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R E P O R T

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# Promoting International Energy Security

Volume 3, Sea-Lanes to Asia

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## Summary

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Security for Asia's major energy sea-lanes—running from the Hormuz Strait, into the Indian Ocean, through the Malacca Strait to Singapore, and into the South China Sea—currently lags behind the growing criticality of these waterways. Key economic powers in the region depend on sea-lane transport for the vast majority of their oil supplies, which in turn help to fuel their economic growth. Although the U.S. Navy has traditionally guaranteed freedom of the seas in Asia, a growing mission set and shrinking force structure challenge this role.

The growing mismatch between the importance of the sea-lanes and the stress on and vulnerability of the system has contributed to rising energy insecurity in the region. This exploratory report assesses whether an alternative approach to sea-lane security would be valuable and what role, if any, the U.S. Air Force might play in enhancing sea-lane security. RAND found that, while the direct benefits of greater Air Force engagement in improving energy sea-lane security would likely be marginal, the spillover benefits of joint operations with the Navy and multinational engagement could make greater Air Force involvement worthwhile.

To inform this analysis, we conducted a broad survey of secondary and primary sources and interviewed country, regional, and operational experts. Our sources included professional journals, academic studies, official strategy and doctrine documents (both domestic and foreign), international and interdepartmental agreements, and news reports. We also participated in several conferences related to maritime security and to piracy in particular.

To understand the concerns over sea-lane security and potential alternative security arrangements, we examined the importance of the sea-lanes in transporting energy, current and foreseeable threats to sea-lane security, existing national and multinational mechanisms for securing the sea-lanes, the potential benefits of alternative arrangements, and the challenges associated with pursuing a new approach to sea-lane security. While the findings of this study are by no means exhaustive, they confirm the potential value of a comprehensive and rigorous inquiry into specific joint and multinational points of engagement for the Air Force.

The majority of the world's rising consumption of energy, and oil in particular, is occurring in Asia. Limited regional oil production means that Asia increasingly relies on imported oil, primarily from the Middle East. Close to 90 percent of the energy that China, Japan, and South Korea import must pass through the Southeast Asian sea-lanes (Storey, 2009a, p. 36). Continual access to these energy supplies is critical for sustained economic growth in Asia, which has been a source of stability in the region.

Threats to sea-lane security can be categorized in three tiers, based on the primary belligerent actor. Tier I threats are nonstate actors, including natural phenomena (such as tsunamis), criminal activity (including piracy), and terrorist movements. These are by far the most common threats, but their ability to disrupt energy flows is quite limited in scope and

duration. Tier I threats tend to have small and/or transitory economic consequences. Tier II threats emanate from failing or rogue states. These states may serve as safe havens for the types of activities that make up Tier I, and in the case of rogue states, the state may actually be the sponsor of such criminal activity. While Tier II threats are not currently present in the region, Bangladesh, Cambodia, Indonesia, Burma, Pakistan, and Thailand have all experienced recent periods of unrest and are not yet free of the risk of further destabilization. Tier III threats constitute capable state-level threats that may involve coercion or force to advance parochial interests, such as by threatening or using force within sea-lanes. Unresolved historic and emerging tensions within the region increase the risk of this type of threat. While the likelihood of a major energy disruption is low, its consequences would be serious. Perceptions of economic vulnerability have led to both national and regional efforts to improve maritime security.

Currently, Asian sea-lane security defaults either to the the U.S. Navy or to emerging and less effective ad hoc multinational mechanisms within the Indian and Pacific Oceans. Traditionally, security issues in the region have been addressed bilaterally. But recently, collective regional security mechanisms have begun to emerge. At least nine multilateral security groupings in the region now address maritime security in some way. Two of the more-promising groups are the Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP) and the Malacca Strait Patrol Network, which countries in the region established to improve coordination of sea-lane security information and activities. While most of these regional mechanisms are still weak, the openness of countries to participation in such forums suggests an increasing understanding of the necessity and benefits of coordination and cooperation.

Despite fledgling improvements in multilateral mechanisms, the existing security structure still suffers from seams and gaps in key capabilities, including surveillance and information sharing, response time and capability, and interoperability. Perceived shortfalls in sea-lane security have manifested themselves through the growth in Asian naval modernization, development of alternative energy distribution systems (such as overland pipelines), the rise in maritime insurance rates, and reliance on private security firms.

RAND explored two alternative approaches to sea-lane security: joint and multinational. A joint approach would include the involvement of not only the U.S. Navy but also the U.S. Air Force and other relevant elements of the U.S. government (such as the Coast Guard and Department of State). Benefits of such an approach would include easing the mission stress on the Navy, allowing it to take a holistic approach to challenges and the United States to engage with regional partners on a number of levels (not just navy to navy).

A multinational approach could enhance partner capacity, while promoting burden sharing; through coordination, improve the effectiveness and efficiency of unilateral and bilateral efforts; and better accommodate the emergence of new powers in the region, improving regional stability through confidence building.

Yet implementing such a new approach will not be without challenges. Obstacles to a multinational approach to maritime security include (1) differing interests within the region, (2) differing threat perceptions, (3) concerns over state sovereignty, (4) negative attitudes toward externally led initiatives, and (5) differing levels of capability among contributing nations. A new approach will need to carefully navigate regional and country-specific preferences and resolve barriers to cooperation within the United States' own bureaucracy.

With these challenges in mind, RAND identified six attributes that would contribute to the success of an alternative approach to sea-lane security. The new approach should be

- built on existing mechanisms for cooperation
- flexible in form
- sensitive to sovereignty
- focused on operationalizing ideas and commitments
- economically affordable
- a true partnership.

To validate the benefits of and pinpoint opportunities for both joint and multinational approaches to sea-lane security, RAND identified a number of potential next steps for the Air Force to take:

- leverage the Air-Sea Battle initiative to further investigate opportunities for greater Air Force–Navy interdependency
- use joint exercises and experimentation to explore and validate sea-lane security options
- pursue greater Headquarters Air Force engagement with Pacific Command and the Asia Pacific Center for Security Studies regarding regional sea-lane security
- consider incorporating maritime security with ongoing training of partner air forces
- introduce a scenario on Indian Ocean sea-lanes or energy security at the Building Partnership Seminars hosted by USAF headquarters or at the Operator Engagement Talks
- evaluate Air Force air- and space-based intelligence, surveillance, and reconnaissance assets that could enhance sea-lane observation
- send a liaison officer to Singapore’s Information Fusion Centre.

Although the direct benefits to sea-lane security of greater Air Force engagement are marginal, enhanced Air Force participation in sea-lane security should not be dismissed. The anticipated spillover benefits of a more joint and/or multinational approach to sea-lane security might more than justify Air Force participation. Forward-leaning engagement could help the Air Force to develop stronger, more-cooperative security relationships with countries in the region. And state-to-state confidence-building activities could contribute to broader regional security.