was described at the parade as a new IRBM with nuclear, conventional, and anti-ship variants. Does this mean that China has in fact debuted - two ASBMs!

- DF-5B Intercontinental Ballistic Missile (ICBM).
 Range of up to 15,000 Km; equipped with multiple independently targetable re-entry vehicles (MIRVs).
 New-generation DF-41 under development is possibly capable of carrying MIRVs as well.
- DF-31 A (ICBM). was also paraded.
- DF-16. Medium Range Ballistic missile (MRBM). First launched in 2009 but was not made public earlier. It is reportedly capable of striking military bases in Okinawa.
- <u>DF-15B. Short-Range Ballistic missile (SRBM)</u>. China has deployed 1,200+ SRBMs opposite Taiwan.
- DF-10 anti-ship missile.69

China is also developing hypersonic glide vehicles and tested one in 2014.⁷⁰

As part of the "world's most rapidly maturing space programme", China is lofting surveillance satellites in rapid succession. Gaofen-2, launched in August 2014, became "China's first satellite capable of submetre resolution imaging". It has planned to launch successively improved variants of this satellite in coming years. China has gained the expertise to send even greater payloads to higher orbits with the completion of a fourth satellite launch facility - Wenchang on Hainan Island, in 2014. Launches of the Long March-5 and -7 heavy lift boosters are scheduled to commence from there by 2016.⁷¹

While China increases its own use of space assets for military purposes, it is developing a range of counter-space weapons to target/threaten its potential opponents. Unusual launch patterns and activities in space suggest efforts to test such capabilities.

- Forging Ahead: Maritime Systems. The PLAN now possesses the largest number of vessels in Asia: It has 26 destroyers, 52 frigates, 20 new corvettes, 85 modern missile-armed patrol craft, 56 amphibious ships, 42 mine warfare ships, more than 50 major auxiliary ships, and more than 400 minor auxiliary ships and service/support craft.⁷² The emphasis now is on quality; China is replacing older platforms with newer and more capable ones. Its shipbuilding industry has begun series production of multiple vessel classes.
- Luyang-III-Class (Type 052 D) Destroyer. It first entered service in 2014, has a vertical launch system capable of firing anti-ship cruise missiles (ASCMs), land-attack cruise missiles (LACMs), surface-to-air missiles (SAMs), and "anti-submarine missiles".
- Type 055 Guided-Missile Cruiser. Was slated to begin construction in 2015, it will wield similar armaments.
 These include the submarine- and ship-launched YJ-18 ASCM.⁷³

YJ-18 ASCM, previously termed "CH-SS-NX-13" by the U.S. Department of Defense (DoD), is China's new-generation indigenous supersonic ASCM. Apparently a Chinese copy of the 3M54E Klub (SS-N-27B export variant) supplied with the eight Kilo-class 636M submarines China imported from Russia. DoD terms it a "dramatic improvement" over the already potent SS-N-27. The YJ-18 reportedly has a cruise range of as much as 180 Km at Mach 0.8 and a terminal sprint

range of 40 Km at Mach 2.5-3.0. These high-speed, long range capabilities, together with a sea-skimming flight profile and likely possession of a command data link, could make the YJ-18 extremely difficult to defend against.⁷⁴

This will greatly strengthen area air defence capabilities: Chinese naval task forces will increasingly be able to take a protective "umbrella" with them to distant seas far removed from the 300 nm- from- shore envelope of China's extensive land-based integrated Air Defense System (IADS). According to DoD such warships may be close to fielding LACMs, which would give the PLAN its first capability to strike shore targets Tomahawk missile-style.⁷⁵

- Jiangdao Class Corvette (Type 056). Newly built, adding Near Seas patrol capabilities beyond the range of the 60 Houbei-class wave-piercing catamaran missile patrol boats (PTG) (Type 022) built in the mid-2000s. While "more than 20" Jiangdao-class corvettes (FFL) are already in operation, and an additional 11 were launched in 2014, China may build more than 60 of this class, ultimately replacing older PLAN patrol boats, including the Houbei.⁷⁶
- Attack Submarines. China has more attack submarines than the U.S., focusing on a much smaller area, which is well-suited for its limited objective. Twelve Yuan-class air independent power (AIP) submarines are in service, "with as many as eight more slated for production". Chinese submarines are optimized for regional missions that concentrate on anti-surface warfare near major sea lines of communication (SLOCs). Presently holding 66 submarines (4 X SSBN, 5 X SSN and 57 X SS), this force will likely grow to between 69 and 78 submarines by 2020.77

- Robust Mining Capability. With a capability to lay more than 50,000 naval mines using submarines, surface ships, aircraft and "fishing and merchant vessels", PLAN extensively supports its high-end Near Seas operations. China is expected to develop still more advanced variants in the future, including "extended-range, propelled-warhead mines", antihelicopter mines, and bottom influence mines more able to counter mine-sweeping efforts. As regards its own mine countermeasure efforts, China can deploy heretofore simply un-Googleable, "remote-controllable WONANG-class inshore minesweepers.
- Undersea Warfare Ability. Three cutting-edge Dalaoclass Submarine rescue ships strengthen this ability.
- Amphibious Capability. Numbers of amphibious vessels remain relatively constant, but China's four (and counting) Yuzhao landing platform docks offer new capabilities, both for South China Sea island seizure campaigns and potentially even for overseas expeditionary warfare.
- Naval Aviation. China's Navy has an air force of its own and its inventory is being diversified rapidly by incorporating an array of relatively high quality aircraft, outfitted with increasingly-sophisticated sensors and weapons. Rotary wing aircraft numbers will grow as every major PLAN surface combatant under construction is capable of embarking a helicopter. Numbers of maritime patrol, airborne early warning and surveillance aircraft are also growing. The PLAN is now introducing UAVs, with the Camcopter S-100 UAV already deployed and various indigenous systems likely to follow soon.⁷⁸

• **PLAAF: Gaining Qualitative Superiority.** Quantitatively, the PLAAF is Asia's largest, and the world's third largest. China remains weak in aero-engines, and may soon import two dozen Russian SU-35S fighters in parts for their advanced engines and radars. The PLAAF is rapidly closing the gap with Western air forces across a broad spectrum of capabilities. China is the only country in the world other than the United States to have two concurrent stealth fighter programmes: J-20 and J-31. Variants of the Y-20 transport - likely to be commissioned in 2016 - could provide badly needed troop movement, refueling and airborne early warning and control (AWACs) capabilities. New variants of the venerable H-6 bomber have been exquisitely retrofitted to serve as tankers and to carry significant weapon loads, including the YJ-12 supersonic ASCM and the CJ-20 LACM. China is placing major emphasis on UAVs and it is appreciated to even outpace U.S. in spending on unmanned systems in the future. No fewer than three long-range precision-strike variants are under development. The BZK-005 UAV has already been observed conducting intelligence, surveillance and reconnaissance over the East China Sea. According to U.S. DoD, "China plans to produce upwards of 41,800 land- and sea-based unmanned systems, worth about \$10.5 billion, between 2014 and 2023."79

As part of China's IADS, the PLAAF also maintains one of the world's largest forces of advanced long-range SAMs. Beside acquiring the long-range S-400 system from Russia, China continues to develop its indigenous long-range systems such as the CSA-9 for IAD and ballistic missile defence (BMD).⁸⁰

• Enlargement and Modernization of China Coast Guard (CCG). The official creation of a national coast guard only occurred in 2013 when China Marine Surveillance (CMS), the Fisheries Law Enforcement (FLE) and at least part of two other agencies were consolidated into the China Coast Guard (CCG) led by the newly created State Oceanic Administration. The creation of the official CCG was largely due to the growing reliance China placed on the paramilitary force for pursuing its maritime interests. In authoritative Chinese publications it is being referred as "Second Navy".81

The CCG is the world's largest blue-water coast guard possessing approximately 330 patrol and coastal combatant ships⁸² while its neighbouring counterparts combined have only 147: Japan: 78, Vietnam: 55, Indonesia: 8, Malaysia: 2, and Philippines: 4. China is continuing to enlarge and modernize the CCG to further improve its ability to enforce its maritime claims. CCG forces are growing at an unparalleled rate. According to the U.S. Office of Naval Intelligence (ONI), the CCG is projected to have added by the end of 2015, >30 large patrol ships and >20 patrol combatants, boasting overall CCG force level by 25 percent.⁸³

China has managed to derive substantial success from the use of the CCG in protecting their various claims. The CCG continues to successfully prevent fishermen from the Philippines from accessing Scarborough Shoal, even in the aftermath of Permanent Court of Arbitration ruling that the Chinese were violating the Filipino fishermen's right to fish there. 84 The U.S. DoD has highlighted Chinese efforts to prevent Philippine resupply of Second Thomas Shoal and mentioned *Luconia Shoals* and *Reed Bank* as potential future

flashpoints. To facilitate such gains while avoiding escalation to military conflict and direct U.S. intervention. ships from the CCG man the front line, while the PLAN remains ready back stage in a monitoring and deterrent capacity. Island reclamation efforts in South China Sea will likely be supported by all such forces in future. Between 2010 and 2016, Chinese coast guard units were involved in 71 percent of the 45 incidents. In 2014, during the oil exploration efforts by Chinese National Offshore Oil Company, roughly 12 nm from an island disputed with Vietnam, (and only 120 nm from Vietnam's coast). China used CCG and fishing boats to fend off Vietnamese vessels with water cannons and ramming, while PLAN ships conducted "overwatch" and PLA fighter and reconnaissance aircraft and helicopters patrolled above.85

China's strategy to protect its maritime claims also extends beyond the use of traditional coast guard or naval forces.

Maritime Militia: China's Third Sea Force. Naval War College Professor Dr. Andrew Erickson stated emphatically during а Senate Armed Services Committee hearing on 22 September 2016 "China's maritime militia is a paramilitary force that operates on the front lines but hides behind the facade of civilian operations. They are often presented as fishing trawlers, but they rarely behave as such. Make no mistake, these are state-organized, developed, and controlled forces operating under a direct military chain of command," China's maritime militia is typically positioned on the front line, with naval and coast guard vessels stationed nearby for protection. China uses these vessels to skirt claims that it is militarizing the South China Sea. Erickson further argued "This is a force that thrives within the shadows of plausible deniability,"

China's maritime militia has been involved in numerous incidents. Maritime militia units made appearances during the 2009 harassment of a U.S. surveillance ship, 2011 sabotage of two Vietnamese hydrographic vessels, 2012 seizure of Scarborough Shoal, 2014 repulsion of Vietnamese vessels near a Chinese oil rig in disputed waters, and 2015 harassment of the U.S.S. Lassen during a Freedom of Navigation Operation (FONOP).

A 1978 report estimated that China's maritime militia consisted of 750,000 personnel and 140,000 vessels, but the current size of this force is unknown. A 2010 defense white paper reported that China had 8 million militia units; the maritime militia would be a smaller subset of that group.

Despite the United States' emphasis on pivoting to Asia and deterring Chinese aggression in the South China Sea, the U.S. government has not addressed this lethal third sea force.⁸⁶

- Weaknesses of PLAN and Measures to Overcome.
 The PLAN still has considerable work to do to become the world-class blue water navy:
- It lacks an open-ocean anti-submarine warfare capability - essential for protecting high-value surface vessels far from home. Though its new ships boast "a variety of new sonar systems, including towed arrays and variable-depth sonars, as well as hangars to support embarked helicopters".
- Its ability to collect and disseminate targeting information in real time under wartime conditions remains uncertain.

- China is still lacking in some critical technologies, industrial processes, and related knowhow. Through multi-pronged efforts, progressively China is bridging the gaps: It continues to obtain significant technologies, components and systems from abroad, for example, Russian and Ukrainian economic woes facilitate Chinese access to advanced expertise and technologies including S-400 SAMs, Su-35 fighters, and the Petersburg/Lada-class submarine production programme from the former; assault hovercraft and aero-engines from the latter. U.S. DoD has documented multiple cases of Chinese nationals seeking to transfer foreign technology illegally. Finally, China is enhancing its own state Science & Technology research funding.
- Logistics and intelligence support remain key constraints for Chinese operations in the Indian Ocean and beyond. It has been assessed by the U.S. DoD that "Beijing will likely establish several access points in this area in the next 10 years" to remedy this lacunae. These arrangements will most likely take the form of agreements for refueling, replenishment, crew rest and low-level maintenance. The services provided will likely fall short of permitting the full spectrum of support from repair to rearmament.
- Major Far Seas capacity will require substantially more and better nuclear-powered attack submarines (SSNs) than China's current limited inventory. A submarine is useful only to the extent that it can attack undetected and China is continuously working on this aspect. Subsequent to the completion of the improved SHANG SSN, the PLAN will progress to Type 095 SSN, which may provide a generational improvement in many areas such as quieting and weapon capacity.

- A major blue water navy also requires robust deck aviation. While China has taken the long path of aircraft carrier development, it is estimated by the U.S. DoD that it would take several years before Chinese carrierbased air regiments are operational.
- Robust nuclear deterrence is important to any great power, but developing an effective sea leg is technically most challenging. China will rely on its Type 094 nuclear-powered ballistic missile submarine equipped with JL-2 nuclear ballistic missiles.⁸⁷
- **Improvement of Training and Education**. Continued training and education reforms was re-emphasized at the Third Plenum Meeting. The PLA has stressed that it needs personnel who are well-trained and educated in joint operations and in the use of new technology if they have to operate using tactics and doctrines that have yet not been battle tested. Further, the PLA is aware that compared to highly advanced armed forces, the PLA's current information literacy is low and its lack of specialized and technical personnel is constraining modernization. With a view to train and educate its personnel in these aspects, the PLA is investing in new facilities and upgrading bases so that they can conduct more complex battlefield simulations and more effectively teach its personnel how to conduct joint operations. However, the nature and success of PLA efforts toward education has yet to be publically debated amongst the other reforms.88
- PLA's Objective. The U.S. DoD in its annual report on Chinese military and security issues has identified PLA's objectives as follows:
- Safeguarding the Chinese Communist Party's ruling position by guaranteeing domestic stability in conjunction with internal security forces as necessary.

- Increasing ability to exert leverage over disputed border areas, Taiwan and unresolved island and maritime claims in the "Near Seas" (Yellow, East and South China Seas).
- Also developing a new outer layer of power projection and influencing capability, becoming far broaderranging in operational scope.
- (Efforts are underway) to make the PLA a great power military with global reach, even if it will not be globally present or capable to U.S. standards.⁸⁹

As China's Commander-in-Chief, Xi Jinping has grasped that induction and display of state-of-the art weapons and equipment alone cannot confer military might. Military machinery can deliver victory on the battlefield only when it is handled by highly trained and professional soldiers, functioning under well-coordinated military organizations utilizing modern means of technology to exercise effective command and control. Therefore, it was anticipated that Xi would soon announce and implement reforms to restructure the PLA, which he rightly did commencing with the Military Parade.

Resistance to Reforms

Barely a week after the Beijing parade, the PLA newspaper had said that the troops cut and other military reforms Xi wished to undertake would require "an assault on fortified positions" to change mindsets and root out vested interests, and that the difficulties expected would be "unprecedented". There have been signs of resistance within the military, with some senior officials warning in military newspapers that the overhaul could destabilise the armed forces and society. It is obvious that in the short-term, the reforms are bound to create some degree of organizational disruption, as new

operational and administrative relations are evolved, new commanders assume responsibility, and PLA personnel grasp their role in the new structure. The significant obstacles foreseen on the path of reforms, restructuring and modernization are:-

Implementation of Force Reduction. Although one of the first announcements, which Xi made was about the downsizing of PLA by 300,000 men but, to date, no specifics have officially been announced other than the abolition of the performing Art Troupe of the Nanjing MR.92 That too has been retracted. The art troupe formerly known as the Song and Dance Ensemble of the PLA General Political Department has been rechristened as The Song and Dance Ensemble of the Political Work Department of the CMC and it appeared in a choral symphony concert under its new name on March 10, 2016. Major General Xu Guangyu, a senior consultant with the China Arms Control and Disarmament Association stated that the tradition of art troupes should be maintained, as it serves to build and sustain troops' morale.93

While the PLA has announced that as many as 1,30,000 are likely to be absorbed laterally, the fate of 1,70,000 members of the officer corps is uncertain. The government had hurriedly announced a five percent reservation of jobs in all ministries for PLA, indicating that some of the 'laid off' PLA personnel may get civilian jobs. The cuts have come at a time of heightened economic uncertainty in China as growth is slowing, its stock markets tumble and the leadership is grappling with painful but much needed economic reforms.⁹⁴ The demobilised soldiers could make trouble as it had happened earlier also.⁹⁵

Further, how will the PLA's 2 million personnel be divided officers. uniformed civil among cadre. non-commissioned officers (NCOs). and conscripts/Volunteers? In 2003, the PLA implemented a 200,000-men downsizing, of which 85 percent were officers, including over 200 one-star generals and admirals. In addition, about 70 junior officer specialty billets were turned over to NCOs. To date, thousands of NCOs have now filled those billets; however, they are still called "acting" leaders.96 Inadequate military housing may lead to significant resentment as it was experienced by Russia also.97

- Relationship between the Theatre Commands and the Services. One of the main areas of resistance to the current reform programme involves concerns about how the relationship between the theatre commands and the services will work in practice. The theatre commands are tasked with warfighting, while the services are tasked to build modern forces. It is apprehended that in view of this split, the services may pursue force modernization efforts that are not relevant to warfighting requirements. At the same time, the theatre commands may not recognize the constraints under which the services are operating due to personnel or costs. And it may be "difficult to focus [the new] command authorities" (nanyi jizhong zhihui tongling) in order to prosecute a conflict. These concerns may indicate that mechanisms for coordination between the theatre commands and the services have yet not been fully worked out.98
- Continued Ground Force Dominance and Resistance to "Jointness". The army still holds sway over some appointments - all five chiefs of the new regional commands are army generals. The joint commands

continue to be headed by army men, who have little or no experience of operations at sea or in the air. A photograph accompanying the historic announcement on 11 January 2016 showed a total of 69 uniformed officers/generals, of which 58 were from PLAA/PLARF, six were from PLAN, and five were from PLAAF - not an auspicious start for greater jointness at the most senior levels of the PLA command structure.99 Further, nominally joint billets (and the CMC) will be initially occupied predominantly by ground force officers. This entails that the army perspectives, interests and biases may continue to frustrate efforts to build a genuinely joint force. It will depend upon the PLA's ability to inculcate jointness in the force through means such as joint Professional Military Education (PME), joint billets and rotational assignments between the services. 100 as being followed in the Western armies.

- Resistance within Organizational System. Senior Colonel Tang Junfeng, a researcher at the National Defence University Research Centre wrote a commentary titled "Expert: The Inner Predicament of Modern Military Reforms" on 29 November 2015, in which he pointed out potential roadblocks to the military reforms. These include resistance within organizational systems because of inertia, the difficulty of breaking through conflict of interest, and the difficulty of measuring military effectiveness. The lack of recent wartime experience may also pose a problem, because the usefulness of reforms is difficult to test during peacetime. Tang cautioned that reforms developed by a peacetime military might lack operational relevance. 101
- Interservice Rivalry and Bias towards Combat Units.
 As with any modern joint force, competition for resources and influence might constrain effective cooperation

between the different services. This is especially likely as China's economic growth is slowing down, placing a premium on access to scarce budgetary resources. 102 Further, the PLA has traditionally given higher status to combat units than to those providing communications, logistics, transport, etc., a misplaced emphasis in an age when information and communications are crucial in warfare. The reforms have done little to correct that bias. 103

- **Difficulty in Modernization and Replacement of** Obsolete Weapon Systems. Another challenging aspect of the reforms is the need to replace obsolete / obsolescent weapons systems and equipment. Despite the growth in defence spending and procurement, many PLA units continue to use outdated equipment. During the 'Stride-2014' military exercises in Zhurihe, Type 59 tanks (in service since 1959) were deployed alongside more modern equipment. 104 Such obsolete equipment is impossible to integrate with modern communication systems, and the vast quantity of antiquated weapons will take years to replace. Further, the Chinese arms industry has struggled to produce indigenous high quality weaponry. In the crucial field of air-defence, despite making gains in the last fifteen years, China still suffers from inadequate capabilities. The Chinese HQ-9 SAM system has been hyped to be an improvement over the U.S. MIM-104 Patriot and the Russian S-300.¹⁰⁵ but China has been struggling to attract foreign buyers. China has been able to copy the Russian S-300, but according to Russian experts the reverse-engineered model is inferior to the original. 106 Beijing is still covered by Russian-made S-300 systems.
- President Xi NOT in Complete Control. Xi did not manage to promote one of his proteges, General Liu

Yuan who has just retired as the Political Commissar of the PLA's Logistics Department. Liu, the son of former President Liu Shaoqi, greatly helped Xi in his campaign to cleanse the 'flies and tigers' in the PLA ranks; with two of CMC's vice-chairmen being investigated, Liu was expected to be appointed Secretary of Central Commission for Discipline Inspection (CCDI) to be set up within the CMC. The fact that he did not get the job tends to show that Xi does not have full control. ¹⁰⁷ In fact, some analysts argue that the recently released list of commanders and political commissars of the new Military Theatre Commands suggest that Xi may not yet have his complete hold in shaking up the deeply embedded army bureaucracy.

Effectiveness of Reforms and "Areas" to be Watched

Despite the aforesaid obstacles to reform process, the PLA will endeavour to succeed, at least in the terms of success defined by the Party: creating a politically reliable modern force capable of joint operations. To achieve that a right mix of three core groups within the PLA has been targeted:

- First group consists of officers who either see value in building a more capable fighting force or hope to advance their careers by implementing the new policy (or both);
- The second group includes senior officers who have risen to the top of the current system. Many senior officers have been placated by being allowed to hold on to their current privileged status until they retire;
- A third group of influential senior officers, who might otherwise resist reforms, will likely fall in line because of the threat of investigations, trials, or the worse fates that have befallen their disgraced colleagues.¹⁰⁸

Over the longer term, the PLA reforms could result in a leaner, more effective warfighting organization. But it is too early to make any conclusive judgment about the likely impact of reforms and reorganization on PLA's operational effectiveness - One has to wait till the formal completion date of 2020 or may be beyond. Various "Areas" which need to be kept under watch to monitor the progress of reforms are:

- Revamping of the CMC: This may be a phased in process over the next few months, or it might not occur until the 19th Party Congress in late 2017 when several members are due to retire. Whatever happens, there should be a large change over in the CMC and President Xi will like to have his own proteges.
- Transformation of CMC: Whether the CMC departments/commissions/offices and theatre headquarters will become true "joint" organizations with a balanced proportion of members from each of the four services plus the PLASSF.¹⁰⁹
- Leadership within each theatre command, which is presently dominated by Army. How Navy and Air Force officers are integrated into the leadership of the new commands.
- The PLA Rocket Force is now a service, but its predecessor commanded troops from bases that were largely outside the command structure of the seven military regions, now replaced by the theatre commands. Taking into account the importance of the nuclear mission, the Rocket Force should retain its independence from the theatre command system. In that case, it will be essential to observe how the theatre commands and the Rocket Force develop and test coordination mechanisms.

- The relationship between the theatre commands and the Strategic Support Force is not yet understood. For the Strategic Support Force to have operational control of troops, it will have to coordinate the operations of those units with the theatre commands during wartime.¹¹⁰ Specific missions of the PLASSF, its composition in terms of number and type of units under its command, strength of personnel and its chain of command and operational control have to be closely monitored.
- Changes that are likely to occur in the PLA system of educational academies and schools: Status of the Academy of Military Science, National Defense University and National University of Defense Technology; Whether they will continue to be directly under the oversight of the CMC; Whether the structure of former academies be transformed into new entities based on force reduction and consequent changes in personnel and force structure.¹¹¹

Implications

Emergence of PLA as a more effective warfighting organization, will provide it greater confidence and capacity to execute joint operations in multiple domains. This could create new and more complex challenges for the U.S. and allied forces operating in the Asia-Pacific Region.

The reorganization of the erstwhile seven Military Regions into five Theatre Commands, is of particular interest to China's neighbours. The Guangzhou and Nanjing Military Regions have remained untouched but renamed as Southern and Eastern Theatre Commands respectively. The Northern Theatre Command includes the entire Shenyang Military Region and portion of the erstwhile Beijing Military Region. The Central Theatre Command consists of Jinan Military Region and the remaining portion of Beijing Military Region.

Western Theatre Command is of particular interest to India, which has merged the erstwhile Lanzhou and Chengdu Military Regions. Comprising more than half of China's land area and more than one-third of China's land-based military, the newly constituted Western Theatre Command represents a strengthened military formation. The merger of the Lanzhou and Chengdu Military Regions will facilitate joint planning and execution of operations across its entire border against India. Inter-theatre move and coordination of operation-logistics will become much easier for PLA. High altitude acclimatized and trained troops could easily be inducted and deployed into Tibet and across Ladakh in a much shorter timeframe. Merger of Lanzhou and Chengdu Military Regions to constitute Western Theatre Command reveals China's increased and abiding military interest in the region.

While China is in the process of completing its reforms and reorganization, it will try to keep the situation on the border stable but in the long-term once the PLA becomes more effective, better coordinated and well-equipped with modernized equipment, it will become strategically more dominant. It implies that India has only a few years to prepare itself in terms of logistics, infrastructure and operational response.

If seen in historical retrospect, all reforms in the PLA have occurred when the supreme leader's despotic position was threatened or in need of consolidation, resulting in large-scale leadership purges with the PLA and promotions of loyal but not necessarily competent generals and admirals in charge. Further, these leaders tested the strength of PLA after the reforms against China's lesser capable opponents. Xi Jinping, who was secretary (1979-82) to Chinese Defence Minister Geng Biao in the later part of the Sino-Vietnam War, might be tempted to emulate Deng Xiaoping and 'test' the new PLA once the reforms are completed.

Conclusion

The PLA has embarked on an ambitious course of reforms and reorganization. Replacing of obsolete/obsolescent equipment alone will be a major challenge, which will stretch far beyond 2020. Even after personnel reductions and organizational changes are finished, the Army officers will continue to dominate the CMC and theatre commands for quite some time into the future, indicating the degree of difficulty the PLA faces in its historic attempt to abandon the traditional mentality of ground force dominance over the sea. Giving equal weightage to officers of other services in senior leadership positions, particularly at the CMC level and at theatre commands, will be a long drawn out process taking many years. Further to prepare the officers from all services in 'jointmanship', assume assignments and discharge their roles with credibility in modern joint operations, drastic changes will be required in PLA's system of academies and universities.

Year 2020 is the target date that has been set for all changes to be in place, but the senior PLA leadership appears to be fully aware of the problems it faces and recognizes that the current reforms and restructuring will take years to implement. In the coming years, dynamic changes will be needed, keeping in tune with the changing situations. For instance, the U.S. military has been continually improving its ability to conduct joint operations in the three decades following Goldwater-Nichols. Similarly current PLA reforms are part of a long-term, multi-generational military modernization and transformation process that is scheduled to continue until the mid-century target of 2049, the Hundredth anniversary of the establishment of the People's Republic of China.

The PLA should not be underestimated in its capability to carry out big changes; it successfully carried out major

troop reductions in the 1980s and 1990s, rebuilt the military education system after the Cultural Revolution, and gave up control over many sectors of the Chinese economy.

Future changes will likely be unveiled in bits and pieces with hidden contents, or will not be made public at all. One aspect is certain when this process is completed, the organization and functioning of the PLA as it has been known and understood for decades, will have changed significantly. Ultimately, the true effectiveness of these reforms cannot be judged unless and until the PLA is tested in a modern, extended joint warfighting against an equally capable opponent.

Annexure 1

Table 1: PLA REFORM AGENDA, 2015-2020

Reform Area	Topics	Target Date
Leadership Management System	Reform Central Military Commission departments, military services, logistics system, equipment development system	2015*
Joint Com- mand and Control System	Establish two-level joint command system, reform joint training, establish theatre commands	2015&
Military Scale Structure	Reduce force size by 300,000, reducing non-combat personnel, reduce officer billets, phase out old equipment	2016\$
Force Composition	Adjust force structure, optimize reserve force, reduce militias	2016
Cultivating New-Type Military Talent	Enhance Professional Military Education (PME)	2016
People's Armed Police (PAP) command and control system and force composition	Adjust People's Armed Police command and control and force structure	2016
Policy System	Reform personnel system, budget management, and procurement system, salary and welfare system	2017 - 2020
Developing Civil - Military Integration	Enhance management of civilian - military integration	2017 - 2020
Military Legal System	Reform military regulations and military justice system	No Date Provided

- * Although the "CMC Opinions" states that changes to the leadership management system were completed in 2015, the CMC reforms were not announced until the second week of January 2016.
- & Reforms to the two-tiered joint command system, composed of the CMC and theatre commands, were not announced until January and February 2016, respectively.
- \$ Although the CMC reform outline lists 2016 as the completion date for the downsizing, a PLA spokesman has stated that it would be complete by the end of 2017.

<u>Source:</u> Phillip C. Saunders and Joel Wuthnow, "China's Goldwater-Nichols? Assessing PLA Organizational Reforms", National Defense University, April 2016, available at http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-294.pdf

Annexure 2

TABLE 2 : CMC FUNCTIONAL SECTIONS

CMC Organization	Organi- zation Assessed Grade	Leader	Leader's Previous Position	Leader's Previous Grade
General Office	Theatre Deputy Leader	LTG Qin Sheng Xiang	Director CMC Gen- eral Office	MR Deputy Leader
Joint Staff Department	CMC Mem- ber	Gen Fang Fenghui	Chief of the General Staff	CMC Mem- ber
Political Work De- partment	CMC Mem- ber	Gen Zhang Yang	Director, GPD	CMC Mem- ber
Logistic Support Department	CMC Mem- ber	Gen Zhao Keshi	Director, GLD	CMC Mem- ber
Equipment Develop- ment De- partment	CMC Mem- ber	Gen Zhang Youxia	Director, GAD	CMC Mem- ber
Training and Admin- istration Department	Theatre Deputy Leader	MG Zheng He	Deputy Command- er Chengdu MR	MR Deputy Leader
National Defense Mobiliza- tion Depart- ment	Theatre Deputy Leader	MG Sheng Bin	Deputy Command- er Shen- yang MR	MR Deputy Leader

Discipline Inspection Commis- sion	Theatre Leader	Gen Du Jincai	Deputy Director, GPD & Secretary, CMC Discipline Inspection Commission	MR Leader
Politics and Law Com- mission	Theatre Deputy Leader	LTG Li Xiaofeng	Chief Procurator, PLA Military Procurator-ate	MR Deputy Leader
Science and Tech- nology Commis- sion	Theatre Deputy Leader	LTG Liu Guozhi	Director, GAD S & T Commis- sion	MR Deputy Leader
Office for Strategic Planning	Corps Leader	MG Wang Huiqing	Direc- tor, GSD Strategic Planning Department	Corps Leader
Office for Reform and Organiza- tion	Corps Leader	MG Wang Chengzhi	Director, GPD Directly Subordinate Work Department	Corps Leader
Office for Internation- al Military Coopera- tion	Corps Leader	RADM Guan You- fei	Director, MND For- eign Affairs Office (Di- rector, GSD Foreign Af- fairs Office; Director, CMC For- eign Affairs Office)	Corps Leader

Audit Office	Corps Leader	RADM Guo Chunfu	Director, CMC Au- diting and Finance Department	Corps Leader
Agency for Offices Administra- tion	Corps Leader	MG Liu Zhiming	Deputy Chief of Staff, Shen- yang MR	Corps Leader

Source: Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., "The PLA's New Organizational Structure: What is Known, Unknown and Speculation, Parts 1 & 2", pp. 6-7., available at http://www.jamestown.org/uploads/media/The_PLA_s_New_Organizational_Structure_Parts_1_ and 2_01.pdf

Annexure 3

TABLE 3: PLA THEATRE COMMANDS

Organiza- tion	Organi- zation Grade*`	Com- mander	Com- mander's Previous Position/ Grade	Political Commis- sar	PC's Previous Position/ Grade
Eastern Theatre Command	Theatre Leader	Gen Liu Yuejun	Com- mander, Lanzhou MR /MR Leader	Gen Zheng Weiping	PC, Nan- jing MR / MR Leader
Southern Theatre Command	Theatre Leader	Gen Wang Jiao- cheng	Com- mander, Shenyang MR/MR Leader	Gen Wei Liang	PC, Guang- zhou MR/MR Leader
Western Theatre Command	Theatre Leader	Gen Zhao Zongji	Com- mander, Jinan MR/MR Leader	LTG Zhu Fuxi	PC, Chengdu MR/MR Leader
Northern Theatre Command	Theatre Leader	Gen Song Puxuan	Com- mander, Beijing MR/MR Leader	Gen Chu Yimin	PC, Shenyang MR/MR Leader
Central Theatre Command	Theatre Leader	\$LTG Han Weiguo	Deputy Com- mander, Beijing MR/MR Deputy Leader	Gen Yin Fanlong	Deputy Director GPD/MR Leader

Note:-

- * Grade Level of the new theatre commands is "theatre leader", which is the same term used for grade of the former MR leaders.
- \$ Han Weiguo, shown as a LTG in the photograph of the establishment ceremony, will likely be promoted in rank and grade, even though he only received his second star in July 2015 and has been one of the Beijing MR deputy commanders.

Source: Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., "The PLA's New Organizational Structure: What is Known, Unknown and Speculation, Parts 1 & 2", p.8., available at http://www.jamestown.org/uploads/media/The_PLA_s_New_Organizational_Structure_Parts_1_and_2_01.pdf

Annexure 4

CHINA'S MILITARY REGIONS (7)



PLANNED THEATRE COMMANDS (5)

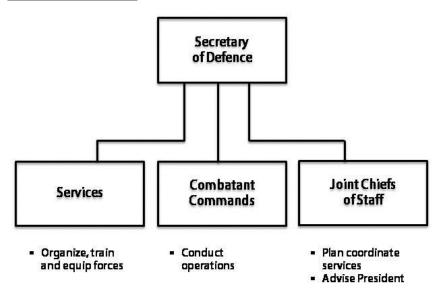


Source: South China Morning Post, available at http://www.economist.com/news/china/21688424-xi-jinping-reforms-chinas-armed-forcesto-hisown-advantage-xis-new-model-army

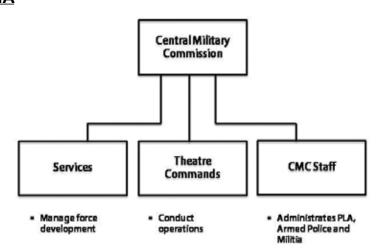
Annexure 5

COMPARISON OF MILITARY STRUCTURES

UNITED STATES



CHINA



Chinese descriptions of reformed military structure strongly resemble structure of U.S. defence establishment under the 1986 Goldwater-Nichols Act

GENESIS OF PLA'S OFFICERS' GRADE AND RANK SYSTEM

The Red Army and PLA have always had an officer (cadre) grade and rank system, which has evolved over the years. This system consists of four basic components: grade categories, grades, rank categories, and ranks. The Chinese use four terms to describe the components: **zhiwu** (position or post), jibie (grade), dengji (rank) and junxian (military ranks) [These terms do not always translate directly into English, but their meaning is usually clear from the context]. The lowest grade is platoon leader and the highest is Chairman of the CMC. The PLA's rank system, which existed from 1955-1965 and was re-instituted in 1988, consists of two parts. The first part is the rank categories: flag rank, field grade (major through senior colonel), and company grade officers (second lieutenant through captain). The second part is the ranks themselves (second lieutenant through general).

Prior to 1952, cadre in the Red Army and PLA were identified only by their position (*zhiwu*). In 1952, the PLA established a formal unified grade system, which consisted of ten grade categories and twenty-one grades (*10 dengji 21 jibie*) as shown in the Table below. In 1955, the "CMC member" grade category was abolished, leaving nine categories and twenty grades.

Under PLA Grades: 1952

Grade Category	Grade
1. CMC (zhongyang junwei)	Chairman (zhuxi) & vice chairman (fuzhuxi)
2. Military Region (dajunqu)	Commander (silingyuan) & Political Commissar (zheng zhi weiyuan)
3. CMC Member (zhongyang junwei weiyuan)	3. Member (weiyuan)
4. Bingtuan	4. Leader (zhengbingtuan)5. Deputy Leader (fubingtuan)6. # 3 leader (zhunbingtuan)
5. Corps (jun)	7. Leader (zhengjun) 8. Deputy Leader (fujun) 9. # 3 leader (zhunjun)
6. Division (shi)	10. Leader (zhengshi) 11. Deputy Leader (fushi) 12. # 3 leader (zhunshi)
7. Regiment (tuan)	13. Leader (zhengtuan)14. Deputy Leader (futuan)15. # 3 leader (zhuntuan)
8. Battalion (ying)	16. Leader (zhengying) 17. Deputy Leader (fuying)
9. Company (lian)	18. Leader (zhenglian) 19. Deputy Leader (fulian)
10. Platoon (pai)	20. Leader (zhengpai) 21. Deputy Leader (fupai)

In 1955, the PLA combined the existing grade system with a new military rank system (junxian zhidu) based on the Soviet rank system, which included five rank categories (dengji) and fifteen ranks (jibie) as shown in the Table below (Each grade was assigned at least one rank):-

PLA Ranks: 1955 -1965

Grade Category	Grade
1. Generalissimo (dayuanshuai)	1. Generalissimo (dayuanshuai)
2. Marshal (yuanshuai)	2. Marshal (yuanshuai)
3. General Grade (jiangguan)	3. Senior General (dajiang)4. General (shangjiang)5. Lieutenant General (zhongjiang)6. Major General (shaojiang)
4. Field Grade (xiaoguan)	 Senior Colonel (daxiao) Colonel (shangxiao) Lieutenant Colonel (zhongxiao) Major (shaoxiao)
5. Company Grade (weiguan)	11. Senior Captain (dawei)12. Captain (shangwei)13. 1st Lieutenant (zhongwei)14. 2nd Lieutenant (shaowei)15. Warrant Officer (zhunwei)

In May 1965, the military grade and rank systems were officially abolished and replaced with the State administrative cadre (officer) rank system. Officers were called cadre (ganbu) and enlisted members were called soldiers (zhanshi). All military personnel wore the same hat (Mao hat with a red star) and plain red collar tabs. Each of the three services wore their traditional Army green, Navy blue and white, and Air Force green jackets and blue pants. The only difference between a cadre and soldier was that a cadre's jacket had four pockets and a soldier's had only two breast pockets, and the material was different. In 1972, the twenty-seven cadre ranks were reduced to twenty-three.

During the 1979 Vietnam border conflict, the PLA had major command and control problems when different units had to work together and it was difficult to tell who was in charge. After several years of wrangling, in October 1988, the National People's Congress (NPC) adopted the Regulation, which established a rank/grade system for three cadre classifications - officers (junguan) and non-technical cadre (fei zhuanye jishu ganbu), technical cadre and civilian cadre (wenzhi ganbu) - and abolished the administrative cadre grade system for the military. The description for each rank provides the grade, authorized ranks and basic rank for each grade e.g., The Regulation stipulates, "Leaders of military regions shall be either General or Lieutenant general, with Lieutenant general as the basic military rank."

There are fifteen officer grades (junguan zhiwu dengji) which determine every officer's military rank, pay and allowances. All PLA officers, regardless of service or duty title, are assigned one of these grades.

<u>Source:</u> Kenneth Allen, "Introduction to the PLA's Administrative and Operational Structure" in Dr. James C. Mulvenon & Andrew N.D. Yang (eds.) "The People's Liberation Army as Organization Reference Volume v 1.0" pp 28-31., RAND National Security Research Division available at https://www.rand.org/content/dam/rand/pubs/conf_proceedings/2008/CF182part1.pdf

Annexure 7

TABLE 4: PLA's 15 - GRADE STRUCTURE SINCE 1988

Grade (zhiwu dengji)	Military Rank (junx- ian)*	Service limit Age ^{\$}	Army	Navy	Air force	2nd Artillery
1. CMC Chair- man (junwei zhuxi) Vice Chair- man (fuzhuxi)	Chair- man - None Vice Chair- man - General					
2. CMC Member (junwei weiyuan)	General		General Depart- ments			
3. MR Com- mander (daqu zheng- zhi)	General / Lieu- tenant General	65	MR/ General Depart- ment Dep Ldr	HQ	HQ	HQ
4.MR Deputy Com- mander (daqu fuzhi)	Lieu- tenant General / Major General	63		Fleet / Naval Aviation	MRAF	
5.Corps Com- mander (zhen gjun)	Major Gener- al / Lt General	55	Army (jituan- jun) / MD	Base / Fleet Aviation	Air Corps / Base	

6.Corps Deputy Com- mander (fujun)	Major General / Senior Colonel	(53)				
7.Di- vision Com- mander (zheng- shi)	Senior Colonel / Major General	50	Division	Garrison / Flotilla (jiandui)	Division	Base
8.Di- vision Deputy Com- mander (fushi) / Brigade Leader (zheng- lu)	Colonel / Senior Colonel	48	Brigade		Brigade	Brigade
9. Regiment Ldr (zhen gtuan) / Brigade Dep Ldr (fulu)	Colonel / Lieu- tenant Colonel	45	Regi- ment	Group (jianting dadui)	Regi- ment / Brigade Dep Ldr	Brigade Deputy Leader
10. Reg- iment Dep Ldr (futuan)	Lieu- tenant Colonel / Colo- nel	(43)				
11. Battalion Com- mander (zheng ying)	Major / Lieu- tenant Colonel	40	Battal- ion	Squad- ron (jianting zhong- dui)	Battal- ion / Group (dadui)	Battal- ion

12. Battalion Deputy Com- mander (fuying)	Captain /Major	(38)			
13. Company Ldr (zhenglian)	Captain / 1st Lieu- tenant	35	Compa- ny	Com- pany / Squad- ron (zhong- dui)	Compa- ny
14. Company dep Ldr (fulian)	1st Lieu- tenant / Captain	(33)			
15. Platoon Leader (zheng- pai)	2nd Lieu- tenant / 1st Lieu- tenant	30	Platoon	Platoon / Flight (fendui)	Platoon

- \$ Officers at the senior grades must retire if they are not promoted to a higher rank. Younger officers who are not promoted must leave the service. The PLA has two types of retirement - tuixui and tuiyi. Tuixui means the officer retires with a full pension and does not have to work any more. Tuiyi means the officer has a civilian job after he leaves the military and does not receive a full military pension.
- * The first rank noted is the basic rank for that grade. Squad leaders (banzhang) are considered enlisted

personnel *(zhanshi)*. The Military Yearbook did not provide the service limit ages for the deputy leaders for the corps and below, so the figures in parentheses are estimates.

Source: Kenneth Allen, "Introduction to the PLA's Administrative and Operational Structure" in Dr. James C. Mulvenon & Andrew N.D. Yang (eds.) "The People's Liberation Army as Organization Reference Volume v 1.0" pp 32-34., RAND National Security Research Division available at https://www.rand.org/content/dam/rand/pubs/conf_proceedings/2008/CF182part1.pdf

NOTES

- Anthony H. Cordesman with the assistance of Joseph 1. Kendall, "China Military Organization and Reform", Center for Strategic & International Studies (CSIS), August 1, 2016 , p.9. available at https://www.csis.org/analysis/ chinese-military-organization-and-reform (accessed on 16 September 2016) [In practice two CMCs exist next to each other - one for the party, one for the state - but they are almost identical. The National People's Congress elects the state commission's 11 members: the Central Committee of the CCP elects the party commission. The existence of two parallel CMCs shows that the PLA and the armed forces play a twin role in the Chinese body politic - the CMC, and therefore the PLA, on the one hand is an integral part of the CCP and on the other hand serves as the highest administrative body for the Chinese state's military. Both CMCs have the same membership structure; the most important difference between the two is the existence of the General Office in the party CMC. The General Office facilitates and manages interaction among China's most senior military leaders.]; and Carin Zissis, "Modernizing the People's Liberation Army of China", Backgrounder, 5 December 2006, available at http:// www.cfr.org/china/modernizing-peoples-liberation-armychina/p12174
- 2. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., "
 The PLA's New Organizational Structure: What is Known,
 Unknown and Speculation, Parts 1 & 2", available at http://www.jamestown.org/uploads/media/The_PLA_s_New_Organizational_Structure_Parts_1_and_2_01.pdf
- The United States Department of Defence Annual Report to Congress "Military and Security Developments Involving the People's Republic of China 2016", April 2016, p.1.
- 4. "China's military committed to reform", available at http://news.xinhuanet.com/english/2015-09/06/c_134595203.htm (accessed on 23 July 2016).

- 5. Miles Maochun Yu, "What Do China's Cyclical Military Reforms Tell Us?", Hoover Institution, Tuesday, 12 January 2016, 'Military History in the News', available at http://www.hoover.org/research/what-do-chinas-cyclical-military-reforms-tell-us
- 6. "Military Modernization in the 1970s" available at http://www.globalsecurity.org/military/world/china/pla-history6.htm
- 7. Xiaoming Zhang, "China's 1979 War with Vietnam: A Reassessment", The China Quarterly 2005, pp 866-867.
- 8. "Military Modernization in the 1970s", op.cit.
- 9. Kevin N. McCauley, "PLA Transformation: Difficult Military Reforms Begin", China Brief, Volume XV. Issue 18. September 18, 2015, p.3. available at http://www.jamestown.org/chinabrief/
- 10. Ibid, pp 3-4; and Miles Maochun Yu,op.cit.
- John Costello, "Could China Be About to Transform Its 11. Military?", The Diplomat, 29 September 2015, available http://thediplomat.com/2015/09/could-china-be-aboutto-transform-its-military (Until 1986, in case of the United States, each service maintained their own logistics, doctrine, and planning apparatus independent of the others, causing a costly redundancy and duplication of effort. Operational authority was directed from the president, through the Secretary of Defense, down through the services to operational units, mired in a bureaucratic game of telephone resulting in a grossly unwieldy military. GNA abolished the operational distinctions between different services and allowed national command authorities - the president and secretary of defense - to exercise direct operational control over combatant commands, regional or mission-defined areas of responsibility. To put it bluntly, GNA cut out the operational middle-man, simplified the chain of command, and allowed the defense establishment to benefit from a more centralized acquisition and logistics structure).

- 12. Marc Julienne, "The PLA reforms: Tightening control over the military", 'European Council on Foreign Relations China Analysis', March 2016, p.6. available at http://www.ecfr.eu/page/-/XIS_ARMY_JULIENNE.pdf
- 13. Yevgen Sautin, "The Influence of Russian Military Reform on PLA Reorganization", China Brief, Volume: 16, Issue: 6, 28 March 2016, available at http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=45236#.V9oz5z594fE
- 14. Phillip C. Saunders and Joel Wuthnow, "China's Goldwater-Nichols? Assessing PLA Organizational Reforms", National Defense University, April 2016, available at http://ndupress.ndu.edu/Portals/68/Documents/stratforum/SF-294.pdf, p.5.
- Jayadeva Ranade, "PLA Reform, Reorganisation, Restructuring and Implications for India", available at http://www.vifindia.org/article/2016/february/04/pla-reform-reorganisation-restructuring-and-implications-for-india
- Cristina L. Garafola, "Will the PLA Reforms Succeed?", 01
 April 2016, available at http://www.rand.org/blog/2016/04/will-the-pla-reforms-succeed.html
- 17. David M. Finkelstein, "Initial Thoughts on the Reorganization and Reform of the PLA", CNA CHINA STUDIES, 15 January 2016, pp 4-8. available at www.cna.org/cna_files/pdf/DOP-2016-U-012560-Final.pdf (accessed on 23 July 2016)
- 18. Anthony H. Cordesman and et.al., op.cit.,p.3.
- 19. David M. Finkelstein, op.cit., p.8.
- 20. Minnie Chan, "Hu Jintao's weak grip on China's army inspired Xi Jinping's military shake-up: sources", South China Morning post, 11 March 2015, available at http://www.scmp.com/news/china/article/1734663/hu-jintaos-weak-grip-chinas-army-inspired-president-xi-jinpings-military
- 21. Cheng Li, "Promoting "Young Guards": The Recent High Turnover in the PLA Leadership (Part I: Purges and Reshuffles)", China Leadership Monitor, no.48, p.2. available

- at <u>www.hoover.org/sites/default/files/research/docs/clm48cl.</u> <u>pdf</u>
- 22. James Mulvenon, "Hotel Gutian: We Haven't Had That Spirit Here Since 1929", China Leadership Monitor, no.46, p.1. available at <u>www.hoover.org/sites/default/files/research/docs/clm46jm.pdf</u>; and "Xi stresses CPC's absolute leadership over army", 01 November 2014 available at http://news.xinhuanet.com/english/china/2014-11/01/c_133759418.htm
- 23. Cheng Li, op.cit., pp.3-11.
- 24. Ibid, pp. 11-12; and "Regulations on the Military Ranks of Officers of the Chinese People's Liberation Army" available at http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content_1383923.htm (accessed on 10 July 2016)
- 25. Ibid., p.12.
- 26. James Mulvenon, "The Yuan Stops Here: Xi Jinping and the "CMC Chairman Responsibility System", China Leadership Monitor, no.47, available at www.hoover.org/sites/default/files/research/docs/clm47jm.pdf
- 27. Cheng Li, op.cit., pp.2-3.
- 28. Phillip C. Saunders and Joel Wuthnow, op.cit, p.7.
- 29. Dingding Chen, "Take Notice, Asia: China's Military is Getting Leaner and More Lethal", The Diplomat, 01 December 2015, available at http://thediplomat.com/2015/12/take-notice-asia-chinas-military-is-getting-leaner-and-more-lethal/ and Marc Julienne, op.cit.
- 30. Marc Julienne, op.cit, p.6.
- 31. David M. Finkelstein, op.cit., p.2.
- 32. Kenneth W. Allen, "Introduction to the PLA's Organizational Reforms: 2000-2012" in the "The PLA as Organization v 2.0", ed. Kevin Pollpeter and Kenneth W. Allen (Vienna, VA: Defense Group, Inc., 2015), pp 12-78.

- 33. Kenneth W. Allen, "Introduction to the PLA's Administrative and Operational Structure" in Dr. James C. Mulvenon & Andrew N.D. Yang (eds.) "The People's Liberation Army as Organization Reference Volume v 1.0" (Santa Monica; CA: RAND, National Security Research Division, 2002), Table 1.1 on p.3., available at https://www.rand.org/content/dam/rand/pubs/conf_proceedings/2008/CF182part1.pdf
- V. Mahalingam, "China's Military Reforms An Analysis", 07 December 2015, available at http://www.claws.in/1481/chinas-military-reforms%E2%80%93-an-analysis-v-mahalingam.html; and http://news.xinhuanet.com/english/2015-11/27/c_134859198.htm (accessed on 23 July 2016).
- 35. Phillip C. Saunders and Joel Wuthnow, op.cit, p.2.
- 36. "Expert: PLA Strategic Support Force a key force to win wars", China Military Online, 2016-01-06, available at http://english.chinamil.com.cn/news-channels/pla-daily-commentary/2016-01/06/content_6846500.htm (accessed on 23 July2016). [Yin Zhuo pointed out that the PLA Strategic Support Force is not a single combat force. It will be included into the operations of the army, navy, air force and rocket force, etc., so as to conduct integrated joint operations.]
- 37. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit., p.7. [The Chinese terms for Second Artillery Force and the Strategic Support Force are "budui" which the PLA translates as "Force", while the PLAA, PLAN, PLAAF and PLARF use the term "jun" and "junzhong", which means "service". The Chinese use of the term "leading organ" for the PLAA, PLAN, PLAAF and PLARF is because the PLA does not have an official term for "headquarters".]
- 38. Ibid, pp. 6-7.
- 39. "China reshuffles military headquarters", English.news.cn / 11 January 2016 available at http://news.xinhuanet.com/english/2016-01/11/c_134998692.htm (accessed on 23 July 2016); and Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,

- 40. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.8.
- 41. "Xi Jinping reforms China's armed forces to his own advantage", The Economist, 16 January 2016, available at http://www.economist.com/news/china/21688424-xi-jinping-reforms-chinas-armed-forcesto-his-own-advantage-xisnew-model-army
- 42. Phillip C. Saunders and Joel Wuthnow, op.cit, p.3.
- 43. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.3. and "Army adjustment and establishment completed in five Theater Commands", China Military Online, 04 February 2016 (Showing the geographical boundaries of five theater commands along with file photos of their commanders and political commissars) available at http://english.chinamil.com.cn/news-channels/china-military-news/2016-02/04/content_6890499.htm (accessed on 25 July 2016).
- 44. Phillip C. Saunders and Joel Wuthnow, op.cit, p.4.; and "PLA sets up Overseas Operations Office to strengthen overseas rapid reaction", China Military Online, 25 March 2016, available at http://english.chinamil.com.cn/news-channels/pla-daily-commentary/2016-03/25/content_6977517.htm (accessed on 25 July 2016). [The Overseas Operations Office of the Operations Bureau of the Joint Staff Department of China's CMC, a new institution is responsible for directing and coordinating actions carried out by Chinese troops overseas. In contrast, the U.S. overseas military operations are organized by its overseas theater commands]
- 45. Rakesh Krishnan Simha, "Military Reforms: Why China may stick with the Russian model", Special to RBTH, 29 December 2015, available at https://rbth.com/blogs/continental-drift/2015/12/29/military-reforms-why-china-may-stick-with-the-russian-model_555435 (accessed on 24 July 2016) [Indeed, PLA researchers explicitly cite both the U.S. and Russian joint command systems in discussing required changes to China's C2 structure.]

- 46. Kevin Pollpeter and Kenneth W. Allen (eds.), "The PLA as Organization v 2.0", pp. 10-15, available at http://www.pla-org.com/downloads/
- 47. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.13.
- 48. Ibid, pp.12-13.
- 49. Ibid, p.12.
- 50. Ibid, p.12.
- 51. Ibid, p.13.
- 52. Loro Horta, "PacNet # 85 Understanding PLA reforms", Center for Strategic & International Studies, 15 December 2015 available at https://www.csis.org/analysis/pacnet-85-understanding-pla-reforms (accessed on 04 July 2016).
- 53. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.2.
- 54. David M. Finkelstein, op.cit, pp 13-14.
- 55. Richard Weitz, "PLA Military Reforms: Defense Power With Chinese Characteristics", World Politics Review, 15 March 2016, available at http://www.worldpoliticsreview.com/articles/18215/pla-military-reforms-defense-power-with-chinese-characterstics
- 56. David M. Finkelstein, op.cit, pp 15-16.
- 57. "Document: China's Military Strategy", The State Council Information Office of the PRC, USNI News, 26 May 2015, available at https://news.usni.org/2015/05/26/document-chinas-military-strategy
- 58. For details on "Concept of Assassin's Mace", see Author's [Brigadier (Dr.) Rajeev Bhutani], "RISE OF CHINA: 2030 and Its Strategic Implications", Pentagon Press, New Delhi, 2016, p.168.
- 59. Richard Weitz, op.cit.

- 60. "China Headlines: Xi urges breakthroughs in military structural reform", English.news.cn. 27 November 2015, available at http://news.xinhuanet.com/english/2015-11/27/c_1348591. http://news.xinhuanet.com/english/2015-11/27/c_1348591. http://news.xinhuanet.com/english/2015-11/27/c_1348591.
- 61. Marc Julienne, op.cit., p.7.; and "Xi: Upcoming CPC campaign a "thorough cleanup" of undesirable practices", Xinhuanet, 18 June 2013, available at http://news.xinhuanet.com/english/china/2013-06/18/c_132465115.htm (accessed on 31 July 2016) [Xi Jinping, leader of the Communist Party of China (CPC), said Tuesday (18 June 2013) that the CPC's upcoming year-long campaign will be a "thorough cleanup" of undesirable work styles such as formalism, bureaucratism, hedonism and extravagance)
- 62. Marc Julienne, op.cit., p.7.
- 63. Minnie Chan, "Xi Jinping shifts control of PLA audit office to military's top decision-making body", South China Morning Post, 07 November 2014, available at http://www.scmp.com/news/china/article/1633802/xi-jinping-shifts-control-pla-audit-office-militarys-top-decision-making
- 64. Marc Julienne, op.cit., pp.7-8.
- 65. "China's Military Parade Celebrates World War II Victory" available at www.nytimes.com/live/china-military-parade/ (accessed on 07 August 2016).
- 66. M. Taylor Fravel, "Strategic Deterrence and China's Military Parade", September 9, 2015, China File Discussion, available at, 'taylorfravel.com/2015/09/strategic-deterrenceand-chinas-military-parade/ (accessed on 08 August 2016).
- 67. Steve Tsang, "China's Military Parade is an Error of Judgement", China Policy Institute: Analysis, 2 September 2015, available at https://cpianalysis.org/2015/09/02/chinas-military-parade-is-an-error-of-judgement/
- For details on development of China's DF-21D ASBM, see Author's [Brigadier (Dr.) Rajeev Bhutani], "RISE OF CHINA: 2030 and Its Strategic Implications", Pentagon Press, New Delhi, 2016, pp. 190-191.

- 69. Andrew S. Erickson, "Missile March: China Parade Projects Patriotism at Home, Aims for Awe Abroad", The Wall Street Journal, 3 September 2015, available at 'blogs.wsj.com/chinarealtime/2015/06/03/missile-march-china-parade-projects-patriotism-at-home-aims-for-awe-abroad/"; and Y. Nishikori, "Victory Day Parade: the chinese ballistic missile program on show", The WASEDA TIMES Student Journal, 11 September 2015, available at 'wasedatimes.com/victory-day-parade-the-chinese-ballistic-missile-program-on-show/" (both articles accessed on 06 august 2016) [Gives an excellent account of China's ballistic missiles from background of development to present day].
- 70. For detail on development of hypersonic vehicles by China, see Author's [Brigadier (Dr.) Rajeev Bhutani], "RISE OF CHINA: 2030 and Its Strategic Implications", Pentagon Press, New Delhi, 2016, p.172.
- 71. Andrew S. Erickson, "What Does the Pentagon Think about China's Rising Military might?" The National Interest, 11 May 2015, available at www.andrewerickson.com/2015/05/what-does-the-pentagon-think-about-chinas-rising-military-might/ (accessed on 08 August 2016).
- 72. Andrew S. Erickson, "U.S. Exposes China's Growing Maritime Power", The National Interest, 10 April 2015, available at www.andrewerickson.com/2015/04/u-s-exposes-chinas-growing-maritime-power/ (accessed on 18 August 2016).
- 73. Andrew S. Erickson, "China's Emerging Competitive Edge: Pentagon Report Reveals Regionally Potent Military with Growing Reach Beyond", China Analysis from Original Sources, 09 May 2015, available at www.andrewerickson.com/2015/05//chinas-emerging-competitive-edge-pentagon-report-reveals-regionally-potent-military-with-growing-reach-beyond/ (accessed on 19 August 2016).
- 74. Andrew S. Erickson, The National Interest, 10 April 2015, op.cit.
- 75. Andrew S. Erickson, China Analysis from Original Sources, 09 May 2015, op.cit.

- 76. Brigadier (Dr.) Rajeev Bhutani , "RISE OF CHINA: 2030 and Its Strategic Implications", Pentagon Press, New Delhi, 2016, p.156.
- 77. U.S. Department of Defense, Annual Report to Congress, "Military and Security Developments Involving People's Republic of China 2015", p.9. available at http://www.defense.gov/Portals/1/Documents/pubs/2015_China_Military_Power_Report.pdf and "The Military Balance 2013", International Institute of Strategic Studies, London p. 289;
- 78. Andrew S. Erickson, The National Interest, 10 April 2015, op. cit.
- 79. U.S. DoD "Military and Security Developments Involving People's Republic of China 2015", op.cit.,p.36. and for further details on China's UAVs see Author's [Brigadier (Dr.) Rajeev Bhutani], "RISE OF CHINA: 2030 and Its Strategic Implications", Pentagon Press, New Delhi, 2016, pp. 170-171.
- 80. Andrew S. Erickson, China Analysis from Original Sources, 09 May 2015, op.cit.
- 81. Ryan D. Martinson, "China's Second Navy", U.S. Naval Institute, available at m.usni.org/magazines/proceedings/2015-04-0/chinas-second-navy (accessed on 25 September 2016).
- 82. "The Military Balance 2016", International Institute of Strategic Studies, London
- 83. Andrew S. Erickson, The National Interest, 10 April 2015, op.cit.
- 84. JC Gotinga, "Filipino fishermen still barred from Scarborough Shoal", CNN Philippines, 15 July 2016, available at http://cnnphilippines.com/news/2016/07/15/scarborough-shoal-filipino-fishermen-chinese-coast-guard.html1 (accessed on 26 September 2016).
- 85. Andrew S. Erickson, China Analysis from Original Sources, 09 May 2015, op.cit.

- 86. RyanPickrell, "HowTheUSShouldRespondToChina's 'Secret' Weapon", The Daily Caller News Foundation, 24 September 2016, available at http://dailycaller.com/2016/09/24/how-the-us-should-respond-to-chinas-secret-weapon/ (accessed on 25 September 2016); and Andrew Erickson and Conor M. Kennedy, "China's Fishing Militia Is a Military Force in All But Name", War is Boring, 9 July 2016, available at https://warisboring.com/chinas-fishing-militia-is-a-military-force-in-all-but-name-58265cbdd7d#.vngrpfofu (accessed on 25 September 2016).
- 87. Andrew S. Erickson, The National Interest, 10 April 2015, op.cit., and Andrew S. Erickson, China Analysis from Original Sources, 09 May 2015, op.cit.
- 88. Anthony H. Cordesman with the assistance of Joseph Kendall, op. cit., p.30.
- 89. U.S. DoD "Military and Security Developments Involving People's Republic of China 2015", op.cit.
- Ben Blanchard, "China military hints at strong opposition to large-scale troop cuts", Reuters, 21 September 2015, available at http://uk.reuters.com/article/uk-china-defence-idUKKCN0RL2B820150921 (accessed on 27 August 2016).
- 91. Minnie Chan, "China vows military reform by 2020, with plans for new anti-corruption watchdog in PLA", South China Morning Post, 26 November 2015, available at http://www.scmp.com/news/china/diplomacy-defence/article/1883606/china-vows-breakthrough-long-awaited-military-reform (accessed on 27 August 2016).
- 92. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.9.
- 93. Zhang Tao (Global Times Editor), "Sweeping military reform leaves PLA art troupes intact", 21 March 2016, available at http://english.chinamil.com.cn/news-channels/chinamilitary-news/2016-03/21/content_6968541.htm

- 94. Mandip Singh, "China's Military Reforms: Is All Well With the PLA?", IDSA, 09 March 2016, available at http://www.idsa.in/idsacomments/chinas-military-reforms_msingh_090316; and Ben Blanchard, op.cit.
- 95. "Xi Jinping reforms China's Armed Forces to his own Advantage Xis New Model Army", The Economist, 16 January 2016, op.cit.
- 96. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.10.
- 97. Yevgen Sautin, op.cit.
- 98. Cristina L. Garafola, op.cit.
- 99. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op. cit., p.3.
- 100. Phillip C. Saunders and Joel Wuthnow, op.cit, pp 8-9.
- 101. Cristina L. Garafola, op.cit.
- 102. Phillip C. Saunders and Joel Wuthnow, op.cit, p.9.
- 103. "Xi Jinping reforms China's Armed Forces to his own Advantage Xis New Model Army", The Economist, 16 January 2016, op.cit.
- 104. Gary Li, "The Wolves of Zhurihe: China's OPFOR Comes of Age", China Brief Volume: 15, Issue: 4, February 20, 2015, available at http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=43560&cHash=66896408efd231039e72a9aa1925a242#.V9wgpD594fE (accessed on 30 August 2016).
- 105. "FD-2000/ HQ-9 SAM China's Strategic 'Game Changer'", Air Power Australia NOTAM 6 December 2009, available at ausairpower.net/APA-NOTAM-061209-1.html (accessed on 30 August 2016).
- 106. Yevgen Sautin, op.cit.

- 107. Claude Arpi, "PLA's Reform Season", The Statesman, 05 January 2016, available at http://cms.thestatesman. com/cms/gall_content/2016/1/2016_1\$largeimg05_ Jan_2016_034449867.jpg
- 108. Cristina L. Garafola, op.cit.
- 109. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.9.
- 110. Cristina L. Garafola, op.cit.
- 111. Kenneth W. Allen, Dennis J. Blasko, John F. Corbett, Jr., op.cit.,p.10.
- 112. Miles Maochun Yu, op.cit.