# Power, Pirates, and Petroleum: Maritime Choke Points in the Middle East

# Yoel Guzansky, Gallia Lindenstrauss, and Jonathan Schachter

#### Introduction

Waterways with vital sea traffic that are vulnerable to blockage because of accident, terrorism, piracy, or war are known as maritime choke points.<sup>1</sup> Vital traffic includes not only transport of oil and other sources of energy (e.g., coal, liquefied natural gas), but also transport of any essential cargo (e.g., foodstuffs) and movement of naval forces. Vulnerability is most often the result of narrowness and the waterway's absolute or relative exclusivity of access. For example, the Suez Canal is not the only route between Europe and Asia; ships can circumnavigate Africa, but doing so is more costly and time consuming. Current discussions of maritime choke points focus primarily on Middle Eastern straits that are traveled by oil tankers to reach the United States, Europe, and the Far East.

This article discusses the strategic value of three significant maritime choke points in the Middle East – the Straits of Hormuz, both ends of the Red Sea, and the Turkish Straits – and reviews the threats to these locations in light of strategic developments in the region. The importance of choke points has grown given the sharp rise in oil prices (two thirds of the world's oil trade moves by sea),² the increased tension between Iran and the United States and Israel, the growth of Somali piracy off the Horn of Africa,³ the instability following the wave of anti-regime demonstrations across North Africa and the Middle East that began in

Yoel Guzansky, Dr. Gallia Lindenstrauss, and Dr. Jonathan Schachter are research associates at INSS.

early 2011, and increased awareness of the potential for environmental disasters in narrow waterways. Recent revelations that Osama bin Laden and his al-Qaeda colleagues considered attacks on marine targets, along with the ongoing problem of piracy, have heightened concerns about the safety and security of international shipping.<sup>4</sup>

### The Straits of Hormuz



The Straits of Hormuz connect the Persian Gulf with the Gulf of Oman and the Arabian Sea. Located between Iran in the north and Oman and UAE in the south, the straits are considered one of the world's most important choke points mainly because they constitute the only sea passage to the open ocean from large areas of the petroleum-exporting Arabian/Persian Gulf. The

narrowest point of the Straits of Hormuz is approximately 33 kilometers, but the international shipping lane is only 10 kilometers wide. The shipping lane at the entrance to the Persian Gulf is in Oman's territorial waters; farther north, the tankers enter an area that is close both to the islands Iran controls in the Gulf (Iran controls seven out of eight major islands in the straits) and Iran's major naval bases, potentially allowing it to obstruct free shipping in the Gulf with relative ease. Roughly a third of all seaborne traded oil, as well as about 20 percent of all liquefied natural gas (LNG), passes in tankers through the Straits of Hormuz.<sup>5</sup>

The straits have been the scene of accidents and terror attacks in recent years – a function of their global importance, the high volume of commercial and military traffic, and geographical conditions. For example, in July 2010 an al-Qaeda affiliate, the Abdullah Azzam Brigades, claimed responsibility for an explosion in the rear of the Japanese oil tanker *M. Star* while it passed through the straits.

Iranian threats to close the straits to international shipping and thereby stop the flow of Gulf oil have increased in frequency and intensity in recent years. Senior Iranian officials have warned explicitly that Iran can and will block the straits in response to "any act of aggression or adventure." In general, these pronouncements are intended to deter the international community from increasing the pressure on Tehran and

raise the cost of any military confrontation with it, particularly against its nuclear facilities. Former commander of the Revolutionary Guards naval force, Rear Admiral Morteza Saffari, has warned that "American warships are easy prey for the Iranian navy." Iran also threatened that it would respond if its ships' cargoes were subjected to inspections (a step included in a 2010 Security Council resolution on Iran).

In addition, and because of America's military superiority in the Gulf, Iran has placed priority on acquiring and building a large number of small, fast moving vessels (some of which are for unmanned use) and has re-outfitted civilian vessels for military missions. As a result, in recent years there have been reports of increased Iranian naval activity and even Revolutionary Guard vessels skirmishing with American ships. These incidents were demonstrative, rather than destructive (the US ships were not actually attacked), and were intended to send a message ("naval diplomacy") to the United States, namely that Iran sees the straits as its strategic backyard. Both sides subsequently tried to minimize the impact of these incidents, and there was even talk of establishing a hot line between the two sides.<sup>8</sup>

In the unlikely event that Iran could effectively close the straits for a long period of time, such a move would not be in Iran's own best interests. Closure would interfere with the import of refined oil to Iran and Iran's export of crude oil (representing some 80 percent of its income), and would almost certainly lead to a confrontation with the American navy. Unlike with Saudi Arabia, Iraq, and the UAE, the great majority of Iran's oil exports pass though the waterway. It is thus not surprising that Iran has never attempted to block the straits, certainly not fully, even at the height of the "Tanker War" during the last phases (1987-88) of the Iran-Iraq War. Aside from Iran's naval inferiority vis-à-vis the American navy, such a move would also require extensive naval mining, something Iran found difficult to accomplish clandestinely in the past and which is tantamount to an act of war.

Estimates are that the US Fifth Fleet is capable of opening the straits to naval vessels within a "few days to two weeks," 10 even if Iran were willing to sacrifice all of its assets, suffer massive retaliation, and potentially lose many of its own oil facilities and export revenues. Former United States Director of National Intelligence Admiral (ret.) Dennis Blair believes that Iran could close the straits, but only briefly, because the US could

"neutralize Iran's attacking forces with a combination of actions at sea and attacks against command-and-control facilities, missile sites, ports, and airfields along the Iranian side of the straits." Such assessments are presumably based on the fundamental weakness of the Iranian air force, a belief in the American ability to paralyze Iranian positions near the straits (where Iran stations its coastal defense cruise missiles), and the improved US ability to remove naval mines. In addition, unlike other vessels such as cargo ships, tankers are hard to sink due to their size, structure, and the fact that crude oil doesn't burn easily.

Nonetheless, senior American military sources have expressed concern regarding the Iranian ability to close the straits: "Iran is developing its conventional military with 'limited' offensive missiles and naval assets able to disrupt Gulf shipping," and it "has the ability to restrict access to the Straits of Hormuz with its naval forces temporarily and threaten U.S. forces with missiles." As early as 2008, Iran announced that it was building new bases, which could threaten movement through the straits. In late 2010 the Iranians also introduced new types of vessels into service, such as mini-subs and improved weapons based on asymmetric tactics. According to testimony by Vice Admiral Lowell Jacoby during his tenure as Director of the Defense Intelligence Agency, Iranian mining could halt the flow of oil through the Straits of Hormuz. 14

Indeed, even an "optimistic" scenario (a partial blockade of the straits with rapid effective international action to open them), that includes sporadic Iranian "harassment" of Gulf shipping could cost the international community dearly due to the effects on the already volatile global energy market. The impact of even a limited campaign is liable to last a long time, beyond the event itself, because of the residual concern about supply disruptions. A longer event might necessitate tapping into strategic reserves, taking advantage of the redundancy of global oil production capabilities (which is limited because it is primarily concentrated in Saudi Arabia), and using alternate shipping routes such as the Saudi East-West and the Habshan-Fujairah pipelines, which can carry up to five million and 1.5 million barrels per day, respectively. Releasing oil from strategic reserves and increasing production have already taken place this year, largely in response to the rise in prices caused by supply disruptions in Libya.<sup>15</sup>

Thus because of its fundamental military weakness, Iran is incapable of blocking the straits completely for long and therefore in any conflict will focus on disrupting freedom of movement in the Gulf in general, while attempting to avoid a comprehensive campaign that might cost it dearly – militarily, politically, and economically. <sup>16</sup> Until then, it will likely continue to threaten to close the straits, a move that serves it well even if it appears contrary to its own basic interests, taking advantage of the straits' unique geographical conditions and global sensitivity to tremors in the world's energy market. That said, any confrontation is liable to develop into or be part of a more widespread campaign that both sides might be hard pressed to contain. For example, Iranian harassment and American-led counteractions could prompt an attack on the western shore of the Gulf, where there is strategic infrastructure, including ports, refineries, and desalination plants. This possibility undoubtedly will give pause to anyone considering a muscular response to Iran's threats.

# **Red Sea Choke Points**



The Red Sea, the most direct maritime route between Asia and Europe, is bordered by two choke points, one natural and one man-made. The Bab al-Mandab strait in the south lies between Eritrea and Djibouti on the west and Yemen on the east, and is about 29 kilometers wide. <sup>17</sup> The Suez Canal in the north connects the Red Sea with the Mediterranean, is roughly 193 kilometers

long, and is only 205-225 meters wide and 24 meters deep. 18

The Convention of Constantinople (1888), which governs navigation of the Suez Canal, guarantees neutrality and free passage in the canal during peacetime and war.<sup>19</sup> Nevertheless, the Suez Canal has been both a focus and victim of international conflicts. The canal was closed following the Suez Crisis from October 1956 until April 1957, and again following the Six Day War from June 1967 until 1975. Such a closure today is difficult to imagine, and would cost billions of dollars in lost revenue to Egypt and necessitate slower, more expensive shipping to the rest of the world.

There are numerous strategic ramifications to transport in and around the canal. In addition to the petroleum and related products that pass through the canal, almost three quarters of the total crude oil moving from south to north in 2010 (and approximately 80 percent of Persian/Arabian Gulf crude oil exports to Europe) passed through the 320 kilometer Suez-Mediterranean (SUMED) pipeline.<sup>20</sup> On the other side of the Sinai Peninsula, the Gulf of Aqaba is home to Jordan's only sea port, and Eilat is strategically important for Israel, though only a small percentage of its total imports and exports pass through the port.

The Red Sea has become an increasingly important Iranian-Israeli arena. Iran reportedly transports weapons through Sudan – and even manufactures them there – to equip terrorist groups in Africa and the Middle East. Moreover, in recent years Iran has invested significant efforts in developing its relationships with a number of East African countries, including Kenya, Eritrea, Somalia, Djibouti, Tanzania, and the Comoro Islands. This is reminiscent of initiatives under Nasser in the 1960s that were intended to provide Egypt with greater ability to block Israeli shipping along the length of the Red Sea. In addition, as part of its high profile regional muscle flexing, in 2011 Iran dispatched ships to the Mediterranean Sea through the Suez Canal, and apparently for the first time, sent submarines to the Red Sea. According to American sources, Israel for its part has bombed Iranian weapons convoys headed for Hamas-controlled Gaza.<sup>23</sup>

Though states' interests in the Red Sea area vary and are sometimes at odds with each other, all seem to put a premium on unfettered shipping. In recent years the greatest regional threat to this common interest has been Somali piracy.<sup>24</sup> Much has been said and done about this ongoing problem. International efforts and resources, including the deployment of European, American, NATO, Chinese, Indian, Iranian, and other naval forces, coordinated commercial ship movements, dedicated tracking and communications resources, and widespread adoption of anti-piracy practices have driven the attacks away from Bab al-Mandab further east along the Yemeni coast of the Indian Ocean (towards the Straits of Hormuz) and to the south of the Horn of Africa.<sup>25</sup>

Tactical measures have thus reduced (that is, displaced) the number of pirate attacks in the Red Sea in recent years. However, the strategic problem of which piracy is a symptom – failing states – may well be



worsening along the Red Sea. Somalia's ongoing problems could prove to be just the tip of the iceberg. Yemen for some time has been racked by sectarian and tribal violence. Much as political and economic conditions in Somalia proved to be a breeding ground for both piracy and the Islamist terrorist group al-Shabaab, Yemen in the last two years has become the adopted home of al-

Qaeda in the Arabian Peninsula. Recent reports suggest that this group has seized control of areas along the Yemeni coast. <sup>26</sup> Yemen's instability long predates the large scale demonstrations that began to sweep across the Arab world in early 2011, but an increasingly disordered Yemen could make the country even more useful a base for Somali pirates, and expand its already thriving weapons black market. While instability in Yemen and Sudan or even their collapse would not necessarily lead to increased piracy on the Red Sea, it is a distinct possibility. This potential, combined with the global importance of undisturbed shipping through the area, suggest that the stability, security, and prosperity of these states are a widely shared interest.

This understanding is hardly new. Little wonder that the British Empire, for whom transportation to and from India via the Suez Canal was essential, maintained a presence in Egypt, Sudan, and Aden (now Yemen).

Concerns regarding Egypt are different. Effective management and smooth operation of the Suez Canal and the SUMED pipeline remain a clear Egyptian interest. Nevertheless, the country is currently experiencing its greatest political turmoil in over half a century. Egypt's poverty and problems of governance pale in comparison to those of Yemen, Sudan, and Somalia, and the country appears an unlikely source of Red Sea piracy. Though there were concerns regarding shipping slowdowns in early 2011, <sup>27</sup> Egypt's Suez Canal revenue in April 2011 was over 15 percent higher than it was a year earlier when fees were the same. <sup>28</sup>

At the same time, the Egyptian government is struggling with a restive Bedouin population in the Sinai Peninsula, from which terrorists, including suicide bombers, have attacked Egyptian targets (primarily tourist sites, e.g., the Hilton hotel in Taba). In 2009 Egyptian authorities

arrested 26 people for planning to attack ships in the Suez Canal and oil pipelines.<sup>29</sup> The Sinai pipeline carrying natural gas from Egypt to Israel and Jordan, which provides Israel with more than 40 percent of its natural gas supply, primarily for electricity generation,<sup>30</sup> has been sabotaged repeatedly this year. In May an Egyptian security official claimed that over 400 Bedouin, Palestinian, and foreign Arab members of al-Qaeda were in the peninsula, and Israeli Prime Minister Netanyahu pointed out that Egypt is having "difficulties exercising its sovereignty over Sinai."<sup>31</sup> While Egypt dedicates significant resources to securing the canal, it is possible that the canal or the SUMED pipeline could become targets of future attacks. An attack on either site could hinder global transportation.

The Red Sea does not appear as central a choke point as the Straits of Hormuz because of the latter's proximity to both the sources of oil and to a confrontational Iran. In addition, anti-piracy measures in the Red Sea region have been effective enough that the trend among Somali pirates is to move away from the Red Sea to the more open waters of the Indian Ocean. Nevertheless, the geographic and political potential remains for the Red Sea to become every bit as difficult a waterway as were the Straits of Hormuz during the Iran-Iraq War. At the same time, because of the common international interest regarding the states bordering the Red Sea, there is enormous potential for continued cooperation.

# The Turkish Straits



The Turkish Straits, comprised of the Bosporus, the Sea of Marmara, and the Dardanelles, connect the Black Sea with the Aegean and Mediterranean Seas and are the supply route for oil from the Caspian Sea region to Europe. In 2009, an estimated 2.5 million barrels of oil were exported daily through the Turkish Straits.<sup>32</sup>

As with the Suez Canal, the Turkish Straits

lie entirely within a single state. They are governed by Turkey according to the Montreux Convention, which was signed in 1936 and is one of the oldest international treaties still in place. At times Turkey has adhered closely to the convention. For example, Turkey blocked US ships traveling to Georgia during the 2008 war because they exceeded the tonnage limits stipulated in the

convention.<sup>33</sup> However, at other times Turkey has claimed that the Montreux Convention should be updated and has added provisions of its own regarding the travel of ships in the straits.

The Bosporus and the Dardanelles are part of the larger struggle for control of the Black Sea, and have in the past been a cause of substantial tension between Turkey and the great powers, especially Russia. In recent years, with the warming of relations between Turkey and Russia - largely due to Turkey's growing dependence on Russian natural gas some of the tensions have subsided and the two states are cooperating more than in the past. This was evident, for example, during the conflict in Georgia, when Turkey, as mentioned above, refused to allow US ships with high tonnage to move through the straits. The conflict in Georgia presented Turkey with a difficult dilemma, as it was reluctant to become entangled in a direct conflict with Russia. At the same time, Turkey is a member of NATO and has traditionally been an ally of the West. From the Turkish viewpoint, refusing to allow the passage of large US vessels but allowing the movement of smaller ships was in accordance with the Montreux Convention, but perhaps more importantly, was an act of diplomatic balance.34

In the wake of the conflict in Georgia, NATO has tried to increase its presence in the Black Sea. The breakup of the Soviet Union and the Eastern bloc has led to a rise in the number of independent states bordering the Black Sea, which in turn has triggered changes in the strategic environment. For example, the US has decided to fund the building of bases in Romania and Bulgaria. While formally these bases are not to be "US bases," they will serve for training of American soldiers and for future American power projection capabilities. Thus, after many years of a Black Sea dominated by Turkey and Russia, it seems all sides will have to reckon with a larger US presence in the region. This is already causing some tension; Russia, for example, complained in June 2011 about the presence of a US warship with anti-missile capability in the Black Sea as part of a joint Ukrainian-US naval exercise, and stated that it "would not let pass unnoticed the appearance of elements of US strategic infrastructure in the immediate proximity to our borders." <sup>35</sup>

Beyond the traditional security dimension, Turkey has repeatedly raised concerns over the environmental threats stemming from the fact that the Turkish straits are not only among the busiest choke points (fourth in the world), but also very difficult to navigate. The Bosporus is the narrowest natural strait used for international shipping; at their narrowest point, the straits are 800 meters wide. <sup>36</sup> Turkish Prime Minister Recep Tayyip Erdoğan has been outspoken on the matter, asserting that "there has been a busy [sic] tanker (carrying oil) traffic in Turkish straits. *Everyone should accept that it is not possible for us to live with this threat.*" Erdoğan, formerly mayor of Istanbul with its population of 13 million, is well aware of the hazards related to heavy traffic in the straits and how Istanbul would suffer from a catastrophic event in the straits.

In April 2011, Erdoğan announced his intention to construct a "second" Bosporus strait, the "Istanbul Canal," by the year 2023. The plan is to build a canal through the western districts of Istanbul, which will reduce if not eliminate commercial traffic in the Bosporus. All sizes of ships will be able to travel through it. 38 Many have praised the idea of the Istanbul Canal, noting that it will diminish the threat of a tanker accident and also reduce the costs accrued by ships waiting to pass through the busy Bosporus strait. However, there has likewise been criticism of the proposal. Some contend that the risks will be the same in a man-made canal as in a natural one, and that "such passages are open targets for terror attacks." 39 Another criticism is that the plan somewhat undermines Turkey's emphasis in recent years on the benefits of constructing energy transfer pipelines through its territory. Still, as Erdoğan has put all of his political weight behind the Istanbul Canal plan, and presented it as part of his successful 2011 reelection campaign, it is highly likely to materialize.

#### Conclusion

Maritime choke points are among the most sensitive locations where geography, trade, and politics meet. The three cases discussed in this article are of particular concern because their rising importance in the global energy market is matched by a parallel rise in the volatility of some of the states surrounding them.

The challenges posed by Middle East choke points, evident even before the massive dependence on oil arose in the twentieth century, have become more urgent in recent years. As a result, states have worked hard to establish security and control over these strategic passageways while developing land-based alternatives like oil and gas pipelines, artificial canals, and railways. Yet while these measures help diversify risk, they are costly to build and maintain, and they require significant international

cooperation. Because they can be comparatively easy to access (on the ground, rather than at sea) and are highly technology dependent (e.g., pumping stations, lock systems), these alternatives themselves can constitute choke points that are perhaps more vulnerable than the sea routes they are intended to supplement or replace. Therefore, interested states will have to continue their significant investment in securing these routes

Significantly, the fact that so many states have a common interest in unfettered sea traffic has led to a de facto unity of purpose – even among states like the United States and Iran – that might otherwise be fierce competitors.

#### **Notes**

- 1 Gal Luft and Anne Korin, "Terrorism goes to Sea," Foreign Affairs 83, no. 6 (2004): 66; Daniel Yergin, "Ensuring Energy Security," Foreign Affairs 85, no. 2 (2006): 78; Frank Verrastro and Sarah Ladislaw, "Providing Energy Security in an Interdependent World," Washington Quarterly 30, no. 4 (2007): 95. Blockage of a choke point can be an action during war or a casus belli in and of itself.
- 2 "Other Chokepoints," Robert S. Strauss Center for International Security and Law, University of Texas at Austin, http://hormuz.robertstrausscenter. org/other\_chokepoints.
- 3 Treves Tullio, "Piracy, Law of the Sea, and the Use of Force: Developments off the Shore of Somalia," *European Journal of International Law* 20, no. 2 (2009): 399-401; J. Ndumbe Anyu and Samuel Moki, "Africa: The Piracy Hot Spot and its Implications to Global Security," *Mediterranean Quarterly* 20, no. 3 (2009):102-11.
- 4 Ken Dilanian, "Al Qaeda Wanted to Attack Tankers, Bin Laden Files Show," Los Angeles Times, May 21, 2011, http://www.latimes.com/la-na-obamacia-20110521,0,2369132.story.
- 5 US Energy Information Administration, "Country Analysis Briefs: World Oil Transit Chokepoints," http://www.eia.doe.gov/EMEU/cabs/World\_Oil\_Transit\_Chokepoints/pdf.pdf.
- 6 "Senior MP: Iran Capable of Blocking the Strait of Hormuz," Fars News, April 26, 2010, http://english.farsnews.com/newstext.php?nn=8902061586. See also "Sayyari: Iran Powerful enough to Close the Hormuz Strait," Tehran Times, November 30, 2008, http://www.tehrantimes.com/Index\_view. asp?code=183642; "IRGC Official: Persian Gulf Security is for All or None," IRNA, August 1, 2010, http://www.globalsecurity.org/wmd/library/news/iran/2010/iran-100801-irna01.htm.

- 7 "Commander Describes US Warships as' Easy Targets for Iranian Navy," Fars News, July 25, 2010, http://english.farsnews.com/newstext.php?nn=8905031495.
- 8 This comes as Iranian-American tension is reportedly on the rise in Iraq and Afghanistan as well. Jay Solomon, "Iran Funnels New Weapons to Iraq and Afghanistan," *Wall Street Journal*, July 2, 2011, http://online.wsj.com/article/SB10001424052702303763404576420080640167182.html.
- 9 Gawdat Bahgat, "Persian Gulf Security at the Turn of the Century: Opportunities and Challenges," *Defense Analysis* 15, no. 1 (1999): 82.
- 10 Anthony Cordesman, "Iran, Oil and the Strait of Hormuz," Center for Strategic and International Studies, Washington DC, March 2007, p. 6, http://csis.org/files/media/csis/pubs/070326\_iranoil\_hormuz.pdf.
- 11 Dennis Blair and Kenneth Lieberthal, "Smooth Sailing: World Shipping Lanes are Safe," Foreign Affairs 86, no. 3 (2007). Consistent with this assessment, in response to Iranian threats to close the straits, the commander of the US Fifth Fleet in 1998 warned that "we will not allow Iran to close it." "US Navy Commander Warns Iran: Don't Try Closing Gulf Oil Passageway," Fox News, July 2, 2008, http://www.foxnews.com/story/0,2933,374905,00.html.
- 12 Viola Gienger, "Iran Could Get Bomb Uranium, Block Oil, Pentagon Says," *Bloomberg*, April 14, 2010, http://www.businessweek.com/news/2010-04-14/iran-could-block-oil-transit-strait-of-hormuz-pentagon-says.html.
- 13 "Commander Stresses IRGC Capability in Subsurface Asymmetric Warfare," Fars News, April 24, 2011, http://english.farsnews.net/newstext. php?nn=9002040599.
- 14 David Crist, "A History of U.S.-Iranian Confrontation at Sea," *Policy Focus* 95, Washington Institute for Near East Policy, June 2009, http://www.washingtoninstitute.org/pubPDFs/PolicyFocus95.pdf.
- 15 Dan Strumpf, "Oil Futures: Oil Plunges as IEA Plans to Tap Strategic Reserves," *Wall Street Journal*, June 23, 2011, http://online.wsj.com/article/BT-CO-20110623-710876.html. The Saudi decision to increase production also appears to be part of the kingdom's efforts to contain Iran. By increasing production, Saudi Arabia is at once limiting the extent to which heavily sanctioned Iran can benefit from high oil prices and indicating that it can contribute to market stabilization in the event Iran tries to impede traffic through the straits. See Jay Solomon, "Saudi Suggests 'Squeezing' Iran over Nuclear Ambitions," *Wall Street Journal*, June 22, 2011, http://online.wsj. com/article/SB10001424052702304887904576400083811644642.html.
- 16 Yoel Guzansky, "The Straits of Hormuz: Strategic Importance in Volatile Times," INSS Insight No. 204, September 3, 2010, http://www.inss.org.il/ publications.php?cat=21&incat=&read=4387.
- 17 US Energy Information Administration, "World Oil Transit Chokepoints, Bab el-Mandab," http://www.eia.doe.gov/cabs/World\_Oil\_Transit\_Chokepoints/Bab\_el-Mandab.html .

- 18 Suez Canal Authority, "Canal Characteristics," http://www.suezcanal. gov.eg/sc.aspx?show=12. The Straits of Tiran at the entrance to the Gulf of Aqaba/Eilat are also an important choke point; the closure of these straits by Nasser contributed to the outbreak of war between Egypt and Israel in 1956 and 1967. However, the 1979 Israeli-Egyptian peace treaty and the subsequent stationing of multi-national forces and observers in Sinai essentially have removed immediate threats to traffic through the straits.
- 19 Text of the Constantinople Convention is reproduced at the Suez Canal Authority Web site, http://www.suezcanal.gov.eg/Files/Constantiople%20 Convention.pdf.
- 20 Arab Petroleum Pipelines Company, SUMED (Alexandria: n.d.), p. 53, http://www.sumed.org/docs/Web/index.html; US Energy Information Administration, "Bab el-Mandab," World Oil Transit Chokepoints, http://www.eia.doe.gov/cabs/World\_Oil\_Transit\_Chokepoints/Bab\_el-Mandab.html.
- 21 Jonathan Schanzer, "The Islamic Republic of Sudan?" *Foreign Policy*, June 10, 2010, http://www.foreignpolicy.com/articles/2010/06/10/the\_islamic\_republic\_of\_sudan.
- 22 See Intelligence and Terrorism Information Center, *Iran's Activity in East Africa, the Gateway to the Middle East and the African Continent*, July 29, 2009, http://www.terrorism-info.org.il/malam\_multimedia/English/eng\_n/pdf/iran\_e011.pdf; and Aaron S. Klieman, "Bab al-Mandab: The Red Sea in Transition," *Orbis* 11, no. 3 (1967): 749-62.
- 23 Luis Martinez, "Exclusive: Three Israeli Airstrikes against Sudan," *ABC News*, March 27, 2009, http://blogs.abcnews.com/politicalradar/2009/03/exclusive-three.html. Cited in Schanzer.
- 24 Israeli cargo ships have been targeted by pirates since 2009. See, for example, Aviel Magnezi, "Zim Ship Escapes Pirate Seizure Attempt," *ynetnews*, January 2, 2011, http://www.ynetnews.com/articles/0,7340,L-4007681,00. html. Interestingly, Iranian shipping has been a target as well. Pirates reportedly attacked Iranian ships off the coast of Africa eight times in a two month period in early 2011. See "Iran Navy Thwarts Somali Pirate Attack," Press TV, May 18, 2011, http://www.presstv.ir/detail/180498.html.
- 25 The move eastward also reflects pirates' ability to adapt and extend the distances at which they can operate. See Lauren Ploch et al, *Piracy off the Horn of Africa* (Washington, DC: Congressional Research Service, 2011), p. 1, and EJ Hogendoorn, "Despite Heavy Security, Somali Piracy is at All-Time High," International Crisis Group, June 29, 2011, http://www.crisisgroup.org/en/regions/africa/horn-of-africa/somalia/despite-heavy-security-somali-piracy-at-all-time-high.aspx.
- 26 Sudarsan Raghavan, "Militants Linked to al-Qaeda Emboldened in Yemen," Washington Post, June 13, 2011.
- 27 Clifford Krauss, "Shippers Concerned over Possible Suez Canal Disruptions," New York Times, February 2, 2011, http://www.nytimes.com/2011/02/03/world/middleeast/03suez.html.

- 28 "Egypt's Suez Canal April Revenues up at \$434.6 mln," Reuters, May 10, 2011, http://af.reuters.com/article/investingNews/idAFJOE74909L20110510; "Suez Canal Leaves Transit Fees Unchanged for 2011," Reuters, March 3, 2011, http://www.reuters.com/article/2011/03/03/suezcanal-egypt-idUSL-DE72213520110303.
- 29 Alaa Shahine and Alaric Nightingale, "Suez Canal Ships, Pipelines Were Plotters' Targets," Bloomberg, July 9, 2009, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aPJCNKXydyAc.
- 30 See Karl Vick, "The Sinai Gas Blast: Another Reason for Israeli Anxiety over Egypt," *Time*, February 7, 2010, http://www.time.com/time/world/article/0,8599,2046573,00.html, and Isabel Kershner and Mona el-Naggar, "Pipeline Blast in Sinai, Said to Be Sabotage, Cuts Gas Supply in Israel and Jordan," *New York Times*, April 27, 2011, http://www.nytimes.com/2011/04/28/world/middleeast/28sinai.html.
- 31 "Report: Over 400 al-Qaeda Terrorists Now in Sinai," *Jerusalem Post*, May 30, 2011, http://www.jpost.com/MiddleEast/Article.aspx?id=222824.
- 32 For comparison, 2004 was the peak year in which 3.4 million barrels of oil were exported through the Turkish Straits; in 2006 the number had already decreased to 2.6 million. See US Energy Information Administration, "World Oil Chokepoints Energy Data," http://www.eia.doe.gov/cabs/World\_Oil\_Transit\_Chokepoints/Full.html .
- 33 Bulent Aliriza, "Turkey and the Crisis in the Caucasus," *CSIS Turkey Project*, September 7, 2008, http://csis.org/publication/turkey-and-crisis-caucasus.
- 34 Emine Kart, "US Ship Headed to Straits after Montreux Deal," *Today's Zaman* August 22, 2008, http://www.todayszaman.com/newsDetail\_getNewsById. action?load=detay&link=150914.
- 35 "Russia Decries U.S. Antimissile Ship's Presence," *Global Security Network*, June 13, 2011, http://gsn.nti.org/gsn/nw\_20110613\_3406.php.
- 36 50,000 vessels, of which 5,500 are oil tankers, pass through the straits annually. US Energy Information Administration, "World Oil Chokepoints Energy Data."
- 37 "Erdogan: 'Busy Straits Threaten Us'" *Seanews.com.tr*, June 23, 2006, http://turkishmaritimenews.com/article/TURKISHSTRAITS/14263/ (emphasis added).
- 38 The plan is to build residential and business areas on the banks of the waterway, as well as a third airport for Istanbul. See "A 'Second Bosphorus' to be built in Istanbul," *Hurriyet Daily News and Economic Review*, April 27, 2011, http://www.hurriyetdailynews.com/n.php?n=a-8220second-bosporus8221-is-to-be-built-in-istanbul-2011-04-27.
- 39 Tuba Parlak, "'Crazy' Istanbul Canal is a Nabucco Rival, Academics Say," Hurriyet Daily News and Economic Review, April 27, 2011, http://www.hurriyetdailynews.com/n.php?n=academics-see-the-8216crazy8217-canal-project-as-nabucco8217s-rival-2011-04-27.