## **SEMAPHORE**



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## **AUSTRALIA'S MARITIME ECONOMIC INTERESTS**

Over the past two decades there has been an increasing lament from Western navies that their countries suffer from 'sea blindness'. What is meant is that there is an apparent lack of public understanding and appreciation of the importance of the oceans for national prosperity. The concern is that if the importance of the oceans is not understood, then the importance of the multifaceted roles of navies in providing protection will not be understood. Whether or not sea blindness exists, maritime economic interests represented by the oceans are important and are discussed below.

The 2012 RAN Sea Power Conference has as its theme 'the naval contribution to national security and prosperity'.<sup>1</sup> In the lead up to it, a number of *Semaphore* newsletters will examine maritime economic interests. This *Semaphore* will provide a broad overview while others will provide a more detailed analysis of specific maritime economic interests relevant to navies.

Geography generates many of Australia's maritime economic interests, with a location at the intersection of three oceans and a large archipelago to the north. Australia has a mainland of about 7.7 million km<sup>2</sup>, with a coastline of about 34,000km, and extensive offshore territories, including: the Australian Antarctic Territory, Christmas Island, the Cocos (Keeling) Islands, Heard and McDonald Islands, Norfolk Island, the Coral Sea islands and Ashmore and Cartier Islands. The United Nations Convention on the Law of the Sea 1982 allows states to claim a variety of maritime zones, with varying levels of jurisdiction and sovereign rights to living and natural ocean resources; and the resulting Australian 200nm exclusive economic zones generate a maritime area of 10 million km<sup>2</sup>, with the extended continental shelf generating a further 2.5 million km<sup>2</sup>.<sup>2</sup>



Australia's Maritime Boundaries (Geoscience Australia)

For the purposes of this Semaphore, Australia has three broad maritime economic interests: the use of the sea for seaborne trade, submarine telecommunication cables, and tourism/recreational use: harvesting/extracting natural resources from the ocean and sea bed; and the various industries that support these and other marine activities. Not all of these interests are currently relevant to the RAN, but all make a contribution to the Australian economy and are thus important. But assigning a comprehensive economic value to ocean usage is problematic; not least due to difficulties in defining all relevant activities that make up the marine industry, and limited statistical collection of information about these activities from which to form a judgement. Thus, apart from seaborne trade and oil/gas data which is fairly robust, all figures relating to the 'marine industry' are indicative only; and unless stated otherwise, have been compiled, with various caveats, by the Australian Institute of Marine Science (AIMS).3

As an island nation with an economy based predominantly on primary production, Australia is heavily reliant on seaborne trade for its economic prosperity. In 2008-09, the value of the Australian economy was about \$1.2 trillion, with seaborne trade contributing \$368 billion, with exports valued at \$202 billion and imports at \$166 billion; importantly these figures represent the value of goods bought and sold, and do not reflect the economic value and employment involved in 'creating' exports. This trade flowed through about 70 commercial ports of varying size, with an additional 51.6 million tonnes of trade within and between states transiting along coastal routes.<sup>4</sup> There is no up-to-date information for the value of the marine industry support for trade (water transport/services), but a 2005-06 calculation put income at \$6.45 billion and wages at \$1.52 billion (employing nearly 13,000 people).<sup>5</sup> With a small Australian trading fleet of only 77 vessels, the majority of trade is carried in foreign ships; and while the protection of commercial shipping has long been a naval task, this foreign ownership creates jurisdictional issues.

An emerging but not publicly known interest concerns the submarine telecommunication cables that carry 99 per cent of all overseas communication. There are about nine cables linking Australia with the rest of the world, of which three have been declared of national significance: the SEA-ME-WE3 cable originating from Perth, which links Australia to Southeast Asia, the Middle East and Western Europe; and two cables originating in Sydney: the Southern Cross Cable, which links Australia with New Zealand, Fiji and the United States; and the Australia Japan Cable, which links Australia with Guam, Japan and Asia. Other cables link Australia with Papua New Guinea, Indonesia and New Caledonia; importantly some of these cables are to provide access for other countries into the global cable network via Australia. While the cables have an economic value embedded in their production and laying, there is no publicly available figure assessing their economic value if they were to be damaged and the flowon implications for the Australian economy; but it is

significant, accounting for the tight regulatory regime in place for their protection from dredging and fishing.<sup>7</sup>

In 2008-09, it was broadly estimated that marine-related tourism contributed over \$11 billion to Australian gross domestic product (GDP), with domestic activities valued at just over \$9 billion and international activities at under \$2 billion; importantly AIMS has heavily caveated these numbers. It is far more difficult to place a value on the recreational use of the oceans; as examples, it is thought 37,000 people were involved in indigenous fishing, and that around 3 million people have fished recreationally, spending some \$1.91 billion on fishing equipment in 2007-08.<sup>8</sup> From a naval perspective, the impact of these activities is limited to providing assets to the Australian Maritime Safety Authority for search and rescue operations.

Fishing is probably the best known marine activity and has a complex management framework for its commercial aspects. The Australian Fisheries Management Authority, on behalf of the Australian government, manages fisheries within the 200nm Australian Fishing Zone, generally from 3nm of the Australian coast, but in some cases with the agreement of affected states, from the low water mark. It manages 25 fisheries of varying sizes, while the states and the Northern Territory have responsibility for recreational, commercial coastal and inland fishing, and aquaculture out to 3nm. In 2008-09, commercial fishing was valued at \$1.4 billion and aquaculture at nearly \$900 million, noting this catch was for both domestic consumption and export.9 The RAN has been involved in the enforcement of Australian fisheries regulation for decades, by providing a capability to AFMA against both domestic and foreign fishers operating illegally in Australian waters; more recently this has been under the operational control of Border Protection Command.

The most valuable use of ocean sea bed resources comes from the exploration and exploitation of offshore oil and gas deposits, beginning in the early 1960s: oil and gas fields were discovered in the Gippsland basin in 1963, entering production in 1969; the Barrow Island oil field in the Carnarvon Basin was discovered in 1964 and entered production in 1967; major gas fields were discovered in 1971 off the north-west of Australia, entering production in 1984; and oil and then gas were discovered in the Timor Gap, between East Timor and Australia. In 2008-09, the value of oil exploration and production was estimated to be about \$3.3 billion and \$9.8 billion respectively; with exports of just over \$1 billion of Liquefied Petroleum Gas and \$10 billion of Liquefied Natural Gas. The RAN has provided both aerial surveillance (1976-83) and maritime patrols of the waters surrounding the Bass Strait oil platforms, and two additional Armidale class patrol boats were built during the last decade, in recognition of the importance of protecting oil and gas installations in the North-West Shelf. More recently the Minister for Defence announced an ADF posture review that specifically noted the energy security and security issues associated with expanding offshore resource exploitation as а consideration for the future location of ADF assets.<sup>10</sup>

Shipbuilding and repair contributes to the Australian economy; in 2008-09, civil and defence shipbuilding and repair was valued at nearly \$2 billion, with boatbuilding

and repair valued slightly lower, employing about 15,000 people across the sector. The major re-equipping of the RAN through the 1980s/1990s, and the new construction programs currently underway are a major long-term contributor to the Australian economy. There was also \$2.5 billion worth of marine equipment sales in 2008-09.<sup>11</sup>

Considering the value of resources taken from the oceans on an annual basis, as well as the value of other marine industries, their contribution to the Australian economy is conservatively estimated at up to \$60 billion (compared with agriculture which is valued at just over \$40 billion). Calculating employment in the marine industry is difficult as the industry is complex and information is fragmentary. In 2011, the Australian Maritime College estimated that employment in the marine industry was about 132,500 people.<sup>12</sup>

Notwithstanding the difficulties in determining the annual value of the marine industry and the exploitation of ocean resources, the indicative estimates demonstrate a major contribution to the Australian economy, particularly when combined with the value and importance of seaborne trade. What does this mean for navies and their concern over 'sea blindness'? Clearly the economic importance of the oceans to Australia needs to be promoted and understood more widely. The role of navies in the protection of ocean resources and seaborne trade, as well as other tasks such as search and rescue, needs to be considered in relation to our future prosperity.

## **Andrew Forbes**

- <sup>1</sup> The seventh RAN Sea Power Conference will be held in Sydney over the period 31 January - 2 February 2012; see the conference website for more details <www.seapowerconference.com.au/>.
- <sup>2</sup> See Geoscience Australia, <www.ga.gov.au/marine/jurisdiction/lawof-the-sea.html> (27 June 2011).
- <sup>3</sup> Australian Institute of Marine Science (AIMS), *The AIMS Index of Marine Industry*, Townsville, 2010; and for difficulties with identifying useable data and the caveats, see *Valuing the Australian marine industry: discussion paper*, Townsville, 2008.
- <sup>4</sup> Australian Bureau of Agricultural and Resource Economics and Sciences, *Australian commodity statistics*, 2010, Canberra, 2010, p. 1; and Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Australian sea freight 2008-09*, Canberra, 2010, pp. 1-2.
- <sup>5</sup> AIMS, Valuing the Australian marine industry, p. 2.
- <sup>6</sup> BITRE, Australian sea freight 2008-09, p. 4; and Stuart Kaye and Lowell Bautista, *The Naval Protection of Shipping in the 21<sup>st</sup> Century:* An Australian Perspective, Papers in Australian Maritime Affairs No. 34, Sea Power Centre - Australia, Canberra, 2011.
- <sup>7</sup> Australian Communications and Media Authority, 'Submarine telecommunications cables', <www.acma.gov.au/WEB/STANDARD/pc=PC\_100223> (27 June 2011).
- <sup>8</sup> AIMS, *The AIMS Index of Marine Industry*, pp. 3, 5; and *Valuing the Australian marine industry*, pp. 3, 8-9.
- <sup>9</sup> See DT Wilson, R Curtotti and GA Begg (eds), Fishery Status Reports 2009: Status of Fish Stocks and Fisheries Managed by the Australian Government, Australian Bureau of Agriculture and Resource Economics - Bureau of Rural Sciences, Canberra, 2010; Australian Fisheries Management Authority, 'About us', <www.afma.gov.au/about-us/> (29 June 2011); and AIMS, The AIMS Index of Marine Industry, p. 5.
- <sup>10</sup> AIMS, *The AIMS Index of Marine Industry*, p. 5; and Stephen Smith MP, *Australian Defence Force Posture Review*, Media Release, MR 177/11 dated 22 June 2011.
- <sup>11</sup> AIMS, *The AIMS Index of Marine Industry*, p. 4. The economic benefits of naval shipbuilding are discussed in Andrew Forbes, 'The Economic benefits of Naval Shipbuilding', *Semaphore*, Issue 9, 2008
- <sup>12</sup> Marcus Bowles, 'So just how many people are employed in the Australian marine industry?', *Australian Journal of Maritime and Ocean Affairs*, Vol 3, No 1, 2011, pp. 1-14.



Sea Power Centre - Australia Department of Defence CANBERRA ACT 2600 seapower.centre@defence.gov.au http://www.navy.gov.au/spc/

