

GOORANGAI

OCCASIONAL PAPERS OF THE ROYAL AUSTRALIAN NAVAL RESERVE PROFESSIONAL STUDIES PROGRAM

VOLUME 2 – NUMBER 4

NOVEMBER 2006

THE SECURITY OF SEABORNE TRADE: CHANGING PERSPECTIVES

Shipping dominates world trade. At least 80% of all international trade, by volume, is carried by ships¹. This dominance makes international shipping both a prime target and an obvious delivery system for those determined to commit acts of terrorism.

It is, therefore, no surprise that terrorism has found its sea-legs. In January 2000, al-Qaeda attempted to ram a boat loaded with explosives into the *USS The Sullivans* in Yemen. The attack failed only because the boat sank under the weight of the packed explosives. After this initial failure, al-Qaeda refined its techniques to blow a hole in the *USS Cole* in October 2000. In June 2002, the Moroccan government arrested a group of al-Qaeda operatives who were plotting raids on British and US tankers navigating the Straits of Gibraltar (this threat initiated *Operation Active Endeavour* which now encompasses the entire Mediterranean). A short time later, in October 2002, an explosive packed boat was rammed into the side of the French registered Ultra Large Crude Carrier (ULCC) *Limburg* off the coast of Yemen. In 2004, the southern Philippines based Abu Sayyaf claimed responsibility for planting an incendiary bomb aboard a large ferry (*Superferry 14*), killing more than 100 passengers. Closer to home, the Singaporean government reported that, in December 2001, it had foiled plans by Jemaah Islamiah to attack visiting USN ships. It is noteworthy that the CIA has concluded that the planning for the attack on the *USS Cole* began in Malaysia².



Figure 1 – French registered ULCC *Limburgh* burning after terrorist attack by high-speed craft. Source: www.historycommons.org

Several intelligence agencies have estimated that al-Qaeda, and its affiliates, now own dozens of ‘phantom ships’ –

vessels, acquired surreptitiously, that have been renamed and operate under false documentation, manned by crews with forged identity and competency documents³.

Al-Qaeda has reason to be interested in merchant vessels. These vessels can be used in various ways by terrorists. They can:

- be used to raise money through legal or illegal trade;
- transport terrorists or weapons;
- deliver bombs to their destination, such as in a container set to explode near a port city or off-shore facility; or
- be used as explosive/incendiary devices in their own right. Oil and chemical tankers could be sunk or set ablaze in a busy strait or port entrance. Ammonium nitrate carriers or Liquefied Petroleum Gas (LPG)/Liquefied Natural Gas (LNG) tankers could be rigged as floating bombs.

As an island continent, Australia would be hard hit by such a terrorist strike, even if it happened on the other side of the world⁴. This is so because the global economy is built on integrated supply chains that feed components to industry on a ‘just in time/just enough basis’. This practice is readily demonstrable by reference to the petroleum supply chain. During the 1991 Gulf War the International Energy Agency (IEA) required its member countries (including Australia) to reduce their crude oil consumption by about 7%. Australia managed this by increasing domestic production and by imposing demand restraints on industry. Increased domestic production is no longer an available option. Current IEA data suggests that Australia holds crude stocks of less than 12 million barrels. As Australia’s refinery production levels are about 750,000 barrels per day there is little margin for error if anything interrupts the supply chain⁵.

The destruction of a single merchant vessel could have a significant impact on the integrated supply chains. The capacity of a single ULCC (>300,000dwt) is equivalent to a fleet of WWII era tankers, while a post-suezmax container vessel can carry over 12,000 TEUs (shipping containers are either, by length, ‘Twenty-foot Equivalent Units [TEUs]’ or ‘Forty-foot Equivalent Units [FEUs]’). The location of such an attack could, however, produce even more critical outcomes. Geography forces merchant vessels to pass through strategic chokepoints, many of which are located in littoral areas where terrorists with maritime capability might be active.

By volume, 75% of global maritime trade passes through a handful of relatively narrow waterways. These include:

- the Straits of Hormuz;
- the Malacca and Singapore Straits;
- the Panama Canal;
- the Suez Canal;
- the Bab el-Mandab Passage; and



- the Bosphorus and Dardanelles.

Of these waterways, the Malacca and the Singapore Straits are the most vulnerable to attack and the easiest to block. The closure of these key straits would disrupt more than half the world's seaborne trade and would trigger a damaging upward spiral in insurance rates. More than 80% of the oil imported by Japan, China and South Korea is carried by vessels that transit these straits. The US Department of Energy has calculated that if they were closed, shipping services around the world would be disrupted as more than 50% of the world's merchant fleet would be obliged to sail further thereby disrupting schedules, worldwide, and generating a substantial rise in the requirement for vessel capacity⁶.

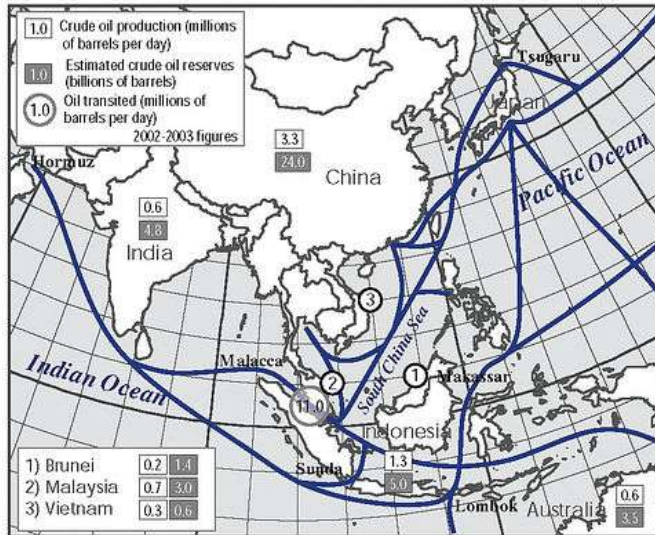


Figure 7 Shipping Lanes and Strategic Passages in Pacific Asia

Figure 2- Major oil routes through strategic straits and archipelago waters. Source:www.firm1.static.flicker.com

Even more damaging would be an attack on one of the mega hub-ports. Michael Richardson of the Institute of South East Asian Studies has posited that the ultimate doomsday scenario would be the use of a radiological, chemical or biological device in a major global port city with land links to the international supply chain⁷. There are over 30 such 'mega' ports, including New York, Los Angeles, London, Hong Kong, Singapore, Shanghai, Antwerp, Rotterdam and Le Havre. The detonation of such a device in a major port city would cut the arteries of maritime commerce.

The size and organisation of world shipping provides terrorists with opportunities to both infiltrate the supply system and to conceal their activities. 50,000 vessels make up the world's merchant fleet. These ships trade between more than 2,800 ports and are manned by a pool of approximately 1.2 million seafarers. In Australian ports, alone, more than 25,000 foreign ship visits are recorded each year⁸.

While sheer numbers makes surveillance of these ships and crews difficult, the task is further complicated by the 'flag of convenience' system. Under this practice about 60% of the world's fleet by tonnage is registered, not in its home country, but on any one of at least 40 open registers. This is done to cut costs, avoid taxes and labour regulation and to ensure anonymity for the real owners of the vessel. Most countries that offer open registers also permit the identities of those who control or benefit from corporate structures to be concealed under complimentary corporations' legislation.

These difficulties are further compounded by the nature of modern cargo systems. About half the world's trade by value and 90% of all general cargo trade is shipped in containers (TEUs). These steel boxes pose several security problems. Once loaded and sealed they are difficult to inspect. The contents of a container can be misrepresented and undeclared items hidden amongst legitimate cargoes. Even when sealed, containers can be surreptitiously opened and illicit components added or removed.

It is estimated that over 230 million TEUs move through the world's ports each year and, on average, each TEU transits the globe 8.5 times annually. Of the 7 million TEUs shipped into the USA each year, however, only about 8% are currently screened. Worldwide, the figure is less than 2%⁹.

These security issues are subject to constant review and a number of global and multi-lateral initiatives have been taken to reduce these risks. The most significant has been the implementation of the International Ship and Port Facility Security (ISPS) Code. The ISPS Code is essentially based on the concepts of vessel and port state control and applies a risk management approach to security. Details concerning the implementation of the ISPS Code in Australia can be found at,

www.dotars.gov.au/transport/security/maritime/index.aspx



Figure 3 – Pong Su being escorted to Garden Island, Sydney after arrest. The Pong Su was found to have dropped off 150 kilograms of high-grade heroin at a rendezvous point on the southern coast of Victoria in 2003. Source: www.theage.com.au

Conclusions

Shipping has become fully incorporated into the phenomenon of globalisation. This is simply a short-hand way of stating that shipping is part of a global trade web with countless interconnections. It is impossible to disentangle shipping from the rest of the total process which makes up maritime trade. This fact has profound implications for those charged with the defence of Australia's maritime interests. As Till has argued, the protection of hulls and the defence of the sea-lines of communication (SLOCs) now form only part of the demands placed on modern navies and 'are not necessarily the most important part of it at that'¹⁰.

Navies have a substantial role to play in the defence of the trade system as a whole, not only against conventional and asymmetrical attack, but also against the threats posed by the illicit uses of the sea. For all these reasons, the Navy must have a well developed level of 'interconnectivity' with the maritime industries.



Notes

1. *Asia Times*, 16 June 2004.
2. Koknar Ali M., *Energy Security* 24 January, 2005; M. Richardson, *Growing Vulnerability of Seaports from Terror Attacks*, Yale Global Press, March 2004; A. Korin, *Energy Security*, *Foreign Affairs*, December 2004; G. G. Ong, *Piracy and the Threat of Maritime Terrorism in South-East Asia*, ISEAS 2006; S. Chestnut, *The Soprano State? North Korean Involvement in Criminal Activity*, www.nautilus.org/fora/security.
3. Al Qaeda has multi-faceted marine strategy, *Agence France Press*, 20 January 2003.
4. By volume, 99% of Australia's imports and 96% of her exports are transported by sea.
5. ACIL/Tasman, *2004 Review of the Liquid Fuel Emergency Act: Discussion Paper*.
6. Richardson, M. *A Time Bomb for Global Trade: Maritime Related Terrorism in an Age of Weapons of Mass Destruction*, ISEAS 2004.
7. Richardson M. *op cit*.
8. This figure relates to Australian port visits; that is, if one foreign vessel visits four Australian ports, it is counted as four port visits. See Department of Transport and regional Services, Bureau of Transport and Regional Economics, *Australian Sea Freight Information Paper 56, International Sea Freight*, available at www.btre.gov.au/index.aspx.
9. Richardson M. *op cit*.
10. Till, G. *A Changing Focus for the Protection of Shipping* in A. Forbes (Ed), *Papers in Australian maritime affairs No 10: The strategic importance of seaborne trade and shipping*. May 2003. Defence Publishing Service: Canberra, ACT. See also G. Till (2003). *Seapower: A Guide for the Twenty-first Century*. Frank Cass: London.



Figure 4 – Superferry 14 burning after terrorist attack off Bataan. Source: www.salvtug.com

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Published by: The RANR Professional Studies Program, Office of the Director General Reserves (Navy). The views expressed in this publication are entirely those of the author and do not necessarily represent those of the RAN, The Department of Defence or the Australian Government.

