Chapter 2

The Global Business of Shipbreaking

I. Introduction

Ships often evoke strong emotions about new economic opportunities, conquests and adventures.¹ A major reason for the present-day economic prosperity that many Western countries enjoy in comparison to their Asian counterparts can be traced historically to their strong navies² and merchant fleets enabling their writ over the seas and, in due course, the land.³ Like newborn babies, ships are welcomed into our midst—“champagne and christening galas, but what of their final hours?”⁴ Some ships are “fortunate to die nobly in battle or ram icebergs on their maiden voyage”⁵. However, the overwhelming majority of ships that have attained superannuation after having put in some 25 to 30 years of service on unforgiving seas end up on the once pristine beaches of Asia. Here, they are torn down for their steel and other parts, which are put to more productive use.

An activity as old as shipbuilding, shipbreaking is an essential and integral component of the shipping business.⁶ Once they have outlived their use, ships have been subjected to the axe to recover useable materials.⁷ However, with the

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² However, this does not mean that Asian civilisations did not have navies. For further details, see R.P. Anand, *Origin and Development of the Law of the Sea: History of International Law Revisited* (The Hague: Martinus Nijhoff Publishers, 1982) at 12–34.
⁶ Ron Hess et al., *Disposal Options for Ships*, RAND Monograph Report (RAND Corporation, 2001) at 41, online: RAND Corporation <http://www.rand.org/pubs/monograph_reports/MR1377/>. ⁷ In the 18th century, ships were sold to the breaker for recovering spars, firewood, iron and brass parts to be used in new ships or to be re-melted. Old lines were shredded to make oakum for caulking the seams of new ships. *Ibid.* at 42. See also Recycling of Ships: Report of the Correspondence Group, Submitted by the Co-ordinator of the Correspondence Group, IMO/MEPC 46/7, 18 January 2001, ¶ 1.1 (KR-CON) (noting that in the past, serviceable material from wooden ships were also used to build wood-framed houses and structures like jetties or beach quoins) [Report of the Correspondence Group].
advent of large modern ships with diverse structural complexity, the ship recycling industry became complicated and dangerous. Till the 1970s, large shipyards in the United States and in Europe performed shipbreaking. With mounting economic costs for safe demolition of ships, industrialised countries found a convenient way to dispose of obsolete ships – pack them off to the developing world where there is a great hunger for steel for development activities.8

Initially, the industry relocated to Taiwan9 and Korea.10 By the early 1990s, realising the dangers which the activity entailed, these countries followed the West in discouraging shipbreaking.11 Thereafter, business gravitated primarily to the beachheads of Third World countries, namely, India, Bangladesh, and Pakistan.12

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8 Sawyer, supra note 5 at 536.
9 After the Second World War, the industry was established in Taiwan. It expanded rapidly and Taiwan became a world leader in shipbreaking. Demolition took place in two state-owned sites at the deepwater port of Kaohsiung using specially built berths and dockside cranes. However, by the early 1990s, Taiwan closed the demolition yards and replaced them with a container terminal. Martin Stopford, Maritime Economics 2d ed. (London: Routledge, 1997) at 486.
10 In the 1980s, South Korea was the third largest shipbreaker in the world with a market share of about 17 percent. The activities were carried out in two demolition yards owned by Hyundai. By late 1980s, the yards were closed down due to rising wages. Ibid.
11 See Chung-Te Fu & Shian-Chee Wu, “Bioaccumulation of Polychlorinated Biphenyls in Mullet Fish in a Former Ship Dismantling Harbour, a Contaminated Estuary, and Nearby Coastal Fish Farms (2005) 51 Mar. Pollution Bull. 932 (ScienceDirect). This study investigated the severe bioaccumulation of PCBs in fish from Ann-Ping harbour in Taiwan, which operated a ship dismantling business in the 1980s. It notes that even though PCB contamination stopped for over a decade, the residual contaminants in the soil and sediments contribute to the body burden of fish residing in the estuary and in the harbour. Ibid.
12 The top ten dismantling countries in terms of the number of dismantled merchant ships ≥ 100 GT in 2006–2007: Bangladesh (ships in 2006–161; ships in 2007–118; total ships in 2006–2007 – 279; percentage of total – 28.5); India (ships in 2006–113; ships in 2007–155; total ships in 2006–2007–268; percentage of total – 27.3); Turkey (ships in 2006–60; ships in 2007–50; total ships in 2006–2007–110; percentage of total – 11.2); Pakistan (ships in 2006–22; ships in 2007–38; total ships in 2006–2007–60; percentage of total – 6.1); Denmark (ships in 2006–32; ships in 2007–18; total ships in 2006–2007–50; percentage of total – 5.1); China (ships in 2006–30; ships in 2007–14; total ships in 2006–2007–44; percentage of total – 4.5); Spain (ships in 2006–5; ships in 2007–23; total ships in 2006–2007–28; percentage of total – 2.9); United Kingdom (ships in 2006–8; ships in 2007–13; total ships in 2006–2007–21; percentage of total – 2.1); United States of America (ships in 2006–10; ships in 2007–7; total ships in 2006–2007–17; percentage of total – 1.7); Norway (ships in 2006–8; ships in 2007–5; total ships in 2006–2007–13; percentage of total – 1.3). EC, Commission, Impact Assessment for an EU Strategy for Better Ship Dismantling (Brussels: SEC (2008) 2846), at 11, online: European Commission <http://ec.europa.eu/environment/waste/ships/pdf/impact_assessment.pdf> [Commission, Impact Assessment]. The top ten dismantling countries in terms of tonnage of dismantled merchant ships ≥100 GT in 2006–2007: Bangladesh (total tonnage 2006–2007(1,000 GT) – 5,025; percentage of total – 51.7); India (total tonnage 2006–2007(1,000 GT) – 2,413; percentage of total – 24.8); China (total tonnage 2006–2007(1,000 GT) – 5,025; percentage of total – 51.7); Pakistan (total tonnage 2006–2007(1,000 GT) – 632; percentage of total – 6.5); Turkey (total tonnage 2006–2007(1,000 GT) – 410; percentage of total – 4.2); Unknown (total tonnage 2006–2007(1,000 GT) – 201; percentage of total – 2.1); USA (total tonnage 2006–2007(1,000 GT) – 165; percentage of total – 1.7); Canada (total tonnage 2006–2007(1,000 GT) – 41; percentage of total – 0.4); Denmark (total tonnage 2006-2007 (1,000 GT) – 26; percentage of total – 0.3);