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Terror in the Straits of Malacca

On a calm September night in 1992, a container ship traversing the Straits of Malacca sailed at top speed directly into an oil tanker, igniting a massive fire that burned for five days. While some believe that piracy played a role in the collision, the outcome certainly was nothing more than a tragic accident.¹ A dozen years later, however, after the use of commercial jetliners as fuel-laden missiles, the Malaccan incident suggests a worrisome future direction for terror attacks.

While its operations have mostly taken place on land, there are signs that al Qaeda and affiliated groups are turning their attention to maritime terrorism. Following a successful attack on a French oil tanker off the coast of Yemen in 2002 – not far from the site of a similar suicide bombing of the U.S. Navy destroyer *U.S.S. Cole* two years earlier – a Qaeda spokesman announced that they had struck “the provision line and the feeding to the artery of the life of the Crusader nation.”² Soon after, Osama bin Laden released a tape in which he said: “By God, the youths of God are preparing for you things that would fill your hearts with terror and target your economic lifeline.”³ Recently there have been reports of ships being hijacked for sailing practice in the Straits of Malacca – with an ominous similarity to the pre-September 11 use of flight schools, the hijackers

¹ John S. Burnett, *Dangerous Waters: Modern Piracy and Terror on the High Seas*, (New York: Dutton, 2002), p. 143

² *Casey Research: What We Now Know, June 3, 2004* (accessed December 7, 2004); available from <http://www.howestreet.com/story.php?ArticleId=443>.

³ Gal Luft and Anne Korin, “Terrorism Goes to Sea,” *Foreign Affairs*, Nov/Dec 2004, p. 64.

“questioned crews on how to operate the ships but [showed] little interest in how to dock them.”⁴

Whether these hijackings are indeed trial runs for a spectacular attack is unknown, but they plainly illustrate the potential for such. The largest oil tankers in use, aptly named “Very Large Crude Carriers” (VLCCs), are surprisingly vulnerable to attack. They are lumbering and ungainly, employ a small crew and have few means beyond fire hoses with which to prevent unauthorized boarding. In a sign of the industry’s lack of preparedness for terror attacks, most shipping companies – much like their airline counterparts before September 11 – instruct their crews not to resist boardings, presuming that damage to the ship and harm to the crew are more likely in the event of armed confrontation. In 1999, a VLCC was successfully taken over by pirates armed with little more than machetes while sailing through the Phillip Channel, the narrowest section of the Straits of Malacca.⁵

A collision and scuttling of two VLCCs in the Phillip Channel would certainly close the Straits of Malacca for a significant amount of time, perhaps several months. Such a closure would be catastrophic for the global economy, as the Straits is the most important chokepoint in the world for international trade. More than 50,000 large vessels transit the Straits each year, carrying 25 percent of the world’s maritime trade and half its oil – including more than 80 percent of the oil imported by China, Japan and South Korea.⁶ The U.S. Department of Energy estimates that nearly half of the world’s fleet

⁴ Ibid., p. 67

⁵ Burnett, p. 147.

⁶ Michael Richardson, *A Time Bomb for Global Trade: Maritime-Related Terrorism in an Age of Weapons of Mass Destruction* (Singapore: Institute of Southeast Asian Studies, 2004); summary available from <http://www.iseas.edu.sg/viewpoint/mricsumfeb04.pdf> (accessed December 7, 2004).

would have to sail farther in the event of a closure of the Straits.⁷ Shipping would necessarily be diverted along two other routes, one passing through the Sunda Straits, the other through the Lombok Straits. Unfortunately, the closer Sunda Straits has a tricky channel and tight depth restrictions and even lacks detailed navigation charts. Sunda is unsuitable for most oil tankers and the largest container ships, which would instead have to use the more distant Lombok Straits, typically adding about 1600 nautical miles and 3-4 days to their journeys.⁸

The increased travel times would not only raise shipping costs and disrupt energy supplies, they would also strain a global fleet that is already operating at capacity. Insurance costs would skyrocket: after the attack on the French oil tanker, rates for ships calling at Yemeni ports tripled.⁹ Some analysts estimate that there is already an insurance premium as large as \$8 included in the price of each barrel of oil; it seems a safe bet that rising insurance rates would drive oil prices to heights previously unseen, with catastrophic effects for the global economy.¹⁰

It is probable that damage to the world financial markets would be even more severe. One study suggests that market loss resulting from the September 11 attacks, in terms of “lower corporate profits and higher discount rates for economic volatility,”

⁷ U.S. Department of Energy, Energy Information Administration. *Country Analysis Briefs: World Oil Transit Chokepoints* (accessed December 7, 2004); available from <http://www.eia.doe.gov/emeu/cabs/choke.html#malacca>.

⁸ Mokhzani Zubir, “The strategic value of the Strait of Malacca,” Maritime Institute of Malaysia: 2004. (accessed December 7, 2004); available from <http://www.mima.gov.my/mima/htmls/papers/pdf/mokhzani/strategic-value.pdf>.

⁹ John C.K. Daly, “Al Qaeda and Maritime Terrorism, Part 1,” *Terrorism Monitor* Volume 1 Issue 4; Washington, D.C.: The Jamestown Foundation (accessed December 7, 2004); available from http://www.jamestown.org/publications_details.php?volume_id=391&&issue_id=2873.

¹⁰ *Casey Research: What We Now Know, June 3, 2004*

approached \$2 trillion.¹¹ It seems likely that an attack closing the Straits of Malacca would cause losses of a similar magnitude, not only due to the resulting economic dislocations, but also because such an attack would plainly demonstrate both the fragility of the world economy and al Qaeda's desire and ability to prey upon it.

A further consequence of such an attack would be a drastic increase in security costs. Much has been made of the costs of repairing the physical damage caused by the September 11 attacks, but these one-time expenses are relatively insignificant compared to the additional security investments being made to protect against future acts of terror. According to twin studies by the New York Federal Reserve Bank, the property damage and cleanup costs caused by September 11 amounted to about \$21.6 billion,¹² while the projected increase in security costs for 2003 alone was \$72.1 billion.¹³ The latter figure only includes expenses incurred in the United States; certainly other countries and foreign corporations have also increased their security spending in response to the attacks. Furthermore, the prospect of a timely end to the war on terrorism and realization of a "peace dividend" seems remote, meaning that these annual costs will likely remain for many years. An associated, but hidden, cost of increased security is the loss of productivity caused by resulting transportation delays, perhaps best exemplified by the enormous lines commonly found at American airport security checkpoints.

While the global economy could ill afford a single disaster of the magnitude discussed here, the effects of additional attacks would be far worse. The shipping

¹¹ Institute for the Analysis of Global Security, *How Much Did the September 11 Terrorist Attack Cost America?* (accessed December 7, 2004); available from <http://www.iags.org/costof911.html>.

¹² Jason Bram, James Orr and Carol Rapaport, "Measuring the Effects of the September 11 Attack on New York City" *Economic Policy Review* Volume 8 Number 2, New York Federal Reserve Bank (accessed December 7, 2004) available from <http://www.newyorkfed.org/research/epr/02v08n2/0211rapa.html>.

¹³ Bart Hobijn, "What Will Homeland Security Cost?" *Economic Policy Review* Volume 8 Number 2, New York Federal Reserve Bank (accessed December 7, 2004) available from <http://www.newyorkfed.org/research/epr/02v08n2/0211hobi.html>.

industry might recover relatively quickly from a closure of the Straits of Malacca, but simultaneous closures of other trade chokepoints or attacks on vulnerable trade infrastructure would have devastating consequences. Unfortunately, al Qaeda has made repeated use throughout its history of simultaneous, coordinated attacks, and it seems likely that it would attempt the same here.

In the years since the September 11 attacks, the United States and its allies have taken a number of steps to combat the threat of maritime terrorism. The Proliferation Security Initiative, with 16 member countries, allows for the interdiction of ships suspected of smuggling illicit goods related to the production of Weapons of Mass Destruction.¹⁴ The United States has passed several domestic laws requiring, among other things, ships to register 24 hours in advance of entering an American harbor and to provide cargo manifests to U.S. Customs offices even before loading in foreign ports.

At the same time, the United Nations' International Maritime Organization (IMO) approved the Shipping and Port Facility Safety Code, mandating all nations engaging in maritime trade to "institute minimum standards of security at their harbor facilities and to similarly certify vessels sailing under their flag." While the Code went into effect in the summer of 2004, there is considerable skepticism about whether all states have met the requirements.¹⁵

Although each of these steps may prove to successfully combat maritime terrorism, it is important to note that they are all intended to counter attacks quite different from those which are being considered in this paper. These actions are largely a

¹⁴ Richardson.

¹⁵ Andrew Holt, "Plugging the Holes in Maritime Security," *Terrorism Monitor* Volume 2 Issue 9; Washington, D.C.: The Jamestown Foundation (accessed December 7, 2004); available from http://www.jamestown.org/publications_details.php?volume_id=400&issue_id=2945&article_id=236670.

response to the concern that terrorists will acquire a nuclear weapon and sail it into the port of a major city aboard an unsuspecting container ship. To combat such an attack, it makes sense to scrutinize shipping companies and their cargo manifests, and to interdict shipments that might be used to further the quest of a terror organization or rogue state to develop nuclear capability. But none of these steps will do anything to reduce the threat of terrorists hijacking and scuttling VLCCs or similar commercial vessels.

An attack on a VLCC could come in several different forms: a hijacking, an intentional collision caused by a smaller vessel under control of terrorists, or an attack with rocket-propelled grenades (RPGs) or similar weapon. The latter two possibilities seem worryingly plausible, considering that al Qaeda is thought to maintain a fleet of at least 15 ships and terrorist groups typically have no shortage of weapons.¹⁶ From the VLCC's perspective, a collision is much more difficult to prevent than a hijacking, since nothing short of a cannon will deter a ship intent on a kamikaze mission, and the idea of outfitting oil tankers with such heavy weaponry is completely absurd. At the same time, the damage caused by such a collision, or by an attack with RPGs, would likely be far less than if terrorists were able to take control of and collide two VLCCs in a manner of their choosing. While a VLCC would be unable to evade a smaller, more nimble craft, especially in a narrow channel, at least in such a case only one of the ships would be carrying several hundred thousand tons of oil.

Hijackings could yield a more devastating result than the other two possible forms of attack, but they would also be somewhat more difficult to carry out. As with the commercial airline industry's security response to September 11, the prevention of maritime hijackings centers on the ability to keep the terrorists away from the controls.

¹⁶ John C.K. Daly.

John Burnett, who traveled aboard a VLCC while researching his book “Dangerous Waters,” argues that once determined men are aboard a ship, it is nearly impossible to keep them out of the bridge.¹⁷ The trick, then, is to prevent the hijackers from boarding the ship in the first place.

It seems that several steps could be taken to keep would-be hijackers off a ship. The vessel’s security defenses could be upgraded; some VLCCs have been equipped with a non-lethal electric field to prevent people from climbing over the side of the boat. Additionally, bridges could be redesigned to prevent access while under way, much as airplane cockpits have been sealed off in recent years. It is likely, however, that such a redesign would greatly affect visibility from the bridge, since the typically large windows overlooking the deck make for an attractive point of entry. The impact a redesign would have on the captain’s ability to operate the vessel would obviously have to be considered before mandating such changes. Finally, since terrorists need not clamber over the railing to board a ship if they are already part of the crew, stricter security checks of crew members are necessary.

Each of these steps will be difficult to accomplish in the deregulated world of international shipping. Many vessels fly “flags of convenience,” meaning they are governed by countries that are frequently more interested in collecting registration fees from shipping companies than they are in enforcing safety regulations. Getting most or all of these countries to agree to institute and enforce such regulations as those proposed here would not be a trivial task. Instead, it might be more productive to work with the owners of the most attractive targets – in many cases, these vessels are directly or indirectly owned by large multi-national energy corporations – and encourage them to

¹⁷ Burnett, p.

implement the changes on their own, either by offering subsidies or denying them port access.

Another option – one not available to the airline industry – is expanded use of military resources. Unlike planes, ships move slowly and can be boarded while underway; this affords the opportunity for military assault teams to counteract a hijacking. Unfortunately, this option is also constrained by the distributed nature of the international maritime legal order: in the last year, the United States offered to increase its naval patrols of the Straits of Malacca, only to be rebuffed by Indonesia, which has territorial rights to much of the area. Even if Malaysia and Singapore invited American warships into their territories, their effectiveness would be limited, since hijackers could safely operate entirely in Indonesian waters. Clearly, a diplomatic solution is necessary for use of the American military to be a viable option, at least in the case of the Straits of Malacca. In the meantime, the United States should push for the creation of regional counter-terror assault teams near each of the major trade chokepoints in the world.

Even if all of these suggestions were successfully implemented, a terror attack such as those described here would still be relatively easy to pull off. The nature of the ocean and the economics of modern maritime trade combine to create conditions that are quite favorable to the execution of such spectacular terrorist attacks. Setting aside the idea that terrorism is best combated by eliminating its base of support – arguments over how best to fight terrorist groups lie far outside the scope of this paper – the damaging effects of maritime terrorism are best mitigated by establishing contingency plans and developing redundancies in the global economy.

The value of contingency plans is rather straightforward; for example, the evacuation plans developed as a result of the World Trade Center bombing in 1993 are widely credited with saving thousands of lives on September 11. The economic dislocation caused by a closure of the Straits of Malacca can likely be minimized with a small amount of advance planning, and this should be undertaken immediately. Each country in the region should understand its role in responding to the disaster; shipping companies should know exactly how to adjust their routes and schedules; and China, Japan and Korea should locate backup sources of energy – all before an attack happens.

Even more crucial is the development of redundancies in international commerce. Thailand is considering building a pipeline across its narrow waist, allowing tankers from the Middle East to deposit oil on the country's west coast and tankers from Asia to pick it up on the east coast.¹⁸ This would allow VLCCs to avoid the Straits of Malacca entirely. While the Straits would remain a crucial chokepoint in the international economy, the negative effects of a closure would be lessened considerably. Such redundancies should be explored throughout the world: a similar possibility, although perhaps far less economical than Thailand's plan, would be the construction of a pipeline circumventing the Straits of Hormuz.

Finally, as argued by Gal Luft and Anne Korin in the latest edition of *Foreign Affairs*, the world's energy supply is likely to remain a target for as long as terrorist groups are active. Ultimately, the best way to combat this threat is to develop alternative sources of energy that will remove the need to transport vast amounts of oil and gas

¹⁸ "Going for the Jugular," *Economist*, June 12, 2004. Accessed December 8, 2004. Available from LexisNexis.

throughout the world by tanker.¹⁹ Energy supply cuts have a far more immediate and pronounced effect on economic wellbeing than other goods shipped by sea; if energy were no longer transported across the oceans, maritime trade chokepoints would be far less attractive targets for terrorist groups.

The threat of maritime terrorism is serious and perhaps not as remote as one would like to believe. A well-planned and executed attack could cause considerable damage to the world economy – perhaps even more than was inflicted by the attacks on September 11. We have every reason to believe that al Qaeda and like-minded terrorist groups desire such an outcome, and the attacks discussed in this paper do not appear to be far beyond their capability. Many of the steps that can be taken to minimize the likelihood of a successful attack will require international cooperation to a degree that seems unlikely, given the current complicated state of international maritime law. The United States and its allies should seek to push this agenda in international forums, while also working with major shipping companies to improve their ship security and with regional organizations to improve policing of the world’s major trade chokepoints. A good first step for the United States would be to ratify the Law of the Sea treaty, which continues to languish in the U.S. Senate ten years after it was signed by President Clinton. At the same time, contingency plans and alternate trade routes should be developed and new sources of energy researched. It is impossible to completely eliminate the danger of maritime terrorism, but much can be done to mitigate its effects.

¹⁹ Gal Luft and Anne Korin, p. 71