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ALIGNING THE TRIAD: ON INDIA'S NUCLEAR DETERRENCE

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The INS Arihant, India's first nuclear ballistic missile submarine that completed its sea patrol earlier this month, will contribute significantly to making India's deterrence capability more robust. Submarine-based nuclear capability is the most survivable leg of a nuclear triad, and its benefit must be seen especially in the light of the growing naval capabilities of India's potential adversaries. In this light, certain questions need to be addressed on the third leg of India's nuclear triad, as well as major challenges for strategic stability in the southern Asian region.

While it is true that India's deterrence capability is a work in progress, there is nevertheless a need to carry out an objective assessment of what INS Arihant can and cannot do, and the implications thereof. To begin with, there is no clarity on whether the first deterrence patrol of INS Arihant had nuclear-tipped missiles on board. If not, the deterrence patrol would have been intended for political purposes devoid of any real deterrent utility. Without nuclear-tipped ballistic missiles on board an SSBN (ship submersible ballistic nuclear) such as INS Arihant, it might not be any more useful than an ordinary nuclear-powered attack submarine (SSN).

Second, even if INS Arihant had nuclear-tipped ballistic missiles on board, it is not clear what ranges they would cover. Reports suggest that it had the 750 km range K-15 missiles on board, which is insufficient to reach key targets in, say, China or Pakistan unless it gets close to their waters, which would then make the Indian SSBN a target. While the K-4 missile (3,500 km range) currently under development would give the country's sea deterrent the necessary range vis-à-vis its adversaries, INS Arihant would not be able to carry them on board. The Navy would require bigger SSBNs (S-4 and S-5) to carry the K-4 ballistic missiles. In other words, deterring India's adversaries using the naval leg of its nuclear forces is a work in progress at this point of time.

Third, if indeed the objective of India's nuclear planners is to achieve seamless and continuous sea deterrence, one SSBN with limited range is far from sufficient. Given the adversaries' capabilities in tracking, monitoring and surveilling India's SSBNs, it would need to invest in at least four more. Maintaining a huge nuclear force and its ancillary systems, in particular the naval leg, would eventually prove to be extremely expensive. One way to address the costs would be to reduce the reliance on the air and land legs of the nuclear triad. Given that India does not have 'first strike' or 'launch on warning' policies, it can adopt a relatively relaxed nuclear readiness posture. New Delhi could, in the long run, invest in a survivable fleet of nuclear submarines armed with nuclear-tipped missies of various ranges, and decide to reduce its investment in the land and air legs of its nuclear deterrent, thereby reducing costs. While this might bring down costs without sacrificing the country's deterrence requirements, inter-service claims might frustrate such plans.

Finally, the naval leg of the nuclear triad also poses significant command and control challenges. As a matter of fact, communicating with SSBNs without being intercepted by the adversaries' tracking systems while the submarines navigate deep and far-flung waters is among the most difficult challenges in maintaining an SSBN fleet. Until such sophisticated communication systems are eventually put in place, India will have to do with shallower waters or focus on bastion control, which in some ways reduces the deterrence effect of SSBNs, as bastions would be closer to the ports..

INS Arihant's induction will also have implications for regional stability. For one, it is bound to make the maritime competition in the Indian Ocean region sharper, even though the lead in this direction was taken by the People's Liberation Army Navy (PLAN) a long time ago. Hence, the dominant driver of India's SSBN plans appears to be China's expanding inventory of nuclear submarines. The PLAN's Jin class submarine with the JL-2 missiles with a range of 7,400 km began its deterrent patrol several years ago. Chinese nuclear-powered submarines (reportedly without nuclear weapons on board) have been frequenting the Indian Ocean on anti-piracy missions, creating unease in New Delhi. INS Arihant in that sense is a response to the Chinese naval build-up. Pakistan's reaction to India's response to China would be to speed up its submarine-building spree, with assistance from Beijing. Add to this mix China's mega infrastructure project, the Belt and Road Initiative, with its ambitious maritime objectives; and the revival of the Quadrilateral Security Dialogue, or Quad, with India, U.S., Japan, and Australia.

This sharpening of the maritime competition further engenders several regional 'security dilemmas' wherein what a state does to secure itself could end up making it more insecure. The net result of this would be heightened instability for the foreseeable future. However, once the three key players in this trilemma — China, India and Pakistan — manage to put in place the essential conditions for credible minimum deterrence, the effect of the instability could potentially decrease. But it's a long road to such an outcome.

What would further complicate the relations among the three key players in the region is the absence of nuclear confidence-building measures (CBMs) among them. While India and Pakistan have only rudimentary nuclear CBMs between them, India and China have none at all. In the maritime sphere, neither pairs have any CBMs. Given the feverish maritime developments that are underway, the absence of CBMs could lead to miscalculations and accidents. This becomes even more pertinent in the case of Pakistan, which uses dual-use platforms for maritime nuclear power projection. In case of a bilateral naval standoff, the absence of dedicated conventional or nuclear platforms could potentially lead to misunderstandings and accidents. It is therefore important for India and Pakistan (as also India and China) to have an 'incidents at sea' agreement like the one between the U.S. and USSR in 1972, so as to avoid incidents at sea and avoid their escalation if they took place.

India's sea deterrent also throws up several key questions about the country's nuclear command and control systems. To begin with, unlike in the case of the air or land legs of the triad where civilian organisations have the custody of nuclear warheads, the naval leg will be essentially under military custody and control given that there would be no civilian presence on board an SSBN. Not only would the SSBN have no warhead control by civilians (i.e., BARC scientists), its captain would be under the Strategic Forces Command, an organisation manned by military officers. Also, given that the warhead would be pre-mated with the canisterised missiles in the SSBN, what would be the finer details of the launch authority invested in the SSBN captain? The SSBN captain would have the authority to launch nuclear missiles on orders from the political authority. However, is there a fool-proof Permissive Action Links system in place to ensure that an unauthorised use does not take place? There needs to be more clarity on such issues.

In sum, while INS Arihant makes India's nuclear deterrence more robust, it also changes deterrence stability in the southern Asian region as we know it. More so, it is important to remember that the country's sea deterrent is still in its infancy, and its path hereon is riddled with challenges.

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