# NEW DIRECTIONS OF CHINA'S NUCLEAR POSTURE: CAPABILITIES AND LIMITATIONS

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**Abstract**

The role of nuclear posture is important in the projection of national power. It entails the ambitions of power in determining the national goals. It also plays a crucial role in maintaining a nuclear deterrence. Nuclear postures are mainly expressed by nuclear doctrine, command and control system and the targeting plans of a country. The nuclear doctrine of China stands for credible minimum nuclear deterrence. China developed nuclear weapons as a limited force to prevent nuclear blackmail and to obtain greater international status and prestige. It's relatively small nuclear forces are intended for retaliation rather than first strike purpose. China has always shown principled stand on nuclear problems and has exercised nuclear restrain against other nuclear powers.

Owing to technological progress, China's strategic and targeting plans are versatile. However, it's current striking capability is limited. China is poised to play an assertive role in changing the status quo. It is striving hard for a more robust nuclear posture against other nuclear powers. This paper is an attempt to highlight the nuclear posture of China. How it is changing from a symbolic stage to operational strike? And what measures China is taking for raising capabilities to stand up to its operational plans.

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## Nuclear Command and Control

In China, the political party and military command are often mixed, but the principle of 'party commands the gun' always prevails[1]. China employs civilian-military mechanism on control of its nuclear button. The Central Military Commission [CMC] of the Chinese Communist Party [CCP] exercises ultimate authority for the use of nuclear weapons. The chairman of the CMC is always the General Secretary of the Politburo[2]. Thus, Chinese command and control system, despite some technological insufficiencies, is matured and does not follow the pre-delegated policy in its nuclear exchange and keeps its nuclear weapons at a very low alert.

## Targeting Plans

From the very beginning, China had decided not to enlarge its nuclear stockpile and therefore its target list has never been long. The nuclear arsenal is shaped according to targeting plans. The nuclear doctrine of a country has different layers ranging from the declaratory to development and employment stage. The targeting plans of nuclear states are mainly gauged through two postures- "Counter force" and "Counter value". The first concept is defined as employment of strategic forces in destroying the enemy's important installations and capabilities including damaging its command and control system. 'Counter value' concept, by contrast, targets enemy's major cities including its industrial base.

Traditionally, China has followed a policy which is closer to Counter force value in its nuclear activities. According to a

1964 draft plan, the Chinese assigned its future military programs to four major targets. These targeting plans were later modified as a result of technological progress and more importantly, political changes in the 1970s and 1980s.For example, the original design targets of the DF-3 were the US Clark Air force base and Subic Bay level base in the Philippines but it was modified to attack targets in the Central and Eastern USSR. The DF-4 was at first aimed at striking the US Andersen air base at Guam. Later, its range was increased to Moscow[3].

In the post-cold war period, China has again revised its strategic targeting. Now ,China's nuclear posture reflects the Counter value option. Chinese intercontinental ballistic missiles (ICBMs) in the 54 base of the Second Artillery have been reserved for Counter value missions against the US homeland specially Alaska and Western US cities[4].

China perceives India and Japan as a latent threat while US is considered as a potential threat because US nuclear posture lists China as one of the targets of its nuclear weapons and takes Taiwan Strait crisis as one contingency for using nuclear weapons .Moreover, China considers US 'control of space' specially over Chinese territory more threatening.

**Nuclear Operational Plans**

China's major strategic force-'The Second Artillery' maintains control over its nuclear missile force and is responsible for the conduct of Chinese nuclear operations. It has been assigned with three basic tasks: deter, survive and retaliate. Based on these assumptions, the second artillery adheres with three

levels of readiness in its operational plans. At the first stage, it trains forces, does exercises and conducts normal maintenance .In the case of nuclear threat, CMC directs these units to move from protected positions like tunnels, silo, caves or garrisons to firing positions. The third level is of high alert, in this situation, missiles are fully deployed for combat purpose with support elements, warheads and fuels, waiting for launch order.

The primary objective of Chinese nuclear policy is to convince the potential enemies that enough of Chinese strategic weapons would survive attack to inflict unacceptable damage on the aggressor. In this context, China is developing assured second strike nuclear capability in its defense plan. This indicates that China lays more focus on retaliation rather than attempting on 'launch on warning' (LOW)[5]. China currently doe not posses the requisite early warning capabilities needed to move towards a LOW- type policy. However, China has acquired high efficiency in handling the situation in launch under attack (LUA) type contingency. It can ride any foreign attack on national nuclear assets of China.

China has largely relied on its land based ballistic missiles to ensure retaliation in post nuclear attack on strategic weapons. According to General Zhang Zhen, the former vice chairman of CMC: 'The combat of Chinese missiles is very high but they must be used on enemy's troop concentrations, important bases, facilities or other command or control centers[6]"

In the beginning, the operational plans of the Second Artillery were rudimentary and faced the technological deficit. For decades, China's medium range bombers and medium range

ballistic missiles had only enough range to hit Japan, Korea, Taiwan and US bases in Philippines or Russian Far Eastern cities.

China has not released information concerning the number of nuclear weapons it posses. It is generally believed that it has always retained about 400 war heads .But, all the old generation missiles were liquid fueled and carried single war head. Most of these missiles were of medium range and were more suitable for tactical combat. For strategic purposes, till early 2000 China had acquired around 20 long range inter-continental missiles (ICBMs) to cover the US[7].

During the process of modernization of its nuclear forces, China is striving to replace old generation of missiles with new generation of missiles with multiple war heads. The liquid fuel technology is being replaced with solid fueled missiles.

In recent years, the Second Artillery corps has replaced its some 20 older DF-5 ICBM has already started and its extended range version DF-31A is under development. China's solid fueled 6500 nautical miles DF-4.The ageing liquid fueled DF-3A is being replaced by the newer road-mobile, solid propellant DF-21 MRBM. At the same time, China is developing a nuclear powered missile submarines carrying 12 single war head from the DF-31 ICBM which is expected to be deployed in the 094 xia class submarine by 2010[8].Besides, the Second Artillery crops is developing a new class of maneuvering re-entry vehicles to acquire naval battle capabilities.

China has made progress in its medium range ballistic missile (MRBMs) and intermediate range ballistic missile (IRBMs) as compared to ICBMs & submarine launch ballistic missiles (SLBMs). The first pair of missiles MRBMs & IRBMs is chiefly assigned to counterforce missions[9], whereas the second pair of missile ICBMs & SLBMs performs counter value targets more effectively in case of present nuclear scenario aimed at countering the hyper power.

Chinese aspirations for counter value action are modest for the purpose of credible minimum deterrence against US especially over the question of latter's support to Taiwan. However, in any crisis situation over Taiwan, China will keep its nuclear options, even for counter value strike, open. By all practical means, most of the Chinese nuclear arsenal and operations are designed for counter force actions. In this respect, US security experts have expressed that China is coming closer to achieving a goal of being able to attack on deployed US aircraft carrier battle group with conventional or nuclear ballistic missiles[10].

US primacy in space and global surveillance has limited Chinese nuclear autonomy in carrying out counter value type strategy in its nuclear equation. The introduction of anti-ballistic missile defense system has further undermined the deterrence value of China.

The second artillery corps has established four research institutes to solve the problems associated with operations. And find out the gap between its targeting plans and operational capability. For that purpose, China has focused on

electro- magnetic technology to fill the lag between goals and operations. In this context, on 11 January 2007, China destroyed its own weather satellite with kinetic kill vehicle launched on a Chinese missile. Earlier, in August 2006 a Chinese ground-based laser blinded a US reconnaissance satellite over China[11]. This anti- satellite weapon has empowered China to follow an active defense over its horizon. The Chinese space program has launched a number of military or dual use satellites for imagery and radar reconnaissance, telecommunication and regional navigation. It is also developing a heavy- lift space launch vehicle (SLV) to place various payloads into earth orbits[12].

Indeed, Chinese rocket technology is the best in the world. The United States drops satellites into the sea and then special ships recover them, while China has succeeded in landing its space craft on ground[13]. Recently, China has planned to develop the new- generation carrier rockets. This will help bolster significantly its capabilities to sharpen its competitive edge in the international launch services.

## Conclusion

The Chinese nuclear posture is still incompatible with its operational capability which is more suitable for counter force option. This lag is manifested in the precision and accuracy of Chinese missiles. Moreover, China lacks command-control, computer and communication, intelligence, surveillance, reconnaissance (C4ISR) skills. As a matter of fact, the gaps of intelligence, surveillance and reconnaissance capabilities between civilian and military sectors are actually expanding

rather than contracting, and the technicians are flowing to the civilian sector for better returns[14].

According to one account, the USA only needs 10-15 W76R5W88 warheads to wipe out China's 4 largest cities[15]. The destruction of cities was perhaps acceptable during Mao period. But, with rapid economic growth in the last four decades, it appears suicidal.

New leadership in China is more pragmatic by embracing the de-targeting agreements with Russia and USA in 1994 and 1998 respectively. Nevertheless, China is trying to improve its strategic ballistic missiles with four high goals: high survivability before launching; high anti-interception capability; high precision and strike capability; and high reliability[16]. These new priorities will definitely bolster Chinese nuclear deterrence more credible and invincible.

## References and Notes

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