

CHINA'S MILITARY REFORMS

SL NARSIMHAN

INTRODUCTION

China announced major military reforms in December 2015¹. Ever since that time, every China watcher in the world has been paying attention to what is happening in the People's Liberation Army (PLA). Many analysts are of the opinion that Xi Jinping announced these reforms in order to tighten the Chinese Communist Party's hold on the PLA.² A closer scrutiny of the events that have been taking place since the beginning of this century will prove that this assumption is not true. In the year that has gone by, the PLA went hammer and tongs at these reforms and seems to have made good progress. The aim of this article is to trace the history of military reforms in China, analyse the present military reforms, and draw some lessons for India.

MILITARY REFORMS IN CHINA

The PLA is not new to military reforms. With every generation of leadership, there have been some reforms. It is also true that the war-fighting doctrine has undergone changes with every generation of leadership in China. Changes

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1. Michael Chase, Jeffrey Engstorm and Roger Cliff, "China's Military Reforms: An Optimistic and a Pessimistic Take", The CSS Blog Network, Centre for Security Studies, ETH Zurich, December 20, 2016. Available at <http://isnblog.ethz.ch/defense/chinas-military-reforms>, Accessed on March 12, 2017.
2. L Jing, (2015), "China's Sweeping Military Reforms Strengthen Grip", *South China Morning Post*, December 28, 2015, Available at: <http://www.scmp.com/news/china/diplomacy-defence/article/1895525/chinas-sweeping-military-reforms-strengthen-grip>, Accessed on March 12, 2017.

What is different this time is the mega scale at which the reforms have been conceived and are being implemented. The latest reforms, if implemented successfully, will change the entire structure of the PLA.

in the number of troops or Military Regions (MRs) have been occurring at regular intervals. However, what is different this time is the mega scale at which the reforms have been conceived and are being implemented. The latest reforms, if implemented successfully, will change the entire structure of the PLA.

Before we analyse the present reforms, it will be pertinent to look into the reforms that the PLA has already undergone since its inception in 1949. Though the PLA traces its origin to August 1, 1927, the PLA of today

has evolved from the time the People's Republic of China (PRC) came into existence on October 1, 1949.

Reforms during the First Generation Leadership

Mao Zedong, also known as Chairman Mao, and Zhou Enlai comprised the first generation leadership. During that generation, which ruled China for the longest time since it became a republic, the doctrine followed was of People's War³. The basic concept behind People's War was to maintain the support of the population and draw the enemy deep into the countryside (stretching its supply lines) where the population would bleed it dry through a mix of mobile and guerrilla warfare. The aim of this doctrine was to inflict unacceptable attrition on the enemy so that it would abandon the offensive. The People's War concept implied the active participation of the regular army and people's militia. The military strategy of active defence upholds war in self-defence, though strategic counter-offensive is permitted as preemptory strikes in self-defence at the campaign and tactical levels⁴. Simply put, it means a defender can seize the initiative through first strikes. During this period, the number of Group Armies (GAs) kept changing from six in 1940,

3. Mao Zedong, "Problems of Strategy in China's Revolutionary War" in M. Zedong, *Selected Works*, Vol. 1, December 1936, p. 238.

4. PK Singh, "Changing Contexts of Chinese Military Strategy and Doctrine", *Strategic Analysis*, March 2016, p. 48.

to 12 in 1954 (due to the Korean War), 13 in 1956, and 11 in the 1960s.

Reforms during the Second Generation Leadership

Deng Xiaoping, known as the paramount leader, discarded the People's War concept because the PLA suffered heavy casualties during the Vietnam War in 1979. During the tenure of the second generation leadership, two different doctrines were followed. Immediately after the Vietnam War, the People's War doctrine changed to People's War under Modern Conditions.⁵

It differed from People's War in the sense that instead of drawing the enemy deep into own territory, it aimed to defeat the adversary closer to China's borders. This doctrine also advocated defence of the cities so that the army could sustain itself logistically. This doctrine was not put into use. In 1985, the Central Military Commission (CMC) had an extended meeting in which Deng gave his view on future wars. Based on that, the doctrine of Local Wars under Modern Conditions was adopted. In the same year, the PLA's strength was reduced by 10,00,000 personnel. The MRs were reduced to seven.

Reforms during the Third Generation Leadership

The third generation leadership that comprised Jiang Zemin and Zhu Rongji, was at the helm of affairs from 1989 to 2002. This was the period which saw major reforms in the PLA due to the studies conducted after the first Gulf War. The doctrine was changed to Limited Wars under Hi-tech Conditions.⁶ Mechanisation of the PLA was started in a big way. This concept took

In 1985, the Central Military Commission had an extended meeting in which Deng gave his view on the future wars. Based on that, the doctrine of Local Wars under Modern Conditions doctrine was adopted. In the same year, the PLA's strength was reduced by 10, 00,000 personnel. The MRs were reduced to seven.

5. X Li, *China at War: An Encyclopaedia* (Santa Barbara, California, USA: 2012), ABC – CLIO, p.349.

6. Alexander Chieh-cheng Huang, "Transformation and Refinement of Chinese Military Doctrine: Reflection and Critique on the PLA's View", in James C Mulvenon and Andrew Wang, eds., *Seeking Truth from Facts: A Retrospective on Chinese Military Studies in Post Mao Period* (2001), pp. 131-140.

The number of GAs was reduced from 21 to 18. Conversion of divisions into brigades was started. This was resorted to because the PLA felt that divisions were heavy and could not adapt to changing situations in the battlefield. A PLA brigade is larger than a brigade in other armed forces, including India's, and its size varies, depending on the operational role.

war beyond Chinese territory. The War Zone Campaign was conceived during the early 1990s. Post Deng Xiaoping's vision that he declared during the 1985 CMC meeting, it was clear that the PLA had to carry out the strategic transition from preparing for a total and nuclear war to a local and limited war. While it was contemplating this change, the 1991 Gulf War showed the PLA that it should be prepared to fight a medium sized local war. The War Zone Campaign implied that the war would be restricted to one strategic direction, fought with troops that were locally available with a small reinforcement, target the enemy's

vulnerable spot, launch the attack and achieve the political aim before the adversary could fully mobilise and orchestrate a campaign. The number of MRs remained seven. The strength of the PLA was reduced by 500,000 in 1997. A Non-Commissioned Officers (NCOs) cadre was established and the number of officers was reduced.

Reforms during the Fourth Generation Leadership

The fourth generation leadership was represented by Hu Jintao and Wen Jiabao. One can attribute the present reforms to their time in power. The doctrine shifted to Limited Wars under Conditions of Informationisation. This change came about due to the way in which the war in Iraq in 2003 was orchestrated from the continental USA, and the realisation that informationisation was the key to winning future wars. During the process, the Chinese visualised the PLA till 2050. The 2006 Defence White Paper said, "China pursues a three-step development strategy in modernizing its national defense and armed forces, in accordance with the state's overall plan to realize modernization. The first step is to lay a solid foundation

by 2010, the second is to make major progress around 2020, and the third is to basically reach the strategic goal of building informationized armed forces and being capable of winning informationized wars by the mid-21st century.”

The present reforms are the second step envisaged in that document. During the period of the fourth generation leadership, leapfrogging of mechanisation and informationisation were adopted. The three warfares (psychological, legal and media) concept came into force.⁸ An effort to graduate from joint operations to integrated

operations and trans-move of troops for support operations, commenced in 2006⁹. The number of GAs was reduced from 21 to 18. Conversion of divisions into brigades was started. This was resorted to because the PLA felt that divisions were heavy and could not adapt to changing situations in the battlefield. A PLA brigade is larger than a brigade in other armed forces, including India's, and its size varies, depending on the operational role. Some 200,000 troops from the PLA, 90,000 from the reserves and 200,000 from the militia were reduced.

The Chinese way of war-fighting has been moving outwards from drawing the enemy deep into own territory to near China's borders, into the adversary's territory and beyond.

Start Point of Present Military Reforms

Contrary to the belief that Xi Jinping ordered the latest round of PLA reforms, a look into the Work Report presented by Hu Jintao to the 18th Party Congress suggests otherwise.

To address these problems and threats, we must make major progress in modernizing national defense and the armed forces. We must, responding to China's core security needs and following the three-step development

7. China's National Defense White Paper, Ministry of National Defence, People's Republic of China, 2006

8. Abhijit Singh, "China's 'Three Warfares' and India", *Journal of Defence Studies*, vol. 7, no. 4, 2013, pp. 1-20.

9. J. S. Bajwa "Chinese Military Strategy: War Zone Campaign Concept", *Indian Defense Review*, November 7, 2015.

strategy for modernizing national defence and the armed forces, ensure both economic development and development of defence capabilities, intensify efforts to accomplish the dual historic tasks of military mechanization and full IT application, striving to basically complete military mechanization and make major progress in full military IT application by 2020.

We should closely follow the new global military revolution that is gathering pace, advance reform of our national defense and armed forces in a both active and prudent way, and deepen military transformation with Chinese characteristics. With innovative military theories taking the lead, we should enhance our capacity for innovation in defense-oriented research and industries, modernize the military organizational structure, and build a system of modern military forces with Chinese characteristics.¹⁰

From the above discourse, three things emerge very clearly. One, the Chinese way of war-fighting has been moving outwards from drawing the enemy deep into own territory to near China's borders, into the adversary's territory and beyond. Two, military reforms in the PLA are an ongoing process except for the fact that the latest round of reforms are the mother of them all. Three, it is not correct to say that Xi Jinping has started these military reforms to increase or tighten his hold on the PLA, though that may result as a by-product of these reforms.

PRESENT MILITARY REFORMS OF CHINA

After Hu Jintao's work report to the 18th Party Congress reinforced the roadmap for China's military reforms in October 2012, the third plenum of the 18th Party Congress was held in November 2013, wherein the decision to plan and execute these reforms was taken:

.... The plenum pointed out: we will endeavour to resolve the prominent problems that constrain the development of national defense and the armed forces, be innovative in developing military theories, enhance military

10. "18th CPC National Congress", Embassy of China in the US, November 27, 2012, available at http://www.china-embassy.org/eng/zt/18th_CPC_National_Congress_Eng/t992917.htm, Accessed on February 20, 2017.

strategic guidance, implement correct military strategy for the new period, and build a system of modern military forces with Chinese characteristics. For endeavour in this regard, the tasks listed include deepening the adjustment and reform of the military administrative set-up and staffing, promoting adjustment and reform of military policies and systems, and deepening the integration between the military and civilian sectors.¹¹

Reasons for These Reforms

The military reforms are proceeding as per the plan enumerated above. However, a number of reasons had come up to start these reforms in 2015. Some of the main ones are discussed in the succeeding paragraphs.

- Flaring up of the Senkaku Islands issue in 2012. China declared an Air Defence Identification Zone (ADIZ) in the East China Sea¹². However, it lacked the capability to effectively deal with the reaction to that situation and control the escalation.
- The Comprehensive National Power (CNP) of China has been increasing. As CNP increases, a country starts flexing its muscle in concentric circles extending outward. To do so, the armed forces of that country should have the capability and capacity to project power.
- China's diaspora is spread all over the world. Its economic interests are going global. The protection of the diaspora and economic interests is becoming increasingly important.

The erstwhile MR system operations on a strategic front fell into the responsibility of more than one MR, thereby creating command and control problems. Therefore, to smoothen the functions, there was a need to superimpose an additional command level from the Central Military Commission (CMC).

11. "Communiqué of the Third Plenary Session of the 18th Central Committee of the Communist Party of China" *Conference Proceedings*, Communist Party of China, 2014.

12. M Pilger, "ADIZ Update: Enforcement in the East China Sea, Prospects for the South China Sea, and Implications for the United States", *US-China Economic Security Review Commission Staff Research Report*, March 2, 2016.

The missions of the armed forces expanded from protecting the country's sovereignty, to safeguarding national interest frontiers; and their functions extended from home territory defence to protecting national interests, regionally or even globally.

- The Defence White Paper that China published in 2015 articulated the military strategy to cater for the increasing aspirations of China. The following points are of significance: China's national security interests were highlighted. These included the diaspora, China's interests in natural resources, and wherever China's investments are located.
 - Correspondingly, the missions of the armed forces expanded from protecting the country's sovereignty, to safeguarding national interest frontiers; and their functions extended from home territory defence to protecting national interests, regionally or even globally.
- Since the military reforms were in the offing, there was a need to structure the doctrines for the Theatre Commands.
- The erstwhile Military Regions system operations on a strategic front fell into the responsibility of more than one MR, thereby creating command and control problems. Therefore, to smoothen the functions, there was a need to superimpose an additional command level from the Central Military Commission (CMC). Moreover, the MR system was dominated by ground forces. It was very difficult to get the MRs to work towards joint operations.

Preparations for the Reforms

Having taken a decision in the Third Plenum of the 18th Party Congress to carry out the military reforms, a Leading Small Group (LSG) was set up under the chairmanship of Xi Jinping himself. The other two important figures in the LSG were Gen Xu Qiliang and Gen Fan Changlong.¹³ The interesting point to note in the leadership of the LSG is that Fan Changlong was senior in the hierarchy but occupied a lower position. The LSG met on January 27, 2015, and July 14, 2015. It made recommendations to the

13. B. Mingxin, "Xi leads China's Military Reform, Stresses Strong Army", *Xinhua*, March 15, 2015.

CMC, which met on July 22, 2015, and discussed the reforms. The reforms were considered by the Politburo Standing Committee on September 3, 2015, and approved by it. Finally, the CMC Military Reform Work Conference took place from November 24-26, 2015. The reforms were announced on November 30, 2015. Prior to the LSG making its recommendations, the opinions of 900 former officers and experts were taken; 690 field visits were carried out, 2,000 questionnaires were sent to field formations and units, and 800 seminars were held to get the opinions of the environment.¹⁴

The Goldwater Nichols Act devolved more powers to theatre commanders and placed them directly under the president of the USA. There is a variation between China's military reforms and the USA's Goldwater Nichols Act. That is, China's Theatre Commands are geographically located within the Chinese territory but the USA's are not.

Philosophy of the Reforms

The philosophy of the reforms is to focus on the home territory but projecting to the peripheries. Many analysts have compared these reforms to the Goldwater Nichols Act of the USA. The Goldwater Nichols Act devolved more powers to theatre commanders and placed them directly under the president of the USA. There is a variation between China's military reforms and the USA's Goldwater Nichols Act.¹⁵ That is, China's Theatre Commands are geographically located within the Chinese territory but the USA's are not. China may establish bases abroad in a number of places like Djibouti and Gwadar. Once that is done, China may also create Theatre Commands like the USA.

Reforms Per Se

In September 2015, prior to the announcement of the military reforms, Xi

14. D. S. Rajan, "China Announces Important Military Reforms Guidelines- Implications", Paper no. 6044, *South Asia Analyses Group*, December 5, 2015.

15. P C Saunders and Joel Wuthnow "China's Goldwater-Nichols?: Assessing PLA's Organisational Reforms", *Joint Force Quarterly* 82, July 1, 2016.

Jinping declared a reduction of 300,000 personnel from the PLA¹⁶. After the CMC Executive Committee meeting from November 24-26, 2015, major military reforms were announced. They fall under five main heads, as given below:

- **Higher Defence Organisation:** Disbanding the four general headquarters and creating 15 entities out of them which will directly function under the CMC.
- **Creation of a PLA Headquarters:** The ground forces did not have a headquarters earlier. The present set of reforms envisages creating one.
- **Abolishing the Military Regions and Creation of Joint Theatre Commands:** The seven erstwhile MRs were to be converted into five joint Theatre Commands.
- **Creation of a PLA Strategic Support Force (PLA SSF):** This force was to be carved out of the organisations from the General Staff Department, General Armament Department and General Political Department.
- **PLA Rocket Force:** The Second Artillery Corps was to be converted into the PLA Rocket Force and upgraded to the status of a full Service.

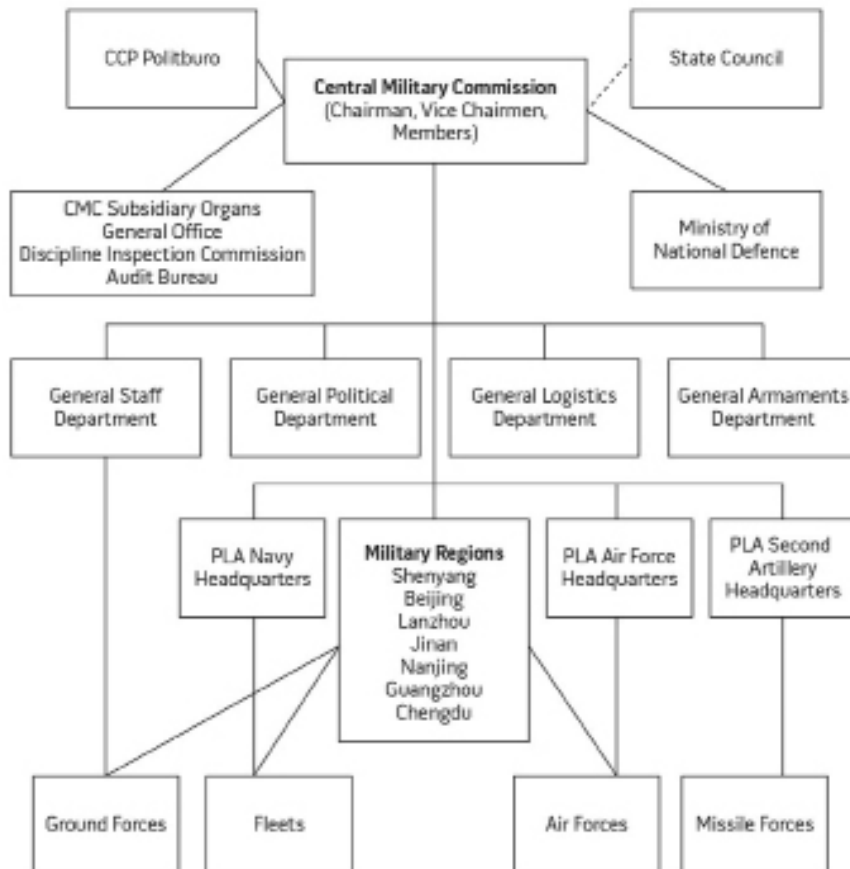
HIGHER DEFENCE ORGANISATION

- The four general departments, namely, General Staff Department, General Political Department, General Armament Department and General Logistics Department were present in all organisations till the regiment level. A regiment of the PLA is equivalent to a brigade in other armies. Since there was no headquarters for the ground forces, they were commanded through these four departments. It was felt that these departments were growing powerful and corruption was seen to be increasing. Moreover, these departments were dominated by the ground forces. In order to change all these factors, the four departments were converted into six departments, six offices and three commissions which would function directly under the CMC.

16. Chris Buckley "In Surprise, Xi Jinping to Cut Troops by 300,000", *New York Times*, September 2, 2015.

- The organisation prior to the reforms is given below:¹⁷

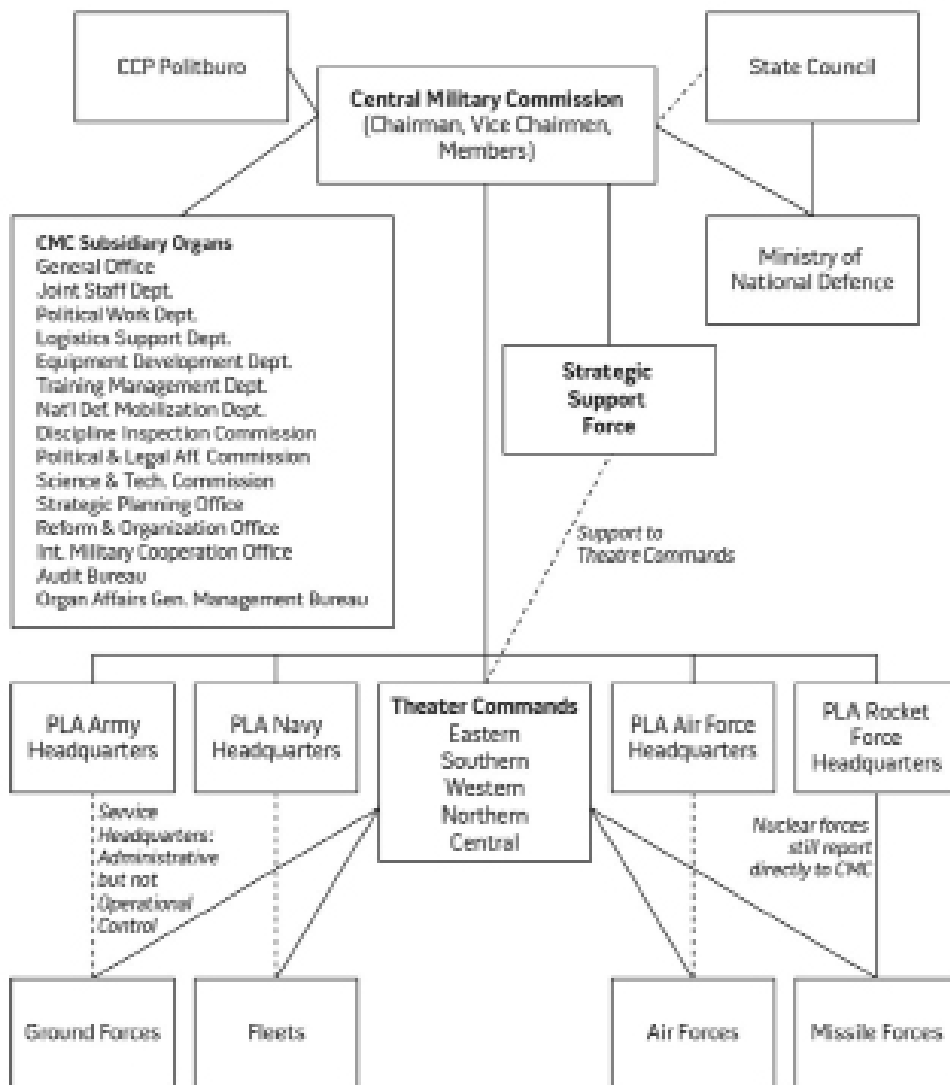
Fig 1: PLA Structure Prior to Reforms



- The PLA structure post reforms is given below¹⁸:

17. Saunders et. al., n. 15.

18. Ibid.

Fig 2: PLA Structure after Reforms

The PLA Headquarters

The PLA Headquarters has been created. However, it will have no operational control over the Theatre Commands. It will be responsible for the manning, equipping and training of the ground forces.

Creation of Joint Theatre Commands

The seven MRs have been converted to five Theatre Commands. The territory of China has been divided geographically into these five Theatre Commands. The same has been depicted in Fig 3 below.

Fig 3



Source: South China Morning Post

Each Theatre Command has a PLA HQ and a Joint HQ. Surprisingly, they are not co-located. It appears that in order to speed up the reforms, China seems to have utilised the existing infrastructure. However, in the long run, this geographical separation is likely to adversely affect the functional efficiency. Fig 4 depicts the locations of the PLA HQ and Joint HQ in each Theatre Command.¹⁹

Fig 4



The role of the Theatre Commands is three-fold. One, responding to security threats from their strategic directions; two, maintaining peace, deterrence against adversaries and winning battles; and, three, safeguarding the overall situation with respect to national security and military strategy. The area of responsibility of each Theatre Command is given in Fig 5.²⁰

19. M Salvacion, "Insider Discloses Location of New Military Commands' Army HQs" *Yibada*, February 5, 2016, available at <http://en.yibada.com/articles/102441/20160205/insider-discloses-location-of-new-military-commands-army-hqs.htm>

20. G. Arthur (2016), "PLA Theatre Commands Outlined", *Shephard*, September 8, 2016, available at <https://www.shephardmedia.com/news/defence-notes/pla-theatre-commands-outlined/>

Fig 5



CREATION OF PLA STRATEGIC SUPPORT FORCE

Among all these reforms, the most important one is the creation of the PLA Strategic Support Force (SSF). As Xi said, during the inauguration of the PLA SSF, "The Strategic Support Force is a new-type combat force to maintain national security and an important growth point of the PLA's combat capabilities."²¹

Organisation and Capabilities of PLA SSF

The PLA SSF is not a full-fledged Service. This new force is likely to have two major domains²². The first one comprises the space operations. China's space programme was under the General Armament Department (GAD) prior to the latest reforms. Though China's officially stated policy is non-militarisation of space, the very fact that its space programme

21. T. Shaohui, "China Inaugurates PLA Rocket Force As Military Reform Deepens", January 1, 2016, http://news.xinhuanet.com/english/2016-01/01/c_134970564.htm

22. "PLA Strategic Support Force", *Sino Defence*, January 1, 2017. Available at: <https://sinodefence.com/organisation/pla-strategic-support-force/>. Accessed on January 17, 2017.

PLA SSF will be controlled centrally by the CMC. It will have its units and corresponding command and control staff in each of the Theatre Commands. The organisation at the Theatre Command level is likely to have a dual command and control system as the PLA Navy and Air Force had in the *avataar* prior to the reforms.

was under the GAD implied that there is a significant military content in it. From 10 satellites at the turn of the century, China's satellite constellation has increased to 181 satellites²³ and the number is constantly growing. China's satellites include weather observation, earth observation, environmental monitoring, remote sensing and navigation satellites. In addition, it is pursuing a space station project called *Tian Gong*, a moon programme called *Chang'e* and a manned spacecraft programme called *Shen Zhou*. In August 2016, China launched a Quantum

satellite. As per *Xinhua*, "The (Quantum) satellite is designed to establish ultra-secure quantum communications by transmitting uncrackable keys from space to the ground".²⁴ Some analysts also attribute teleportation capability to this satellite.²⁵ In October 2016, China launched a micro-satellite named *Banxing 2* from its space station *Tian Gong 2*.²⁶ Earlier there were reports that a Chinese micro-satellite had passed a mere 45 km from the International Space Station.²⁷ All this indicates that China's space capabilities are good and improving further. This capability will now be under the PLA SSF.

23. *UCS Satellite Database*, August 11, 2016, available at http://www.ucsusa.org/node/3354%26gt%3B%3B#.WQr6p_mGPIU.

24. Available at http://news.xinhuanet.com/english/2016-08/18/c_135611520.htm. Accessed on January 14, 2017.

25. P. S. Singer, Jeffery Lin and P. Costello, "China's Quantum Satellite Could Change Cryptography Forever", *Popular Science*, March 3, 2016.

26. "Companion Satellite Released from Tiangong-2 Space Lab for Orbital Photo Shoot", *Spaceflight101.com*, October 23, 2016.

27. Kevin Pollpeter, Joan Johnson-Freese, Dean Cheng, "China's Space & Counter Space Programmes", Testimony before the US - China Economic and Security Review Commission, February 18, 2015. Available at https://www.uscc.gov/sites/default/files/Annual_Report/Chapters/Chapter%202%2C%20Section%202%20-%20China%27s%20Space%20and%20Counterspace%20Programs.pdf

The second important capability that is likely to pass into the hands of the PLA SSF is the Information Warfare (IW) capability. Under this domain, the PLA SSF is likely to have the psychological operations, offensive and defensive cyber operations and electronic warfare capabilities²⁸. The Chinese PLA is one of the few armies relying heavily on psychological operations and has invested heavily in cyber warfare. Each Military Area Command had a cyber unit. These are likely to be reorganised and affiliated to the Theatre Commands. It is a known fact that China has civilian entities incorporated for the cyber warfare task.²⁹

China was by far the largest source of international hacking attacks, with 41 percent of the world's attacks to its credit.³⁰ China watchers will also recall that the Cyber Unit 61398 was located in Shanghai in 2013. Its cyber warfare capabilities have been experienced by many countries, including advanced countries like the USA. Needless to say that India has also been one of the victims of cyber attacks from China. There is a huge radar network that it has built up all along the coastal areas and its borders with other countries. All these capabilities will also now be under the PLA SSF. A diagrammatic organisation of the PLA SSF is given in Fig 6 below:

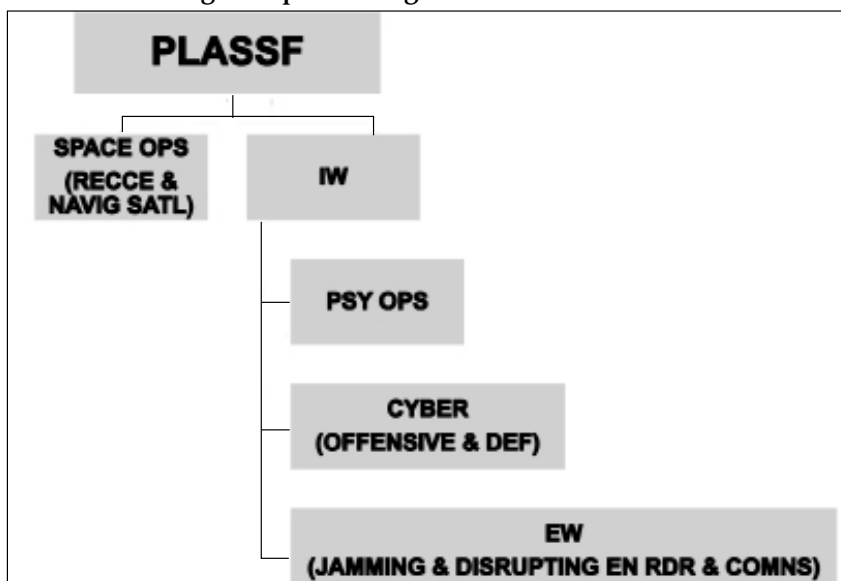
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28. Lincoln Davidson, "China's Strategic Support Force: The New Home of the PLA's Cyber Operations", *Council on Foreign Relations Net Politics*, January 20, 2016 Available at <http://blogs.cfr.org/cyber/2016/01/20/chinas-strategic-support-force-the-new-home-of-the-plas-cyber-operations/>. Accessed on March 14, 2017.

29. William Howlett, *The Rise of China's Hacking Culture: Defining Chinese Hackers* (San Bernardino: California State University, 2016), p. 22.

30. N. Staff, "Top 10 Countries Where Cyber Attacks Originate", *Government Technology*, April 24, 2013, Available at <http://www.govtech.com/security/204318661.html>. Accessed on March 14, 2017.

Fig 6: Expected Organisation of PLA SSF



Human Resources for PLA SSF

In order to constitute this force, manpower has been drawn from the PLA's No 1 Department (Operations), No 2 Department (Intelligence), No 3 Department (Technical Reconnaissance), No 4 Department (Electronic Counter-Measures and Radar) and Informationisation Department (which is also sometimes known as the No 5 Department). From the departments from which manpower has been drawn to create the PLA SSF, one can clearly understand the role and mission of this force.³¹

Mission of PLA SSF

The mission of the PLA SSF is to enable battlefield operations in the aerospace, space, cyber and electromagnetic battlefields. In the space domain, this will involve, target tracking and reconnaissance, operation of the Beidou navigational satellites (23 satellites out of the planned 35 satellite constellation have been launched so far), and management of reconnaissance satellites. In the cyber space, it will involve both offensive and defensive cyber operations. Jamming and disrupting the enemy's

31. n. 22.

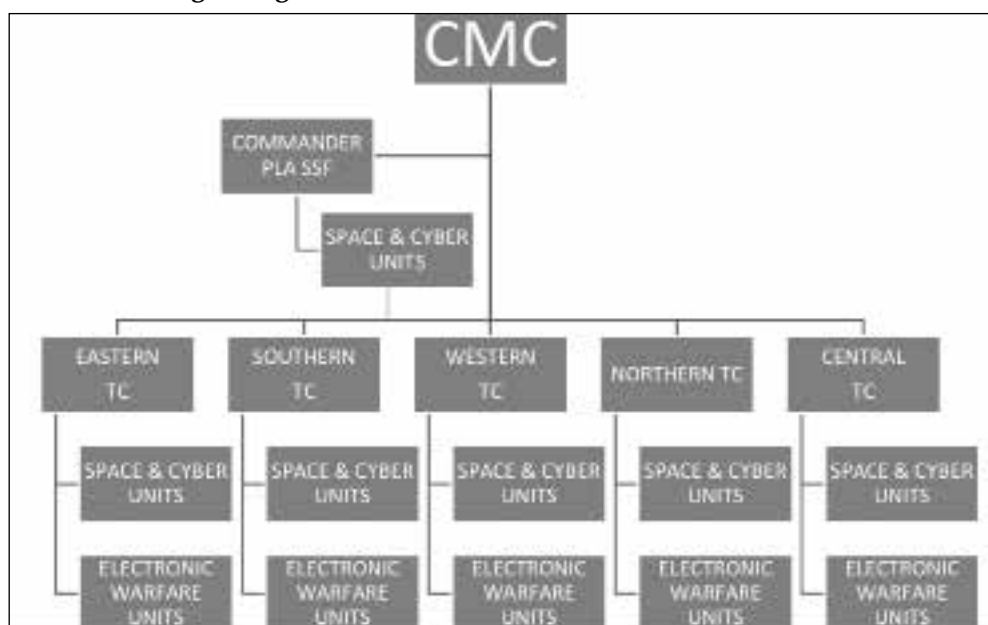
radars and communications and protecting China's radars and communications from the enemy's attacks through Electronic Counter-Measures (ECMs) will also be the mission of the PLA SSF. Another major mission that has been given to the PLA SSF is to protect China's financial security and the security of the people's lives.³² This mission enables the PLA SSF to support China's interests at home and abroad. It is in consonance with this that the role and mission enunciated for China's armed forces in its 2015 White Paper, that go beyond China's territory.

Troops equipped with outdated equipment, administrative staff and non-combatant personnel are expected to be reduced. This will release funds for modernisation of forces. A report of March 11, 2017, said that the reserves in the PLA will be reduced and the reserves in the other Services will be increased.

Command and Control

The PLA SSF will be controlled centrally by the CMC. It will have its units and corresponding command and control staff in each of the Theatre Commands. The organisation at the Theatre Command level is likely to have a dual command and control system as the PLA Navy and Air Force had in the *avtaar* prior to the reforms. While they will be placed under the Theatre Command, for technical control, they will be under the CMC. The CMC will also be responsible for manning and equipping the PLA SSF. This system will enable the Theatre Commands to benefit from the capabilities of the PLA SSF without directly getting involved in equipping and training the units. The CMC is likely to take care of the equipping, training and capability building of this force. A diagrammatic representation of the expected command and control of the PLA SSF is given at Fig 7.

32. S. Narasimha, "People's Liberation Army's Strategic Support Force (PLA SSF)", *Defence Aviation Post*, December 12, 2017. Available at <http://defenceaviationpost.com/peoples-liberation-armys-strategic-support-force-pla-ssf-the-game-changer/>. Accessed on March 14, 2017.

Fig 7: Organisation of PLA SSF in Theatre Commands

In these reforms, the higher level units of the PLA SSF have been placed under the CMC, thereby, enabling the PLA under the Theatre Commands to concentrate on operations. The CMC will directly supervise the sensitive space and cyber domains. The capabilities of space, cyber and electronic warfare can be exploited better by all the Services of the armed forces of China. Earlier, since these were under the General Staff Department and General Armament Department, there were drawbacks in sharing the inputs with the other Services. This force will enable better jointness amongst the Services. Though it is not a full-fledged Service, it will draw its importance from being directly under the CMC and the kind of capabilities that it is expected to possess.

PLA Rocket Force

In the present round of military reforms, the Second Artillery Force was upgraded from a branch to a Service equivalent to China's army, navy and air force. Xi Jinping described the PLA Rocket Force (PLA RF) as a "core of strategic deterrence, a buttress to the country's position as a major

power, and an important aspect of national security.” He made this statement when he visited the headquarters of the force in Beijing on September 26, 2016. The PLA RF has both conventional and strategic missiles. When the latest military reforms were announced, the question arose as to whether the conventional missiles would get delegated to the theatre commanders. It is, by and large, sure now that the PLA RF will be centrally controlled by the CMC.³³ The reason for this could well be that when a missile is launched, it is extremely difficult to make out whether it is a conventional one or a nuclear tipped strategic one. Should a theatre commander prematurely decide to launch a missile, it may result in an escalation of the conflict that could spin out of control.

As per the latest US Department of Defence report on China’s military capabilities, released in May 2016, China’s missile holdings are as follows:

Table 1

System	Number of Missiles	Launchers	Estimated Range(Km)
ICBM	75 - 100	50 - 75	5,400 – 13,000+
MRBM	200 - 300	100 - 125	1,500+
SRBM	1000 - 1200	250 - 300	300 - 1,000
GLCM	200 - 300	40 - 55	1,500+

ICBM – Inter-Continental Ballistic Missiles; MRBM – Medium Range Ballistic Missiles; SRBM – Short Range Ballistic Missiles; and, GLCM – Ground Launched Cruise Missiles.

Other than upgradation to a Service, no major change is expected in the capabilities of the PLA RF.

33. “Xi’s China: Command and Control”, *Financial Times*, July 26, 2016.

One of the major efforts by the PLA SSF is likely to be cyber warfare.

India needs to synergise her efforts in this field.

Separate domains need to be created for offensive and defensive cyber warfare. She also needs separate set of people to carry out offensive cyber operations. There are a number of agencies involved in cyber operations. Their efforts need to be synergised.

Reduction of Troops

In September 2015, Xi Jinping announced a reduction of 300,000 troops from the PLA by the end of 2017. This will bring down the strength of the PLA from 2.3 million to 2 million. The troops equipped with outdated equipment, administrative staff and non-combatant personnel are expected to be reduced. This will release funds for the modernisation of the forces. A report of March 11, 2017, said that the reserves in the PLA will be reduced and the reserves in the other Services will be increased.³⁴ The reduction in the troops levels is likely to create disturbances in the society. The provincial Party chiefs have been entrusted with the task of rehabilitating them.

However, there have been protests in Beijing by ex-Servicemen who retired prior to the reforms and who have not been rehabilitated.³⁵ The PLA personnel who will be retrenched due to the reforms by the end of 2017, will add to the problem. As it is, the official unemployment figure in China is 4.3 percent. The unofficial figure is around 10 percent.

INFERENCES

The present round of military reforms in the PLA is likely to radically change the way the PLA operates. A number of inferences can be drawn from these reforms. The PLA ground forces were the most powerful and they dominated the military scene in China. With these reforms, the power and influence of the ground forces will be reduced considerably. The chief of general staff will lose oversight of military training, and education, mobilisation, strategic planning, electronic warfare, cyber units, and human resources management. Human resources management will be

34. G. Dominguez, "China to Reduce Army Reserve Numbers" *HIS Janes* 360, March 13, 2017.

35. Xin Lin, "Chinese Military Veterans Gather in Beijing to Protest 'Broken Promises'", *Tuidang*, January 3, 2017. Available at <http://en.tuidang.org/news/communist-regime/2017/01/chinese-military-veterans-gather-in-beijing-to-protest-broken-promises.html>

done by the Political Works Department. The CMC will get involved in the day-to-day functioning of the armed forces. This aspect is likely to adversely affect the functioning of the CMC. Earlier, the CMC had a buffer which it could use effectively to do strategic thinking and planning. After the reforms, the PLA will concentrate more on operational issues related to combat and territorial defence. Separating the departments to form the PLA SSF will enable greater exploitation of the resources by all the Services. This will facilitate in increasing the joint operation capabilities. Overall, the PLA is likely to emerge as a leaner and meaner force, better equipped to carry out joint operations.

IMPLICATIONS FOR INDIA

India needs to increase its deterrence capability to warn China not to enter into a conflict due to the enhanced capabilities that it may achieve as a result of the reforms. Creation of the PLA SSF and increased testing of missiles by China in the recent past will enable it to launch protracted non-contact warfare. The non-contact phase of operations will aim to degrade the Indian armed forces' ability to fight a war effectively. This phase will mainly be focussed on space-based operations and cyber warfare. Since these domains do not have territorial limitations and activities in these fields have absolute deniability, they cannot be deemed to be acts of war in the true sense. China follows the principle of active defence. The principle of active defence implies that China will not necessarily wait for an adversary to launch an attack on its soil. It can take proactive measures to preempt its adversary's attack. The PLA SSF will be central to this concept and will provide an information umbrella to its armed forces. This will reduce the Observe, Orient, Decide and Act (OODA) loop and also reduce the time for the PLA to react to any adversary's actions. India needs to prepare itself for such an eventuality. India also needs to improve its space and information warfare capabilities. The PLA RF will be able to offset the disadvantage that the PLA Air Force faces due to the high altitude terrain in the Tibetan plateau. Therefore, India needs to cater for redundancies in its operational and civil infrastructure. To counter the PLA RF, India needs to continue on the development path and attain an effective ballistic missile defence capability.

India needs to monitor the PLA SSF's space assets and develop systems to safeguard own assets. Since this force has all the space and cyber assets of China placed under it, India needs to harden, isolate, and protect its critical infrastructure and military networks. India also needs to synergise its offensive and defensive cyber capability. There has been talk of China developing laser and particle beam weapons that the Chinese call the assassin's mace weapons. These are likely to be launched from space and likely to be part of the PLA SSF. Therefore, India needs to protect its networks and harden them against such weapons. One of the major efforts by the PLA SSF is likely to be cyber warfare. India needs to synergise its efforts in this field. Separate domains need to be created for offensive and defensive cyber warfare. It also needs a separate set of people to carry out offensive cyber operations. A number of agencies is involved in cyber operations and their efforts need to be synergised.

China follows the concept of three wars. These are psychological, media (public opinion) and legal wars. Of these, psychological warfare is likely to be part of the PLA SSF. In India, there has been no effort that can be seen in the open source domain regarding psychological operations. There is also a belief that psychological operations are undertaken only during a war. This is misleading. Psychological operations need to be carried out in a continuum. India needs to create a structure at the national level to do this and thereafter incorporate all the agencies that are needed into it.

CONCLUSION

China has embarked on a long-term plan to modernise its forces. The roots of these reforms go back to the era of Hu Jintao. There will be a quantum change in the way China's armed forces operate in the future. India needs to analyse these reforms in detail and take action quickly to be prepared to face any action that China may take against it in the future. Asymmetric warfare is likely to gain increasing prominence and importance in China and building its capabilities. The implications for India mentioned above need to be studied in detail and an action plan needs to be worked out to build own asymmetric capabilities.