



Role and Modernization Trends of China's Second Artillery

Speaker: Dr. Roshan Khanijo, Senior Research Fellow, United Services Institution of India

Chair: M V Rappai, Honorary Fellow, ICS

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The presentation by Roshan Khanijo sought to underline the characteristic changes that the 'Second Artillery', or the guardian of China's missile force, has undergone in the last few decades. She enlightened the audience on the role and development of China's Second Artillery (SA hereafter) in the context of its military modernization covering a range of topics from China's military strategy, missile base structure, missile arsenal, modernization trends to analysing India's options for deterrence.

The speaker began by pointing out the limitations in studying China's military strategy as the literature on it is largely conceptual and the Chinese do not disclose the number of missiles they actually possess. Therefore, to understand China's military strategy, China's strategy doctrine needs to be studied, which a combination of several documents and guidelines at different levels incorporated in what is called the "Science of Military Strategy". This primarily consists of components like: active defence, local war under conditions of informatization and modified people's war. The speaker then explained the conditions under which China will apply each of the three parameters of strategy. Active defence means China would retaliate if it is attacked first and it has a powerful counterattack force to do that, and it conducts a good number of joint exercises to test its military preparations. Local war is based on the idea that future warfare will be local in geography, primarily along China's periphery and the war will be limited in scope, short in duration and most importantly, will be fought under conditions of information warfare.

In modified people's war, people actively support the military in terms of logistics and operation and there will be synchronization between the PLA, armed forces and various civilian networks.

Regarding the role of Second Artillery, the speaker found that it is a critical component of China's emerging power projection capabilities with the dual role of credibly deterring adversaries at intercontinental ranges through intercontinental cruise ballistic missiles (ICBM) and conventionally holding adversary forces within 1,500 kms of China. The SA has a powerful nuclear retaliation campaign to attack key strategic targets and also a conventional missile attack campaign with the precision strike capability to use conventional missile warheads against key military and infrastructure targets and they will help in combat operations of the army, air force and navy in joint operations to achieve any combat missions assigned to them from the higher authorities. The SA functions on the core principles of dual deterrence and dual operations. SA will use both nuclear and conventional missile forces for any warfare where they will use nuclear missile as a counterattack – either independent nuclear counterstrike through guided missiles or joint nuclear counter strike with the navy and air force. The conventional missiles are for precision strikes.

The next part of the presentation looked at China's 'no first use' policy. The speaker observed that for China to have a no first use policy, it must have the capability to absorb the first strike and ensure the survivability of nuclear weapons and for that, China has dispersed its nuclear weapons. Apart from this, the survivable telecommunication will play an important role during the war and this requires high degree of integration. In China's limited nuclear deterrence, nuclear weapons play a critical role in the deterrence of both conventional and nuclear war and escalation control.

Delving deeper into the main part of the presentation, the speaker revealed that the strategy of SA is to develop a lean and effective force. China does so by pushing for the informationization of its weaponry, improving the safety and reliability of weapons and by enhancing its capabilities in protection, rapid reaction, penetration and damage and precision strike. China developed the idea of 'nuclear retaliation campaign' to paralyze the adversary's command system, weaken its capability to persecute war and sabotage its strategic plans. In order for its nuclear force to survive an attack, they try to conceal and camouflage potential missile targets and develop their intelligence and reconnaissance. The speaker also highlighted that conventional missiles make up

the bulk of China's ballistic missiles and their growth is much faster than the nuclear forces as China sees nuclear force for deterrence and conventional missiles for offensive first strike and to take the adversary by surprise. The offensive first strike is used in the initial phase and its intensity is maintained by building a missile operational system suited to informationized warfare and this requires accuracy, long range, precision and a large number of missiles. China tries to change force structure of its SA from medium-intermediate range nuclear force to a bifurcated force armed with an array of missile categories, classes and variants.

The SA headquarter is in north of Beijing and SA troops are located within the seven military regions and the missile units are divided into bases and brigades which are further divided into support units like Launch Battalions. The missile brigades have six departments and are in charge of both nuclear and conventional weapons. The speaker also explained and showcased the six missile bases in different parts of China where the missiles are placed. Among them, Base 53 in Kunming targets India and South East Asia. The speaker specifically highlighted Base 22 at Taibalin Qinling mountain range in Xi'an as the most important base with most of the stockpile of missiles and as being responsible for storing and managing all other aspects of warheads like safety, maintenance and transport. China reportedly has a 5000 km underground facility to load the TEL under protected cover, seven test sites with six of them having launch facilities. The speaker gave a list of major missile arsenals China possesses which includes 1200 SRBMs with improved ranges and accuracy, conventional MRBM for precision strikes, IRBM in developing stage for near precision strike and LACM as the main components of the artillery and they are air, land and sea launched. Besides them, China has anti-ship cruise missiles, anti-radiation weapons and anti-ship ballistic missile. Further, the speaker informed that China is the only country to develop and deploy anti-ship ballistic missile, which has 932 miles range and manoeuvrable warhead with ability to threaten U.S navy aircraft carriers. Currently, China is engaged in improving the range, accuracy and number of arsenals. As far as trends in modernization are concerned, China is developing more sophisticated missiles with solid fuels, reloadable and mobile, and also increasing their numbers – especially the conventional ones – with new variants. Its ultimate aim being to move from a MRBM/IRBM to a multidimensional force and thus, to shift its priority from regional and Eurasian deterrence missions to intercontinental deterrence missions in view of its power projection scenario. China has already made its foray into BMD and is in the process of R&D of missile defence umbrella.

In view of China's modernization of its SA, in the last part of the presentation, the speaker dealt with the possible options for India to deter China. The speaker contended that India has to build its strategic deterrence through both military and non-military ways. In military terms, India needs to develop a military-striking strategic force, which has both nuclear and conventional forces with advanced guided technology to increase their operational efficiency and missile precision strikes. Space domination is critical in this context with more satellites for military purposes and space station carriers and rockets to develop both defensive and offensive space capabilities. The need to consider information warfare with both offensive and defensive cyberspace capabilities was also emphasized. In non-military means, the speaker highlighted bilateral visits, developing CBMs on nuclear issues with China and also through diplomacy with other states to create partnerships and multilateral treaties. A sound economy with investment opportunities and the development of science and technology in terms of R&D facilities to indigenize defence were seen as a must to build a formidable deterrence. Equally important is the political resolve of leadership to use the strategic deterrence when the need arises which the speaker referred to as psychological warfare.

Discussion

The discussion covered many issues discussed in the presentation. The first question was raised in the context of developing a strong Indian strategic deterrence against China – about whether India should increase its number of ICBMs? The speaker acknowledged the point regarding the relevance of ICBM to a Eurasia based threat and clarified that India needs to have more number of MRBMs. Another question pertained to China's 'no first use' policy – how to ascertain that a first strike from China will necessarily be conventional followed by a second strike that will be nuclear? The speaker responded that this is a dilemma for everyone including the US who actually asked the Chinese to separate its conventional weapons from its nuclear force. However, the speaker acknowledged that there is no way of knowing each from the other until the coming missile has struck the target. Therefore, she argued for a strong deterrence as the best option in this context especially, given the fact that China's nuclear doctrine is largely ambiguous and conditional.

Another question was about China huge stockpile of missiles – how vulnerable is it? To this, the speaker mentioned that as far as India is concerned, Chinese missiles are not as vulnerable but

they are from the US perspective. Therefore, this is to be understood in relative terms. A few others from the audience commented that India could deter China despite the huge gap in terms of numbers if it develops missiles with a range and accuracy that can target Beijing and Shanghai. Doubts were raised about India's ability to deter China without a thermal nuclear capability. The speaker pointed out that India had actually tested a thermonuclear device in 1998 though many people doubt the test and it is unlikely for India to test again as it has agreed to the moratorium of not testing further. Besides that, the global system of missiles is coming back to conventional rather than nuclear and China is following the same trend. It was discussed that India's cyber warfare is decades behind China' and it needs to develop it and also to have nuclear survivability options like civilian infrastructures and hospitals to treat nuclear casualties.

Report prepared by Beri Palden Sonam, Research Intern, Institute of Chinese Studies.

About the Speaker

Dr. Roshan Khanijo is Senior Research Fellow at the United Service Institution (USI) of India. She is a strategic analyst specializing in 'Nuclear Issues'. Her areas of interest are China and Pakistan. She has been a panelist in nuclear discussions and presented paper in CSIS, Beijing, and in RINSA, South Korea. She has authored a book - "Complexities and Challenges of Nuclear India" and authored a Monograph- "Iran Nuclear Conundrum". She was a member of the study team conducting a "Net Assessment" on China and South Asia namely "War Waging Potential of China" and "Strategic Balance in South Asia". She did a project on the "Net Assessment of Pakistan". She is a visiting professor at the Jindal International University.

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