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Pakistan's Sea-Based Nuclear Deterrent and its Asymmetric Escalation Strategy

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ABSTRACT This brief situates Pakistan's pursuit of a sea-based nuclear deterrent within the context of its asymmetric escalation strategy. It does so by examining the role of Pakistan's land-based tactical nuclear weapons in such strategy, as well as by raising questions about claims that India may be shifting towards a counterforce targeting strategy and thus endangering the survivability of Pakistan's nuclear deterrent. The brief also reviews claims that Pakistan's pursuit of a nuclear triad contributes towards enhancing crisis stability.

INTRODUCTION

In January 2017, Pakistan tested a nuclear-capable submarine-launched cruise missile (SLCM), christened Babur-3. The weapon, a variant of its ground-launched cruise missile Babur-2, is suspected to be deployed on Pakistan's fleet of the French-made diesel-electric Agosta 90B submarines[1] – the Khalid class – or potentially to the S-20 Yuan-class submarines it is in the process of acquiring from China. It has a range of 450 kilometres.[2] Following the test, the Pakistani military noted that its acquisition of a nuclear-capable SLCM would enhance the country's posture of credible minimum deterrence. This test comes at a moment of serious international concern about the growing Pakistani nuclear arsenal. Other than this SLCM, Pakistan has eight different kinds of ballistic missiles, two families of ground-launched cruise missiles, and two kinds of aircrafts with nuclear roles.[3] In 2016 Pakistan's nuclear arsenal was estimated to be of 130 warheads.[4]

Coupled with other nuclear-weapons development in Pakistan, a worrying picture emerges. In this analysis, Babur-3 can be viewed as a third-strike weapon. Its test marks a

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pronounced shift for Pakistan towards nuclear war-fighting as part of its semi-official "full spectrum deterrence" posture. This brief situates Babur-3 in Pakistan's nuclear strategy of fielding both short-range low-yield tactical nuclear weapons (TNWs) as well as longer range "strategic" nuclear missiles as part of its asymmetric escalation strategy (to use Vipin Narang's terminology).[5] It argues that far from Babur-3 being crisis-stability enhancing, it in fact could support Pakistan's stated nuclear posture of first use to stall even a shallow-thrust conventional Indian attack to seize a sliver of Pakistani territory as part of a post-conflict bargaining strategy.

The paper is organised in the following manner. The next section situates Pakistan's SLCM strategy in the context of its TNW programme, the possibility of India shifting its nuclear posture towards counterforce targeting, and around concerns about survivability of the nuclear arsenals of both countries. The subsequent section discusses Pakistan's shift towards full spectrum deterrence and away from credible minimum deterrence, and argues that Babur-3 supports the former and not the latter. The paper ends with some concluding observations of what Babur-3 portends, if it does, for a more relaxed Pakistani first-use posture.

TNWs, COUNTERFORCE STRATEGIES AND SURVIVABILITY

The understanding of Pakistan's SLCM programme must be triangulated within three distinct developments: (1) Pakistan's pursuit of TNWs; (2) a possible shift in India's nuclear strategy towards counterforce targeting; and (3) both powers' quest for a survivable deterrent. It should also be understood within the context of asymmetric nuclear doctrines of India and Pakistan: while India's declaratory doctrine commits to no-first-use (NFU) of nuclear weapons in a conventional conflict, Pakistan's doctrinal ambiguity – presumably to enhance deterrence – includes no such pledge or even concrete threshold(s) for nuclear first use.

The first development has its origin in India's pursuit of a deterrence-by-punishment strategy towards Pakistan. After a prolonged Indian military mobilisation following a failed 2001 terrorist attack on the Indian parliament, Indian strategists advocated a more limited proactive strategy to punish Pakistan in the event of another similar attack. According to this strategy – colloquially referred to as "Cold Start" – a small number of division-sized "integrated battle groups" will mobilise in a matter of days following political clearance and carry out a shallow-thrust offensive into Pakistan, potentially seizing a small hamlet in Pakistani Punjab.[6] (Indian military officers generally eschew talking about "Cold Start" as such and refer, instead, to putative limited aims strategy.) The military objective of this strategy will be to seize a small swathe of its territory and use it for post-conflict bargaining – a much more robust response than the September 2016 cross-LoC "surgical strikes."[7] While there is evidence, though far from unequivocal, that a proactive limited war strategy does indeed exist in Indian war-planning,[8] the very fact that India eschewed a military response to the 2008 Mumbai terrorist attacks has been read by many to mean that Cold Start planning may lack substantive content. However, the recently-published joint doctrine of the Indian armed forces does seem to suggest that a proactive offensive strategy indeed exists as part of Indian war-planning.[9] Nevertheless, when Pakistan retested an improved version of Nasr short-range missile

battery (meant as a delivery system for its TNW arsenal), army chief Qamar Bajwa proclaimed that it was designed to pour "cold water over Cold Start."[10]

The second development relevant to Pakistan's pursuit of a sea-based deterrent is a growing debate around India's shift towards a counterforce targeting strategy in the event of deterrence failure. This debate, in the making for the last few years in light of a possible Chinese shift towards MIRVs and an attendant counterforce strategy,[11] came to sharp focus in 2017 following observations made by the former Indian national security adviser (and in that capacity, the chairman of the executive council of the Nuclear Command Authority) Shivshankar Menon, albeit in the context of Pakistan and its use of TNWs in a conflict.[12] India's extant public nuclear doctrine notes that it will "retaliate massively" in the event that deterrence fails, which many have interpreted to mean a massive counter-value retaliation.[13] However, with the Modi government coming to power in 2014, there has been more than minor rumblings about the continued efficacy of India's nuclear doctrine in a changing strategic environment. His party campaigned to power noting that, if elected, they would "study in detail" India's nuclear doctrine and update it if there was a need.[14] While such a review has not happened so far (at least publicly), there is broad consensus that India's extant nuclear posture is no longer suitable in light of the growing capabilities of India's adversaries.[15]

The question here is not about the intent, whatever it may be. It is about capabilities. Counterforce targeting – as opposed to counter-value use – requires sophisticated weapons technology as well as refined C4ISR capabilities.[16] At present, Indian counterforce capabilities are still nascent and primarily a function of its arsenal that continues to be limited. Rajesh Rajagopalan recently presented some back-of-envelope calculations that suggest that a comprehensive Indian first strike on Pakistan will require– at a conservative estimate – 90 out of the 110 warheads, leaving only 20 or so for a contingency with China.[17] Pakistan's topography, with the exception of its east, is largely mountainous; the Northern Highlands is home to some of the tallest mountains in the world. The Baluchistan plateau too has peaks as high as 4,000 meters.[18] The extensive cavernous structures associated with these mountain systems provide ideal and hardened locations for Pakistan to conceal its nuclear weapons. As such, it will be an exceedingly challenging task to detect each and every Pakistani nuclear weapons systems in that terrain, more so to destroy them.

Nevertheless, there is a possibility that in a kinetic conflict, India would carry out conventional counterforce strikes against exposed missile batteries. In the event of a "discrimination problem"[19]—where the Indian military is unable to tell whether a given missile battery has conventional or nuclear warheads – these strikes could result in yield events on the battlefield and therefore inadvertent nuclear first use by India.[20] However, there is no reason to believe that Pakistani planners are not aware of this problem, and that they will not make efforts to signal to India which of the battlefield batteries are nuclear-armed and which are not. More than anything else, this would be out of self-interest in survivability of their battlefield nuclear weapons, especially if they are deployed in populous territory in the plains of Pakistani Punjab and they are not one-point safe (meaning that if hit with conventional munitions they would cause a yield event).[21]

This brings us to the third development relevant to Pakistan's SLCM strategy: the

pursuit of a survivable deterrent. The Pakistan military, in its statement after the January 9, 2017 test of Babur-3, noted that it "will provide Pakistan with a Credible Second Strike Capability, augmenting deterrence [emphasis added]."[22] This is notable in that it reflects, as in similar occasions, Pakistan's lack of trust in India's NFU posture and a concern for survivability of its nuclear deterrent. From the Indian end, right from the first draft nuclear doctrine of 1999, the credibility of Indian nuclear deterrent has been tied to its survivability and, consequently, to the pursuit of a nuclear triad.[23] With the induction of an SSBN INS Arihant into service in August 2016, India now has a modest sea-based deterrent force.[24] However, India's quest for survivability of its nuclear deterrent has not been smooth. India's pursuit of a nuclear triad has been criticised by many as moving beyond its publicly stated credible minimum deterrent posture. Be that as it may, India's NFU posture along with a sea-legged deterrent diminishes rather than enhances first-strike instability – a situation where a state, fearing the loss of its nuclear weapons, chooses to use them first. This is not the case with Pakistan which has, over the years, moved away from credible minimum deterrence.

PAKISTAN'S NUCLEAR POSTURE: FROM 'CREDIBLE MINIMUM' TO 'FULL SPECTRUM' DETERRENCE

Pakistan's implicit nuclear doctrine has evolved considerably over the last 20 years since the 1998 nuclear tests. Beginning with a posture that mirrored India's – a commitment to credible minimum deterrence – with the introduction of TNWs, Pakistani strategists have advocated a shift to what they describe as "full spectrum deterrence", presumably to include deterring limited Indian offensive action.[25] In the accompanying strategy, Pakistan would use TNWs as a soft counterforce weapon to stall a conventional attack while holding Indian nuclear retaliation at bay through the threat of using its longer-range missiles for counter-value targeting.[26] Parenthetically, Ankit Panda and Vipin Narang have already noted that this is what North Korea seeks to do too with the introduction of the Hwasong ICBMs to its arsenal: use short-range nuclear weapons to thwart a conventional American attack while preventing nuclear retaliation through the ability to hit US cities.[27] However, official Pakistan military statements also continue to speak of "credible minimum deterrence" or – more recently, following a drafting error in an Indian military doctrine – of "credible deterrence", dropping the qualifying "minimum."[28]

It is important to situate Pakistan's SLCM in this "asymmetric escalation strategy," as full spectrum deterrence has also been described. As discussed earlier, scenarios that envision deterrence failure always starts with Pakistan's TNW use following an Indian conventional attack. Indian conventional military superiority over Pakistan – especially in the event of a limited offensive action where India's choice of theatre will be where it enjoys a numerical advantage – does not present it with any incentive to use nuclear weapons first in a conflict. Following Pakistan's TNW use, if India was to respond with massive retaliation through a combination of counter-value and counterforce targeting – as the public doctrine commits it must – then Pakistan's Babur-3 is visualised as a survivable third strike weapon that would be presumably used in a countervalue role, to target Indian cities. (It is important to keep in mind that this terminology

is not meant to be taken literally. Rather it suggests that by promising a third strike from a survivable platform, Babur-3 seeks to dissuade India from carrying out a second retaliatory strike following a Pakistani TNW use.) In this way, it is a consolidation of Pakistan's asymmetric strategy to support full-spectrum deterrence. On the other hand, India's pursuit of a sea-legged deterrent consolidates credible minimum deterrence given that it is supposed to make credible India's retaliatory commitment through enhancing survivability of its deterrent.

This view of Babur-3 as a third-strike weapon has important implications. For it to perform its role as a weapon to be used after a massive Indian nuclear retaliation – and for the strategy supporting Babur-3 to be credible – command-and-control must be devolved to commanders of submarines carrying this weapon in moments of crisis. This raises incredible assertive control and nuclear safety issues of the type Clary and Panda raise in their recent discussion of Babur-3.[29] Incidentally, similar issues continue to plague Pakistan's battlefield nuclear weapons strategy. In many ways, the Nasr system and Babur-3 present the same conceptual problems for Pakistani and Indian planners alike.

Of course, one cannot discount the possibility that Pakistan has never really taken India's counter-value retaliatory posture seriously and has suspected that India will attempt a comprehensive first strike neutralising Pakistan's nuclear deterrent. If that is indeed the thinking in Rawalpindi then Babur-3 for Pakistan is what its military claims it is: a second-strike weapon that enhances deterrence through survivability. However, as noted earlier, despite claims by many scholars, there is little hard evidence to suggest that India has the technical capability required to carry out a comprehensive surprise first strike (called a "splendid first strike" in the nuclear literature). It stretches imagination to believe that Pakistani planners are not aware of these Indian limitations.

CONCLUSION: TOWARDS A MORE RELAXED PAKISTANI FIRST-USE POSTURE?

The classical view of a sea-based deterrent is that of deterrence enhancing: by assuring survivability, the adversary is promised a retaliation in the event of a first use of nuclear weapons. Especially for states with smaller nuclear arsenals, acquisition of a survivable nuclear arsenal – such as sea-based deterrent or hardened siloes for that matter – helps relieve their "use-or-lose" dilemma in a conflict. However, it is unclear whether Pakistan continues to face such a dilemma. Pakistan's nuclear arsenal is larger than India's, at 130 warheads compared to 110.[30] Its mountainous topography also contributes to survivability of its nuclear weapons in that it helps conceal them. Therefore, it is unclear if Pakistan's acquisition of a sea-based deterrent would lead it to adopt a more relaxed first-use posture than it was before.

Beyond this, the crisis-inducing role of stationing nuclear-armed SLCM on Pakistan's sole conventional fleet of diesel-electric submarines is clear. As Clary and Panda note, "[i]t would be difficult if not impossible for an Indian Navy surface ship, submarine, or maritime reconnaissance aircraft to know if a detected Pakistani submarine has a strategic or a conventional role."[31] If such Pakistani submarines were to leave its territorial waters in a crisis, they would most likely be destroyed by the Indian navy. Note how this is different from the case of the Indian sea-based deterrent. As

the sole Indian SSBN, it would be clear that the INS Arihant's role in a crisis would be that of nuclear missions. As such, there is little risk of inadvertent escalation with the Arihant patrolling in contingencies.

As this brief has argued, Babur-3 instead has to be viewed as yet another step in Pakistan's consolidation of its full spectrum deterrent strategy that seems to have steered – beginning with the Nasr TNW system – away from deterrence and towards a nuclear-warfighting posture. It also contributes to Pakistan's grand strategy of sub-conventional warfare against Indian interests under the nuclear overhang by adding another layer of strategic complexity for India in its pursuit of deterrence by punishment.[32] However, in this move away from a deterrent to war-fighting role for nuclear weapons, Pakistan is hardly alone. Over the past years, Russia too—with its "escalate-to-deescalate" strategy – has proposed to use low yield nuclear weapons in a conventional conflict in order to generate an operational pause. As Debak Das has recently written, the 2018 US Nuclear Posture Review, with its advocacy of "useable" nuclear weapons, seems to also move the US towards a posture that is more akin to full spectrum deterrence, in spirit if not in letter.[33] As such, the shifts in thinking about the role of nuclear weapons present significant challenges to Indian strategic planners and the international community at large. ORF

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