Southeast Asian Chokepoints

Keeping Sea Lines of Communication Open

by John H. Noer

Conclusions

- The Sea Lines of Communication (SLOCs) in the Indonesian Archipelago and the South China Sea remain critical "chokepoints" for U.S. national interests.

- Half of the world's shipping passes through the SE Asian SLOCs.

- Closure of any of the SLOCs would raise shipping freight rates throughout the world. U.S. imports and exports would be directly affected.

- A serious blockage could cause a world-wide shipping shortage, and, at least in the short term, place severe pressure on the economies of region.

- The U.S. has direct and immediate mari-time economic interests to protect in the region, namely, orderly shipping markets, commercial freedom of navigation, and stability on the South China Sea.

Merchant Shipping in Southeast Asia

Over half of the world's merchant fleet capacity sailed through the Straits of Malacca, Sunda, and Lombok in 1993, or sailed passed the Spratly Islands. Over one third of the world's fleet weighing more than 1000 DWT visited the region (Table 1 on page 2).

The sheer volume of merchant shipping transiting the South China Sea gives the region global significance. Any disruption on these high seas can impact all shipping worldwide.

The Straits: Chokepoints for Shipping

Many nations in Southeast Asia are either insular or peninsular, or have extended coastlines. Land transport infrastructure is not well developed, so, most trade moves by sea. The region's seaborne imports and exports are growing rapidly. Geographic and economic factors confer importance to certain key waterways.
The three "southern entrances" into the region: the Straits of Malacca, Sunda, and Lombok are particularly important chokepoints in the world trade system. Equally important because of the threat of political and economic disputes are the sea lanes passing the Spratly Islands in the South China Sea.

The Strategic Interests of the United States

The U.S. Navy has long been assigned the mission of protecting the SLOCs of Southeast Asia. During the Cold War, the mission was viewed in strategic military terms: the United States needed to be able to move military supplies through the region in crises, and deny the SLOCs to the Soviets. Now that the Soviet threat is gone, what national interests are at stake?

Does it matter if merchant ships are forced to detour? Whose ships and whose trade use these trade routes? What are American interests? To answer the question "Who benefits from free access to SE Asia SLOCs?" the CNA team gathered extensive data on shipping and trade to analyze what would happen on the high seas if these SLOCs were closed.

What if the SE Asia SLOCs Closed?

At present, events that could disrupt passage through the SE Asian sea lanes for an extended period are unlikely. Nevertheless, unanticipated challenges might cause sustained disruption with serious consequences.

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Number of Ships</th>
<th>% World Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Bulk</td>
<td>2,573</td>
<td>60</td>
</tr>
<tr>
<td>Supertankers</td>
<td>297</td>
<td>59</td>
</tr>
<tr>
<td>Cellular</td>
<td>641</td>
<td>56</td>
</tr>
<tr>
<td>General Cargo</td>
<td>2,710</td>
<td>43</td>
</tr>
<tr>
<td>All Others</td>
<td>2,621</td>
<td>40</td>
</tr>
<tr>
<td>Regional Total</td>
<td>8,842</td>
<td>52</td>
</tr>
</tbody>
</table>

In principle, blockage of shipping lanes might not be a serious matter. Alternate routes are available. For example, ships denied access to the Malacca Straits might use Sunda. The Straits of Lombok and Makassar offer an alternative to the South China Sea. These detours are not so large, and after all, merchant vessels offer one of the cheapest modes of transport.

In practice, however, it turns out that blockage of these SLOCs would matter a great deal. Nearly half the world fleet would be required to sail farther, generating a substantial increase in the requirement for vessel capacity. All excess capacity of the world fleet might be absorbed, depending on the number of
straits closed and how long they remained closed. The effect would be strongest for crude oil shipments and dry bulk such as iron ore and coal. (See Table 2.)

Closure of the Straits of Malacca would immediately raise freight rates. Denial of the SLOCs passing the Spratly Islands to merchant shipping would disrupt world shipping markets even more severely generating shortages. Freight rates around the world would be affected, thus adding costs to American imports and exports. All trading nations have a vested interest in preserving stability on the SE Asian SLOCs.

The experience with the closure of the Suez Canal seems to indicate that such a disruption might increase freight rates by as much as 500 percent. Note that military or physical SLOC closure is not required. Suppose war-related uncertainty over the Spratlys caused maritime insurers to either increase rates or deny coverage in the region. Shippers might be motivated to reroute shipping via safer sea lanes. The factor that converts a localized maritime concern (SLOC blockage) to a global economic event (freight rate crisis cum capacity shortfall) is the huge volume of shipping involved in the South China Sea.

Table 2
World Capacity vs SLOC Closure

<table>
<thead>
<tr>
<th>Ship</th>
<th>Normal Excess Capacity</th>
<th>On Closure of:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Straits of Malacca Only</td>
<td>Spratly Islands SLOCs</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td>Available Excess</td>
<td>Available Excess</td>
</tr>
<tr>
<td>Cellular</td>
<td>24.3 %</td>
<td>12.6 %</td>
<td>+ .7 %</td>
</tr>
<tr>
<td>General</td>
<td>19.8 %</td>
<td>6.8 %</td>
<td>- 4.0 %</td>
</tr>
<tr>
<td>Bulk</td>
<td>14.3 %</td>
<td>5.5 %</td>
<td>- 2.2 %</td>
</tr>
<tr>
<td>Tanker</td>
<td>13.7 %</td>
<td>0</td>
<td>- 9.6 %</td>
</tr>
<tr>
<td>Total</td>
<td>15.4 %</td>
<td>3.6%</td>
<td>- 5.8 %</td>
</tr>
</tbody>
</table>

Note: Percentages of the world fleet.

Trade Through the Straits

Well over one half trillion dollars worth of long-haul inter-regional seaborne shipments passed through these key chokepoints in 1993. This $568 billion was over 15 percent of all the world's cross-border trade, and does not include trade within the region. Malacca and the Spratly SLOCs are the main routes.

Japan, Australia, and the nations of Southeast Asia send over 40 percent of their trade by sea through these narrow waterways. Their economic vitality depends on free access to these sea lanes. U.S. prosperity in turn relies on the economic health of our trade partners. (See Table 3.)

 Flags and Vessel Ownership
Most vessels plying the region fly flags of convenience. The most common flag in the region is Panamanian; the second is Liberian. Japanese interests own more ships operating in the region than any other country. Most are "flagged out," so Japanese presence is discretely understated. U.S. interests are third behind Japan and Greece in terms of capacity owned passing through the Straits of Malacca in 1993. Over three quarters of U.S.-owned ships in SE Asia flag out.

There is often little correlation between nationality of registration and the nationality of owners, and these factors often have little relationship to the economies shipping or receiving cargoes. The concept of "nationality" as applied to shipping is thus ambiguous. Policies that would try to discriminate among shipping on the basis of nationality are based on a false premise. "Nationality" is not a meaningful concept when applied to merchant shipping, which has a chameleon-like quality. Maritime policies should be "internationalist" in nature.

The Straits of Malacca

There is a legitimate concern for safety in the crowded, shallow, and narrow Straits of Malacca. In 1993, 114 large merchant vessels per day travelled on inter-regional voyages through Malacca. Local and other shipping increases the total.

Indonesia and Malaysia prefer that deep-draft supertankers use the deeper and less crowded Straits of Lombok and Makassar. They do not. Over 1,100 fully laden supertankers annually pass eastbound through the Straits of Malacca, many with only a meter or two of clearance between their keels and the channel bottom. Most go to Japan or Northeast Asia, while about 20 percent go to Singapore.
The Policy Implications

In early 1995, Secretary of State Warren Christopher issued a warning to the nations quarreling over the Spratly Islands. The United States does not take sides in this dispute, but will not accept the disruption of trade passing through the South China Sea. The American position is based on direct national economic interest, as well as quasi-altruistic concern for the welfare of other nations. The United States has direct and immediate economic interests to protect in the region, as SLOC blockage could immediately and directly disrupt the U.S. economy. The United States also needs to protect its trade links to healthy, prosperous trading partners to maintain its own prosperity.

Table 3
Inter-Regional Trade via SE Asia SLOCs

<table>
<thead>
<tr>
<th>Percent of 1993</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Australia</td>
<td>53</td>
<td>40</td>
</tr>
<tr>
<td>SE Asia</td>
<td>53</td>
<td>55</td>
</tr>
<tr>
<td>NIEs*</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>China</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Europe</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>United States</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>World</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

*NIE: Newly Industrialized Economies - Taiwan, South Korea, Hong Kong.

All nations benefit from the free flow of world trade, which requires freedom of movement on the high seas. The current international consensus in favor of commercial freedom of navigation is a natural state of affairs, and a logical extension of the global trend towards free trade. The public will continue to expect the U.S. Navy to carry out the traditional mission of protecting trade on the high seas. During the Cold War, the threat of the Soviet Union dominated military thinking. "Threat analysis" determined the size of the force required to meet the Soviet threat; an American force capable of meeting that threat could handle all other missions. Now we live in a world where the threats are more vague, more diffuse. The distinction between defense against threats versus pursuit of national interests is now less well defined.

Facts

- The trade pattern via the chokepoints is dominated by a flow of high-volume raw materials moving north and east, and high-value finished goods returning south and west.

- Japan has the largest volume of inter-regional trade and shipping through the SE Asia SLOCs. Much of Japan's traffic could easily reroute in a crisis, but at a cost.
• Australia is heavily dependent upon the Straits of Lombok, especially for the shipment of iron ore to China. Most inter-regional trade through Lombok is Australian.

• Economies closest to the SLOCs are the most dependent upon them.

• Closure of the Malacca or Spratly SLOCs could generate a massive increase in freight rates worldwide, and hit bulk shipments hardest.

Interpretations

• The concept of "Freedom of Navigation" has both economic and strategic significance.

• Naval sea lane protection is a mission with economic merit in its own right.

• The fact that SLOC closure hits nearby countries hardest should be a stabilizing factor. Countries best able to either defend or close SLOCs are motivated to keep them open.

• The U.S. has immediate and direct maritime interests in stability in the South China SE Asia SLOCs.

• Other nations have even more stake in free movement of shipping on SE Asia SLOCs. These nations should be motivated to cooperate, and share the costs of naval SLOC protection.

Recommendations

ul li The United States should encourage other nations to share in the costs of protecting SLOCs in general, and the SE Asian SLOCs in particular. /li/ul li The United States should foster international consensus in both regional and global forums to keep SLOCs open because the economics of world trade require it. /li/ul li The United States should encourage Australia and other regional nations to ensure the viability of the Lombok-Makassar route, which would be vital to the region if the South China Sea became dangerous, or if Malacca were unavailable. /li/ul li Protecting shipping for economic reasons should become as important a national priority as protecting it for military reasons. /li/ul li Dr. John H. Noer is an economist in the Policy, Strategy, and Forces Division of the Center for Naval Analyses, Alexandria, VA. He is the author of the NDU Press book Chokepoints: Maritime Economic Concerns in Southeast Asia (1996).

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