PLA's Strategic Support

Force: A New Art of

Modern War

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Introduction

On October 18, 2017, Chinese President Xi Jinping, in his speech, delivered at the 19th National Congress of the Communist Party of China (CPC), reflected on China's military preparedness under the new circumstances. Xi categorically stated:

Confronted with profound changes in our national security environment and responding to the demands of the day for a strong country with a strong military, we must fully implement the Party's thinking on strengthening the military for the new era and the military strategy for new conditions, build a powerful and modernized army, navy, air force, rocket force, and strategic support force, develop strong and efficient joint operations 48 commanding institutions for theater commands, and create a modern combat system with distinctive Chinese characteristics.¹

To note, the foundation to a "strong and modern military" was laid out in November 2015, at the Third Plenum of the 18th Party Congress which called for major military reforms that aimed at increasing the People's Liberation Army's (PLA's) ability to carry out joint operations on a modern high-tech battlefield. The PLA structure after the reforms is outlined in Fig. 1.

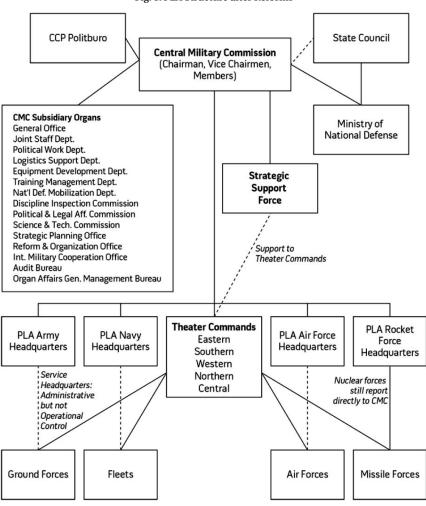


Fig. 1: PLA Structure after Reforms

Source: Saunders and Wuthnow (2016)2

These structural and organisational changes are also necessitated by the logic of the Chinese dream of "building a strong military", wherein, China's military mission aims at two central goals: first, by 2035, the PLA's modernisation to be "basically completed"; and second, by the mid-21st century (2050), the PLA to be "fully transformed into world-class forces".³ To meet the ends of building a modern military power system, the PLA has undertaken significant reforms⁴, of which, one such measure comprises the establishment of the PLA Strategic

Ability to fight under multi-dimensional conditions and improving combat capabilities for joint operations are key drivers for creation of PLA SSE.

Support Force (PLA SSF), that came into existence on December 31, 2015.

Here, the guiding principle is that of 'combat capability' that the PLA needs to gain expertise in. To attain this objective, Xi highlighted the need for the "development of an intelligent military, and improve combat capabilities for joint operations based on the

network information system and the ability to fight under multi-dimensional conditions"⁵ – two key drivers behind the creation of the PLA SSF. This military calculation is driven by the logic that the PLA Army should "optimize its power structure and troop formation, speed up the Army's transformation from the regional defensive type to the full-spectrum combat type, so as to build a powerful, modern and new-type Army."⁶ Serving this purpose, the PLA SSF, as described by Xi, is a "new-type combat force to maintain national security and an important growth point of the PLA's combat capabilities".⁷

PLA SSF in China's "Winning of Informationised Local Wars"

According to the *Textbook for the Study of Space Operations*, published by the PLA's think-tank, the Academy of Military Science (AMS), the importance of 'space' as a strategic domain is understood as:

Whoever is the strongman of military space will be the ruler of the battlefield; whoever has the advantage of space has the power of the initiative; having 'space' support enables victory, lacking 'space' ensures defeat.⁸

Given the above statement, China's 'space-based' strategic military calculus is driven by the perception of its security environment and its understanding of the evolution of modern warfare. To note, the emphasis on information warfare has captured the attention of the PLA since at least the mid-1990s given the modern warfare techniques employed in cases such as Operation Desert Storm, the North Atlantic Treaty Organisation (NATO) operations in the Balkans, and the wars in Afghanistan and Iraq. This has influenced the Chinese to change their war-fighting outlook wherein the old tactic of mass mobilisation and preparation for all-out warfare is replaced by the need to build military capabilities given the increasing importance of information technology in modern warfare. This changing nature

of modern warfare is largely emphasised in cyber and space operations, and on long-range precision-strike systems. Against this scenario, what China needs to do is improve its ability to conduct highend joint operations in multiple domains, including by establishing a permanent joint Command and Control (C2) mechanism. Given this rationale, China's primary interest is:

PLA SSF combines space, cyber and EW capabilities under a single entity to ensure PLA's military superiority.

...to disrupt [an] adversary's C4ISR [Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance] advantages through such means as attacking its computer and communications systems. Accordingly, the PLA is establishing information warfare units and capacities, and developing anti-satellite capabilities [and] space warfare weapons.⁹

Here, the key nodal point is to establish military superiority or dominance over the information realm. This new-found military preparedness is informed by the Chinese strategic goal of "winning informationised local wars" which recognises the centrality of information, and the information domain as a battlefield in modern warfare. This decisive shift in China's military strategic guideline has evolved from "winning local wars in conditions of modern technology, particularly high technology" to "winning local wars under conditions of informationisation" as noted in the 1993 and 2004 White Papers respectively.

Given the PLA's view of space as the "new commanding height", the establishment of SSF capabilities is very timely, given the PLA's commitment to "expedite the development of a cyber force". The foundation for the PLA's SSF capabilities was laid by the 2015 Defence White Paper on *China's Military Strategy* which, for the first time, officially designated "outer space" as a "critical security domain". To secure its interests in 'space', as the White Paper notes, China needs to: "[to] keep abreast of the dynamics of outer space, deal with security threats and challenges in that domain, and secure its space assets to serve its national economic and social development, and maintain outer space security". In view of this, the SSF lies at the core of China's information warfare force, which, as the Chinese official sources suggest, is central to China's "active defence" strategic concept. China's "active defence" strategic concept.

Here, it is imperative to note that the PLA SSF is not a service. First, the PLA designated the SSF as a 'force' and not a Service – suggestive of a difference

between the SSF and the designated Services. The second, is the composition factor, wherein the SSF's officer corps is mainly dominated by Army officers, with a smaller contingent of Navy and Air Force officers. And third, is the conceptual factor, as the term 'strategic support' is defined as a "support provided to other operational *jituan* units or the country in order to achieve a strategic goal", which can come in the form of units, fire support, Command, Control, Communications, Intelligence, Surveillance, Reconnaissance (C4ISR) capabilities, or logistics. Given these factors, Song Zhongping, former Second Artillery officer, contends that the SSF is an independent Service that is "unique in the world". Therefore, in view of the opacity involved, what can be rightly stated is that the PLA SSF is more of a force that a Service, more specifically a 'space-cyber force' that is responsible for space, cyber, and Electronic Warfare (EW) missions.

PLA SSF Composition and Capability

On January 14, 2016, Gao Jin, the SSF's newly appointed commander stated:

[T]he SSF will raise an information umbrella for the military and will act as an important factor in integrating military services and systems, noting that it will provide the entire military with accurate, effective, and reliable information support and strategic support assurance.¹⁵

The rationale behind the creation of the PLA SSF lies in understanding the nature of modern warfare which, as the 2013 *Science of Military Strategy* predicts, entails that future wars may begin in outer space and cyber space and that "achieving space superiority and cyber superiority are critical for achieving overall superiority and being victorious over an enemy." In this regard, the PLA SSF serves the Chinese logic as it aims to unify space, cyber and EW capabilities to ensure that the PLA's military superiority is maintained in space and on the internet.

What lies at the core of this military reform is the guiding principle of transforming China's PLA armed forces from "the regional defensive type to the full-spectrum combat type," with focus on real combat, efficiency, and integration of military and civilian development. As Xi Jinping posited, the PLA SSF should:

...always stay on alert and maintain combat preparedness, map out a development strategy and a capacity building plan, build a new training system, and enhance its deterrence and war-fighting capabilities.¹⁸

This further confirms the Chinese objective to conduct high-end joint operations in multiple domains, wherein the SSF provides the improved flexibility and responsiveness to enhance the PLA's ability to fight multi-domain conflicts. That is, to provide C4ISR support to commanders and oversee space, cyber and electronic warfare activities.

What kind of military force is the PLA SSF? What drives this new military structure are two key words: the first, is 'combat', as the main mission of the PLA SSF is to support combat operations on the battlefield so that the Chinese military can gain partial advantages in the battlefields of space, space, network and electromagnetic space and ensure the smooth operation of the war.¹⁹ More specifically, as Yin Zhou notes, the mission of the SSF includes: the detection of targets, the reconnaissance and return of target information; the undertaking of daily navigational operations and the management of Beidou satellites and space reconnaissance; the defence of electromagnetic and cyber space tasks – the "new areas that determine whether the [Chinese] military will win the battle in the future."20 And the second is 'joint operations', as the PLA SSF will be integrated with the operations of the land, sea and air forces and rocket forces throughout the whole operation – acting as the key force for the victory in the war. That is, the SSF is not an independent operational force rather an integrated force. These key factors make the SSF a significant addition to China's military preparedness in order to win informationised local wars. What makes it so is, as Yin Zhou argues:

[A]ny combat operations are now inseparable from electronic space offensive and defensive operations, and [given the] strategic support units will be engaged in reconnaissance, early warning, communications, command, control, navigation, digital oceanography, digitization Earth construction and other aspects; this will provide strong battlefield support for the joint operations of the various arms in order to achieve the goal of winning a local war under the conditions of informationization.²¹

This further clarifies that the SSF is not a separate or independent combat unit but rather a force that calls for integrated joint combat operations. Here, the force is designed to function under two operational imperatives:²² one, peace-timewar-time integration from the previous position that needed the PLA to transit to a war-time posture just prior to, or shortly after, the outbreak of war. And two, a shift in the PLA's most strategic, informationised missions from a disciplinecentric to a domain-centric force structure based on the idea of "integrated"

reconnaissance, attack, and defense, wherein the intelligence, offensive, and defensive elements are integrated together to enable full-spectrum war-fighting in a particular domain."²³ Given these functionalities involved, it is argued that unlike the US military that inefficiently disperses its information warfare forces among the Services, China's SSF concentrates the PLA's information warfare forces under the central command of the Central Military Commission (CMC) of the CPC rather than the PLA General Staff.

The SSF is made up of a cyber force composed of network attack and defence units, a space force mainly responsible for reconnaissance and navigation satellites, and EW units responsible for countering enemy radar and communications. This is further reflected in the officer corps that is mainly drawn from operational units and organisations from the former General Departments, particularly the General Staff Department (GSD), General Armaments Department (GAD), and General Political Department (GPD), units responsible for space, cyber, and electronic warfare, the SSF's main missions. As the official sources cite, the SSF is led by the Commander, Lt Gen Gao Jin, the Political Commissar (PC) is Maj Gen Liu Fulian, the Deputy Commander is Li Shangfu, former Director of the GAD Xichang Satellite Launch Centre 27th Base, and Rao Kaixun, former Director of 1PLA, is reportedly another Deputy Commander . The command and control of the PLA SSF can be traced from Fig 2.

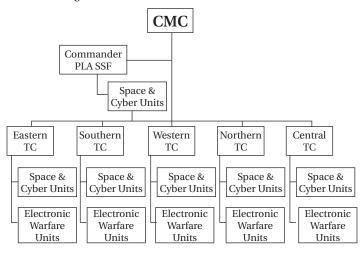


Fig. 2: Command and Control Structure of PLA SSF

Source: Narasimhan (2016)28

Given these capabilities, the composition of the SSF has been structurally drawn from various departments, such as, it has absorbed signals collection capabilities from the former PLA General Staff Department's Third Department and electronic collection capabilities from the Fourth Department. The SSF also might include some elements from the Second Department, to include human intelligence collection capabilities.²⁹ In addition, two new units have been created: the Space Systems Department to carry out the SSF's space missions and the Network Systems Department to carry out the SSF's cyber and EW missions.³⁰ It is also suggested that this force may also develop and deploy cutting-edge capabilities such as directed-energy weapons. This is further reflected in the various units and research divisions that fall under the composition of the SSF, as listed in Table 1.

Table 1: Units and Centres under PLA SSF

SPACE UNITS: LAUNCH FACILITIES	SPACE TELEMETRY, TRACKING, & CONTROL	NEW BUREAUS	R&D CENTRES
Jiuquan Satellite Launch Centre/ 20th Testing and Training Base	Beijing Aerospace Flight Control Centre	Aerospace Reconnaissance Bureau	China Nuclear Test Base/ 21st Experimental and Training Base 63650
Taiyuan Satellite Launch Centre/ 25th Testing and Training Base	Xi'an Satellite Control Centre/ 26th Testing and Training Base	Satellite Main Station	Aerospace Research and Development Centre
Xichang Satellite Launch Centre/ 27th Testing and Training Base	Telemetry, Tracking, and Control Stations (eg. Kashi station)		Project Design Research Centre
Wenchang Aerospace Launch Site	China Satellite Maritime Tracking and Control Department/23rd Testing and Training Base		

Source: Costello (2016)31

Therefore, given its composition and capabilities, it can be stated that the SSF is primarily equipped to provide signals, intelligence, and reconnaissance and conduct electronic warfare, wherein the central goal is to strengthen China's combat capabilities in order to win informationised wars. This new integrated structure holds significant implications. And in the case of India, this new PLA reform holds greater implications given the boundary disputes with China in the eastern and western sectors. This further raises new security concerns for India, more specifically in the domain of electronic warfare.

Conclusion

It is clear that China's perception of future warfare is undoubtedly centred on the information domain wherein the essence lies in mastering the art of "winning informationised local wars" by means of the SSF. The composition and capabilities of the SSF aim to provide intelligence and reconnaissance to the rest of the PLA and enable integrated joint operations. This makes the PLA SSF play a pivotal role as a strong combat force with integrated joint operational capabilities. Though it is at the nascent stage of its development, the SSF marks a new beginning in China's art of modern war.

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Notes

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