Examining the Dynamics of Nuclearisation of the Indian Ocean: Ramifications for South Asia and the United States

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Contents

Introduction

- Nuclear rivalry between India & Pakistan and India & China has shifted to the maritime domain
- At the intersection of naval and nuclear strategy, trilateral security competition has led to destabilization of balance of power in Southern Asia
- China's growing naval presence in IOR as a naval nuclear actor and China-Pakistan nuclear dynamics induces possibilities of coercive nuclear escalation
- Has China's growing naval presence in the IOR prompted New Delhi to reassess its ASW capabilities? What are the steps that are being taken by the Indian Navy to plug in its ASW gaps vis-à-vis China?

India's Sea-based Deterrence Credibility

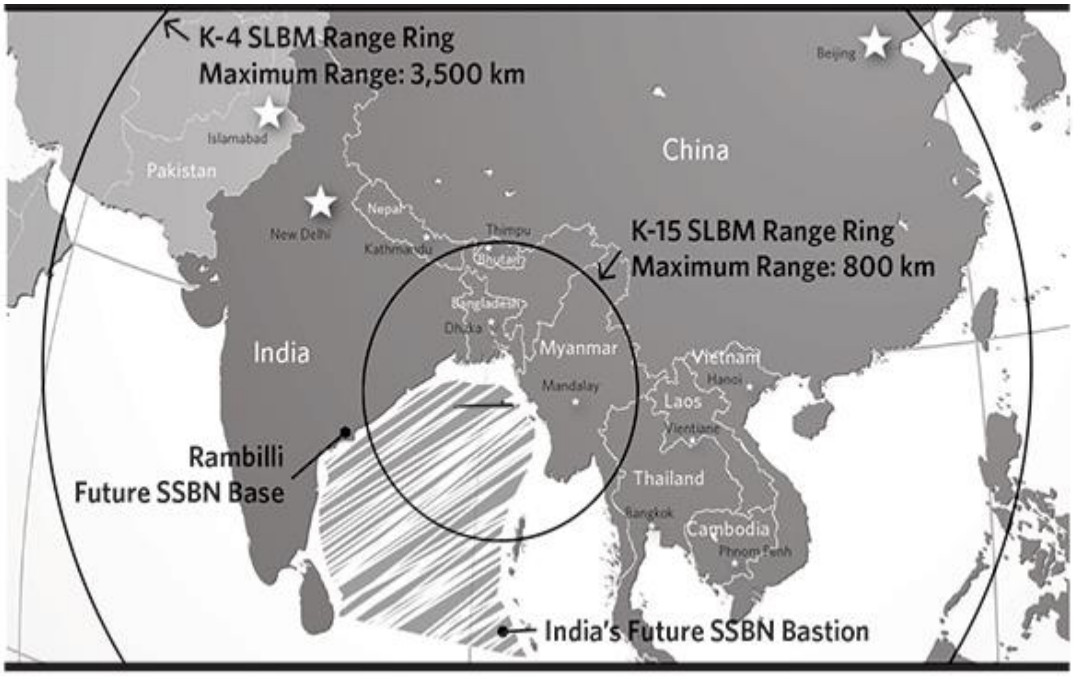
- On western side, Indian K-15 and K-4 SLBM range covers a major portion of Pakistan as shown below:

- India exercises a credible deterrence vis-a-vis Pakistan

Source(s): Carnegie Endowment

India's Sea-based Deterrence Credibility

- On eastern side, Indian K-15 SLBM range does not even reach the border with China; K-4 SLBM does not effectively cover northern Chinese cities as shown below:



- While India will not like to see an escalation of arms race in Southern Asia, New Delhi is impacted by increasing Chinese assertiveness in the Indo-Pacific. It is likely that India will consider investing in developing longer range missiles to exercise effective sea-based deterrence vis-a-vis China

Source(s): Carnegie Endowment;

Naval Capability Snapshot

Particulars	China Naval Capability	India Naval Capability	Pakistan Naval Capability
Submarines	- SSBN Type 094: 4 - SSN Type 093/093A: 3 - Kilo SS: 12 - Type 035 SS: 9 - Type 039 SS: 13 - Type 039A SS: 14 - Type 032 SS: 1 - Total: 56 (41 are modern)	- Type 877EM SS: 9 - Type 209 SS: 4 - Akula-class SSN: 1 - Scorpene-class SS: 1 trials (5) under construction - Arihant-class SSBN: 1; and 3 under construction	- S20 SS: 8 (yet to be finalized) - Agosta 90B SS: 3 - Agosta 70 SS: 2 - SSBN: 1 projected (?)
Aircraft Carrier	One with a capacity for 24 J-15 fighters, 6 anti-submarine warfare helicopters, 4 airborne early warning helicopters and 2 rescue helicopters: Total 36 aircrafts	One STOBAR carrier with another STOVL carrier to be decommissioned. One more are under construction.	None
Navy Destroyers	- Sovremenny: 4 - Type 052A: 2 - Type 051B: 1 - Type 052B: 2 - Type 052C: 6 - Type 051C: 2 - Type 052D: 3 - Total: 20	10 Destroyers	Type -21 destroyers: 6
Frigate Commissionings	- Type 053 H2G: 4 - Type 053H3: 10 - Type 054: 2 - Type 054A: 19 - Total: 35	9 Frigates and 7 more under development	4 Type 053H3 Frigates
Amphibious ships and floating bases	- Type 071 amphibious ship: 4 - Development of floating sea bases underway	Replenishment and fleet tankers	2 Landing craft

India lags behind China and shall continue to experience capability gaps if New Delhi follows a strategy of achieving number-parity with China

Source(s): Compilation of data from multiple public sources - NTI, Pakistan Navy, CRS;

New Delhi's Strategy

- Merely focusing on comparison of China and India's strategic ASW capabilities does not throw adequate light on the evolving geopolitical concerns and context in the Indian Ocean.
- Factors like geography, offensive-sea control policy and a 'nuclear (protective) bastion' are important determinants of Delhi's strategy and the evolving dynamics in the Indian Ocean

India's Strategic and Conventional ASW Capabilities

- India's SLBM capabilities
  - K-4: 3,500 kms
  - K-15: 1,500 kms
- INS Kadmatt (ASW Corvette)
- INS Kalavari (Diesel Attack- Submarine; Project 75)

Efforts to Close the Gap

- Lack of advantage in SSBN capability vis-à-vis China
  - Focus on SSN assets for forward-deployed sea denial
  - Focus on sub technologies such as low frequency SONAR
  - Installation of underwater sound surveillance sensors (SOSUS); Integrate with existing US-Japan “Fish Hook” network
  - Aerial ASW platforms such as P-8Is, anti-submarine helicopters

Can India and US cooperate on deploying UUVs in the Indian Ocean? India remains concerned regarding Chinese investments in autonomous weapons and unmanned systems.

Commingling of Forces

- What is commingling of forces?
  - Use of conventional and nuclear assets interchangeably using dual-capability systems
- Two Schools of Thoughts
  - Deterrence strengthened through injection of ambiguity
  - Deliberate blurring of conventional and nuclear platforms is likely to heighten the risk of vertical escalation
- Indian Strategy:
  - Uncertainty over India's strategy of commingling
  - Dual capable systems developed and Dhanush-class short-range ballistic missiles (stopgap measure)?
  - Prithvi launched from land and sea

Can ambiguity buttress deterrence?

Commingling of Forces

- Pakistan's Strategy:
  - Blurring is the 'best strategy'
  - Unclear nuclear arsenal and ambiguity in terms of second strike capability acts as deterrence
  - Breeds instability in the region through coercive escalation
- China's Strategy:
  - The degree of commingling in practice is very difficult to assess using open-source materials
  - Some amount of commingling may be expected to be present

Commingling of Forces: What does it signal?

- China's increase in commingling of forces may indicate China's efforts to intentionally increase risk of nuclear escalation
- Pakistan's commingling of forces may indicate deterrence to escalate tensions in the short-run. However, in the long-run, it might be flawed since India's maritime strategy places emphasis on offensive sea control
- India's commingling of forces may indicate a stopgap measure to invoke deterrence – a short-run solution
- Therefore, commingling may signal different perceptions based on actors involved. While it may lead to deterrence in the short-run, it is not a long-run solution. Instead it may lead to an arms race in the region

Can commingling of forces across States between allies lead to deterrence? What are the challenges?

Conclusion

Need for Escalation Control - Highly destabilizing security environment in IOR

- Challenge for sea-based nuclear forces is not trivial; (US and Soviet Union took years to get the accurate and effective SLBMs)
- Active patrols by nuclear-powered Chinese subs purportedly for 'piracy operations' in the IOR are intensifying misperceptions
- India needs to plug-in ASW gaps; India-US cooperation on 'shared ASW capabilities'; Expanding talks to include Japan and Australia
- Efforts to improve nuclear signaling and strengthening crisis stability
- India-China; India-Pakistan need to create confidence building measures in maritime domain