More than five years have passed since India launched its first ballistic missile submarine (SSBN) in July 2009. Meanwhile, Pakistan formally inaugurated a Naval Strategic Force Command headquarters in 2012 and has declared its intent to develop its own sea-based deterrent. As India and Pakistan develop their naval nuclear forces, they will enter increasingly murky waters. By further institutionalizing relations between their navies and by insisting on stronger transparency with regard to naval nuclear developments, both countries may succeed in adding a greater degree of stability to what otherwise promises to be a dangerously volatile maritime environment.

**Takeaways for India and Pakistan**

- India's pursuit of a sea-based nuclear strike force is the next logical step in its quest for an assured retaliatory capability.
- India has conducted a series of test firings of Dhanush-class short-range ballistic missiles from offshore patrol vessels. It appears that for the Indian Navy, the Dhanush program is a stopgap measure until the SSBN fleet comes to fruition.
- The submarine-based leg of India's nuclear triad will have a major impact on the nation's existing command-and-control arrangements.
- To enjoy an effective sea-based deterrent vis-à-vis China, India's other prospective nuclear adversary, New Delhi has to develop larger SSBNs with greater missile carriage capacity and more powerful nuclear reactors.
- Pakistan's naval nuclear ambitions are fueled primarily by the sense of a growing conventional, rather than strategic, imbalance between New Delhi and Islamabad.
- By dispersing low-yield nuclear weapons across a variety of naval platforms, Islamabad aims to acquire escalation dominance and greater strategic depth and to reduce the incentives for a preemptive strike on its nuclear assets.

**Ongoing Naval Nuclear Dynamics in South Asia**

- India's pursuit of a sea-based nuclear strike force is the next logical step in its quest for an assured retaliatory capability.
- India has conducted a series of test firings of Dhanush-class short-range ballistic missiles from offshore patrol vessels. It appears that for the Indian Navy, the Dhanush program is a stopgap measure until the SSBN fleet comes to fruition.
- The submarine-based leg of India's nuclear triad will have a major impact on the nation's existing command-and-control arrangements.
- To enjoy an effective sea-based deterrent vis-à-vis China, India's other prospective nuclear adversary, New Delhi has to develop larger SSBNs with greater missile carriage capacity and more powerful nuclear reactors.
- Pakistan's naval nuclear ambitions are fueled primarily by the sense of a growing conventional, rather than strategic, imbalance between New Delhi and Islamabad.
- By dispersing low-yield nuclear weapons across a variety of naval platforms, Islamabad aims to acquire escalation dominance and greater strategic depth and to reduce the incentives for a preemptive strike on its nuclear assets.

**MURKY WATERS: NAVAL NUCLEAR DYNAMICS IN THE INDIAN OCEAN**

**ISKANDER REHMAN**

© 2015 Carnegie Endowment for International Peace. All rights reserved.

The Carnegie Endowment does not take institutionalized positions on public policy issues; the views represented here are the author's own and do not necessarily reflect the views of Carnegie, its staff, or its trustees.

CarnegieEndowment.org