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The Evolving Dynamic of Piracy and Armed Robbery at Sea in the Modern Era: Scope, Dimensions, Dangers and Policy Responses

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The rash of pirate attacks off Somalia and the Gulf of Aden in 2008 has cast into sharp light an enduring problem that affects not only the waters around the Horn of Africa but many other areas of the world as well. This paper aims to inform and put into context the current debate on piracy by providing an overview of the scope and factors driving armed maritime violence in the contemporary era and the principal dangers that are associated with this particular manifestation of transnational crime. Given its publicity and unprecedented character, the paper also addresses the appropriateness of the measures that have been instituted to deal with armed maritime violence in the wider vicinity of East Africa and the Arabian Peninsula.

Introduction

The main thrust of the security threats currently confronting the global community has taken the form of transnational "gray area phenomenon". These threats pose unique challenges in several respects. First, they rarely emanate from clearly defined sovereign sources and, generally, do not exhibit the character of overt military aggression. Second,

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in many cases they interact with one another to exacerbate their individual destabilising potential. Third and, most importantly, they cannot be readily deterred by the defences states have traditionally erected to protect their borders and their populations.[1]

Stated more directly, the geo-political landscape that presently confronts the global community lacks the relative stability of the linear Cold War division between the East and the West. By contrast, security, conflict and general threat definition have become far more opaque and diffuse in nature, taking the form of amorphous challenges whose source is internal rather than external to the political order that the concept of "national interest" has conventionally represented.

The maritime realm is particularly 'conducive' to these types of threat contingencies given its vast and largely unregulated and opaque nature. Covering 139,768,200 sq. miles,[2] most of this environment takes the form of high sea that lie beyond the strict jurisdiction of any single state. These "over the horizon" oceans are fringed and linked by a complex lattice of territorial waters, estuaries and riverine systems that, in many cases, are poorly monitored and, in terms of internationally recognised jurisprudence, exist as entirely distinct and independent entities.[3] Combined, these various traits and practices have served to ingrain the planet's aquatic expanse with the type of unpredictable and lawless qualities that, as Thomas Hobbes once famously wrote, ensure life as "brutish, nasty and short."

One specific threat that has been the subject of growing international debate is maritime piracy. An age-old scourge, this particular manifestation of armed violence at sea has elicited growing concern with the spate of audacious attacks currently being witnessed off the Horn of Africa. Not only are gangs now routinely hijacking extremely large vessels, they are also exhibiting a proven capacity to operate as far as 500 nautical miles (NM) from shore. This paper aims to inform and put into context the current debate on piracy by providing an overview of the scope and factors driving armed maritime violence in the contemporary era and the principal dangers that are associated with this particular manifestation of transnational crime. Given its publicity and unprecedented character, the paper also addresses the appropriateness of the measures that have been instituted to deal with armed maritime violence in the wider vicinity of East Africa and the Arabian Peninsula.

For the purposes of this analysis, piracy can be defined as "an act of boarding or attempting to board any ship with the apparent intent to commit theft or any other crime and with the apparent intent or capability to use force in furtherance of that act". This definition is used by the International Maritime Bureau (IMB) and it is wider

than the conceptualisation adopted under the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which restricts its focus only to attacks that take place on the high seas (which is problematic as the majority of piratical incidents occur in territorial or coastal waters). The IMB definition also abolishes the traditional two-ship requirement, which means that attacks from a raft or even the dockside would be counted as an act of piracy.[4]

Global Piracy: Scope and Dimensions

It is possible to identify three main types of piracy that are currently occurring in waters around the world. At the low-end of the spectrum are anchorage attacks mounted against ships at harbour. This form of piracy has been encouraged by the relatively relaxed security procedures of many small and not so small ports. The IMB describes these types of assault as low-level armed robbery – opportunist attacks on a ship, mounted close to land by small high speed craft crewed by maritime 'muggers' normally armed with knives. Their targets are typically cash and portable high-value personal items with an average theft of between US$ 5,000 and 15,000.[5]

A more serious manifestation of piracy is the ransacking and robbery of vessels on the high seas, or in territorial waters – a style of attack that, if carried out in narrow sea-lanes, has the potential to seriously disrupt maritime navigation (especially in instances where vessels are left out of control because the crew is kidnapped, detained or thrown overboard). The IMB describes these assaults as medium-level armed robbery – violent attacks of theft involving serious injury or murder by well organised gangs, usually operating from a "mother ship" and equipped with modern weaponry.[6]

At the high-end are assaults involving the outright theft of ships. Originally, much of this activity was directed at seizing and reconverting vessels for the purposes of illegal trading.[7] Often referred to as the "phantom ship phenomenon", this form of piracy followed a typical pattern. A carrier was first seized and its cargo off-loaded into lighters at sea. The vessel would then be renamed and re-registered under a flag of convenience – generally, using bureaus in Panama, Honduras, Liberia, the Bahamas, Malta, Cyprus and Bermuda[8] – and issued with false documentation to enable it to take on a fresh payload. The new cargo would not be delivered to its intended destination but transferred to a designated port where it would be sold to a pre-arranged buyer who more often than not was a willing participant in the entire venture. The IMB describes these assaults as major criminal hijack – well resourced and

planned international criminal activity employing highly trained and armed syndicates working in conjunction with land-based operatives and brokers.[9]

More recently, the hijacking of ships has been undertaken for the more straightforward purpose of extorting ransoms. This model has been especially evident off the Horn of Africa, where 42 ocean-going carriers were seized during 2008.[10] The most vulnerable vessels are those that travel slowly (less than 15 knots) and have low freeboards from the deck to the water.[11] Ransoms for abducted vessels start high and have, on occasion, exceeded US$ 3 million (US$ 3.2 million was paid for the release of the Ukrainian-registered *M/V Fiana* in 2009, which was seized in 2008 while transporting a consignment of Russian-made arms). According to regional and international naval officials, Somalis have accrued around US$ 100 million in ransom payments over the last couple of years – an exceptionally high sum in a country where the per capita GDP is only US$ 600.[12]

A total of 1,845 actual and attempted acts of piracy were recorded around the world between 2003 and the end of 2008, which represents an annual average incident rate of around 352.[13] The actual problem of piracy in global waters is undoubtedly far more extreme than these figures suggest, largely because most attacks – possibly as many as 50 per cent – are not reported. Officials with the IMB in Kuala Lumpur assert that most shipowners are reluctant to alert authorities about attacks on their vessels on account of the costs that subsequent investigations and delays will necessarily entail (most of which are borne by the companies themselves) as well as due to a fear that acknowledging incidents will serve to raise maritime insurance premiums by highlighting that basic security measures were not being practiced.[14] The combined magnitude of these incurred losses would, in most cases, greatly outweigh those resulting from a piracy attack, which in cases of low-level theft, ransacking and hostage-taking tend to represent between 2 and 10 per cent of the value of the targetted boat and its cargo.[15]

Violence remains a principal characteristic of contemporary piracy. Gangs are increasingly abandoning the "spray and pray" approach to firing weapons from the hip and now routinely adopt military-style precision postures to increase the accuracy of their targetting. They are also deliberating aiming rocket propelled grenades (RPGs) into accommodation blocs to start on-board fires. Most disturbing has been the marked rise in crew abductions with 2008 recording the highest level of hostage taking (889) that has yet to occur in any given year.[16] At the time of writing, 300 seafarers from 25 different countries were still being held in Somalia awaiting payment of a ransom for their release.[17]

The concentration of piracy is greatest around the Horn of Africa, the Gulf of Aden and the wider Somali basin. In 2008, this expansive region surpassed Indonesia as the world's most dangerous zone for armed maritime violence, accounting for over 37 per cent of all attacks reported during the year (111 out of 293). Virtually all of these assaults were attributed to Somali-based clans who have 'free-run' of the area and enjoy wide latitude to impose self-defined 'laws' that work to protect and further their own vested interests.[18] Gangs typically operate from small skiffs manned by a compliment of up to 5 crew and launched from a 'mother' ship to extend their attack range. Groups are known to have access to a wide range of weaponry, including AK-47s, anti-personnel mines, heavy machine guns, RPGs etc., and they are known to have carried out assaults as far as 500 NM from shore.[19]

Other high-risk zones include Nigeria/Gulf of Guinea, Indonesia, Bangladesh, India and Tanzania. These regions collectively accounted for 59 per cent of all non-Horn of Africa/Gulf of Aden incidents during 2008 (Fig. 1).

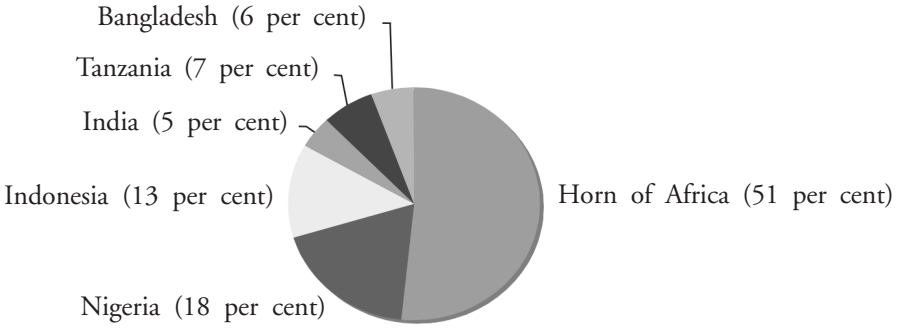

Fig. 1. Pirate high-risk locations during 2008[20]; Source: IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008*.

The Actual Manifestation of Piracy

Factors Accounting for the Growth of Piracy in the Modern Era

Traditionally, piracy has been 'fed' by two underlying drivers – the enormous volume of commercial freight that moves by sea;[21] and the necessity of ships to pass through congested (and ambush-prone) bottlenecks such as the Panama Canal, Suez Canal, the Straits of Hormuz, Strait of Bab-el-Mandab, the Malacca Straits and the Bosphorus Straits.[22] Together they have provided an almost limitless range of vulnerable targets

from which to choose. The emergence of piracy in the contemporary age reflects the continued salience of these basic causal variables in addition to at least seven other contributory factors:

(i) There has been a growing trend toward the use of 'skeleton' crews, both as a cost-cutting measure and as a reflection of more advanced navigation technology. Undoubtedly, this reduced manning is more efficient, but the smaller number of sailors now found onboard many vessels has both reduced the options for concerted anti-piracy watches and made the task of gaining control of ships that much easier.[23]

(ii) The general difficulties associated with maritime surveillance have been significantly heightened as a result of the 11 September 2001 (9/11) attacks on USA and the concomitant pressure that has been exerted on many governments to invest in expensive territorially-bounded homeland security initiatives. In the case of governments that have consistently struggled to secure their sovereign waters (for example, the Philippines, Indonesia, Turkey, Eritrea and Kenya), such external demands have negatively impacted on already limited resources for underwriting off-shore monitoring systems. Policy analysts contend that the resultant void has been of particular benefit to pirate syndicates, providing them with an operational environment that is now highly conducive to their tactical and material designs.[24]

(iii) Lax coastal and port-side security have played an important role in enabling low-level pirate activity, especially harbour thefts against ships at anchor. Problems of this sort have been especially acute in Peru, West and East Africa and across South and Southeast Asia. Various ports in these areas suffered at least three reported incidents in 2008 (Table 1), reflecting the near absence of a functioning maritime police presence and a general lack of basic staff, boats and equipment.

(iv) Corruption and easily compromised judicial structures have encouraged official complicity in pirate rings, providing the necessary 'lubrication' that, as with other forms of criminality, has allowed this form of illicit activity to both exist and, indeed, flourish. The nature of this involvement has been extensive, ranging from providing intelligence on ship movements and locations to helping with the rapid discharge of stolen cargoes. In regions of endemic

Table 1. Ports and anchorages with three or more reported incidents in 2008

Country	Location	Number of incidents
Ivory Coast	Abidjan	3
Ghana	Tema	6
India	Kakinada	3
India	Kanda	3
Bangladesh	Chittagong	11
Indonesia	Jakarta-Tg. Priok	4
Indonesia	Belawan	6
Nigeria	Bonny river	6
Nigeria	Lagos	22
Peru	Callao	5
The Philippines	Manila	3
Tanzania	Dar es Salaam	12
Vietnam	Vung Tau	6

Source: IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008*.

corruption, it has also extended to actually constraining coastal patrols whenever they appear to be making substantial progress in denting attacks. This has been evident in Nigeria, where members of the Navy have decried government decisions to cut their funding – alluding that such moves reflect the dissatisfaction of central members of the administration who have actively colluded with maritime gangs operating in the Niger Delta.[25]

(v) The lack of governance in Somalia has directly contributed to the rampant scale of piracy that is currently being witnessed off the Horn of Africa and in the Gulf of Aden. Experts unanimously agree that the scale and incidence of maritime criminality in this region is, at root, an extension of the land-based violence, lawlessness and general poverty that has plagued Somalia since the fall of the Said Barre dictatorship in 1991.[26] As Roger Middleton of the UK-based Chatham House Institute observes:

"*Piracy has been a problem in Somali waters for at least 10 years. However, the number of attempted and successful attacks has risen over the last three years.*

With little functioning government, long, isolated sandy beaches and a population that is both desperate and used to war, Somalia is a perfect environment for piracy to thrive."[27]

(vi) The ready willingness of shipowners to pay increasingly large sums of money for the return of their vessels and cargoes has provided added incentive to engage in maritime crime. Unlike the past when ransoms usually amounted to hundreds of thousands of dollars, today they frequently exceed a million dollars. For many gangs, the prospect of windfall profits such as these far outweigh any attendant risk of being caught or otherwise confronted by naval and coast guard patrol boats – especially when one factors in the problems associated with detention and prosecution.[28] As a former captain in the Somali Navy dryly commented:

"*All you need is three guys and a little boat and the next day you are millionaires.*"[29]

(vii) Finally, the widespread availability of light weapons in the region has provided pirates with an enhanced means to operate on a more destructive and sophisticated level. Originating from unregulated arms markets and former as well as on-going conflict zones in Africa, Asia and Europe the range of munitions currently available is truly extensive, including everything from pistols, light/heavy caliber machine guns and automatic assault rifles to anti-ship mines, hand-held mortars and RPGs.[30] Most commentators are in general agreement that this material – most of which is readily transportable, easy to handle, cheap and durable – is one of the main factors contributing to the growing level of violence that has come to typify piracy in recent years. As Noel Choong, the current Director of IMB's Piracy Reporting Centre in Kuala Lumpur, remarks:

"*Five to six years ago, when pirates attacked, they used machetes, knives and pistols. Today, they come equipped with AK-47s, M-16s, rifle grenades and RPGs*."[31]

The Dangers Associated with Piracy

The dangers associated with contemporary piracy are complex, multifaceted and have direct implications for human, political, economic and environmental security. At the most basic level, attacks constitute a direct threat to the lives and welfare of the citizens of a variety of flag states. Assaults are becoming increasingly violent and can now be expected to involve casualties of one sort or another. Disturbingly, there has been a marked rise in hostage-takings, with 2008 recording the highest level of such instances to occur in any single year.[32] In the words of one senior member of the United Kingdom's National Union of Maritime, Aviation and Shipping Transport Officers (NUMAST):

> "*The necessities of normal diplomacy should not obscure the fact that British nationals are being threatened with extreme violence. The present intolerable situation should be approached by the UK government just as firmly as if British tourists were being attacked whilst [taking a holiday] in a [foreign] country*."[33]

Quite apart from the risk of physical death and injury, many seafarers that have been subjected to a pirate attack have suffered considerable mental trauma. Many do not fully recover from the experience and may never go to sea again. Despite this, the human cost involved in modern-day piracy is seldom recognised; largely because assaults tend to be directed against "less than visible" targets. NUMAST has also stated:

> "*If you had civilian aircraft being threatened or bazookas being fired at train drivers there would be a public outcry. Because it is shipping, it is out of sight, out of mind and nothing is done*."[34]

Piracy also has a direct economic impact in terms of fraud, stolen cargoes and delayed trips, which can potentially undermine a maritime state's trading ability. Shipowners are often required to pay their own legal expenses in terms of post-attack investigations and they always have to bear the negative fiscal impact of cancelled/interrupted onward journeys. The costs of major criminal hijackings can be particularly exorbitant. On a number of occasions, consignees have borne the entire loss from an abducted ship.[35] A reputation for piracy would do little for the international standing

of a trading country and could lead to a boycott of its port facilities. This, for instance, emerged as a major concern of Hong Kong in the mid-1990s, with many shipping companies threatening to boycott the territory's port facilities as a result of the frequency of attacks in the so-called Hainan-Luzon-Hong Kong (HLH) "terror triangle".[36] More recently, problems of this sort have beset terminals in Bangladesh, Nigeria, Indonesia and the Horn of Africa.[37]

No systematic study of the overall cost of piracy has ever been undertaken, particularly in relation to expenses incurred as a result of suppression.[38] However, various analysts have estimated that attacks could realistically cost the shipping industry anywhere between US$ 1 billion and 16 billion each year[39] – a significant figure that, at first glance, may appear unacceptable. However, it needs to be put in context. When measured against the annual total value of world exports in 2007 at US$ 13.6 trillion,[40] in fact, it is not prohibitively onerous.[41] However, the economic dimension of piracy is still important and is certainly a factor that has affected the thinking of individual shipping associations, many of which already operate on narrow profit margins.[42]

Politically, piracy can play a pivotal role in undermining and weakening regime legitimacy by encouraging corruption among elected government officials. Until relatively recently, this was a recurrent problem in Indonesia with numerous shipping associations and maritime bodies decrying the complicity of government officials and members of the security forces in participating, arranging or otherwise facilitating both low- and high-end attacks.[43] The high incidence of corruption in the country reflected both the freeing up of the political order following the demise of the Soeharto dictatorship in 1998 and the 'pull' factor associated with the 1997 Asian Financial Crisis (AFC) – the effects of which fell disproportionately on the Indonesian government.[44]

Attacks also have the potential to trigger a major environmental disaster, particularly if they take place in crowded sea-lanes traversed by heavily laden oil tankers. The nightmare scenario is a major crash involving an unmanned rogue vessel and an oil tanker. The resulting discharge of petroleum would not only cause irreparable damage to maritime life and other off-shore resources, if left to drift, it would also seriously degrade large tracts of fertile coastal low land. This could conceivably have very serious ramifications for any state that relies on the ocean as a primary source of protein for domestic consumption or regional export.[45] In the opinion of the IMB, it is only a matter of time before pirates trigger an environmental disaster of this sort.[46]

Responding to Piracy Off the Horn of Africa and the Gulf of Aden

The rapid escalation of armed attacks around the Horn of Africa and Arabian Peninsula has triggered unprecedented counter-piracy action on the part of the international community and the private sector. In January 2009, USA announced the creation of a new Combined Task Force (CTF) 151 to monitor a self-defined maritime security patrol area (MSPA) in the Gulf of Aden. The aim is to have this form the basis of a multinational coalition anti-piracy force. CTF 151 currently consists of only four vessels: the *USS San Antonio*, *USS Mahan* and *USS Eisenhower* of the US Navy and *HMS Portland* of the UK Navy. However, Australia, Pakistan, Saudi Arabia, the United Arab Emirates (UAE) and Turkey have all expressed strong interest in joining. According to Vice Admiral Bill Gortney, Commander of the US Fifth Fleet, as many as 14 countries could be part of the joint force by the end of 2009.[47]

CTF-151 will compliment a European Union (EU) combined Naval Force (EUNAVFOR) operation named *Atalanta* that was deployed in December 2008. The flotilla, consisting of six vessels and with a mandate for a year, will coordinate vessels from Britain, France, Spain, Germany and Greece for dedicated anti-piracy missions in the wider vicinity of the Gulf of Aden and Red Sea. Specific tasks slated for *Atalanta* include:

- Protection of vessels of the World Food Programme (WFP) delivering food aid to displaced persons in Somalia;
  Protection of vulnerable vessels cruising off the Somali coast; and
- Deterrence, prevention and repression of acts of piracy and armed robbery off the Somali coast.[48]

Apart from CTF-151 and EUNAVFOR, a number of other states have sent frigates to protect and/or escort shipping in the Horn of Africa, including India, China, Russia, Pakistan, Saudi Arabia, the Netherlands and Malaysia. South Korea, Japan and UAE are expected to add to this complement by the end of 2009. At the time of writing this paper, 14 national navies were operating in the Gulf of Aden with a collective deployment of around 20 ships.[49]

The United Nations Security Council (UNSC) has also passed several resolutions to deal with armed maritime violence emanating from Somalia's maritime and territorial space. These include UNSCR 1816, 1846 and 1851, which collectively sanction 'cooperating' states to take all necessary measures that are deemed appropriate to

suppress Somali-sourced piracy and armed robbery at sea. The first two relate to the country's coastal waters, the third one to clan dens on land.[50]

Complementing these inter-governmental responses have been a number of initiatives on the part of the private sector. UK-based firms that offer commercial protection services such as Eos Risk Management Limited and Hollowpoint Protective Services have shown willingness to provide military-trained personnel – both armed and unarmed – to help safeguard ships transiting the Gulf of Aden. The US security contractor, Blackwater (now known as EI) has made similar overtures in addition to offering at least one vessel, the *McArthur*, to undertake dedicated escort duties for tankers and freighters passing through the region.[51]

These measures have met with some success. Escort ships have ensured the safe delivery of WFP relief supplies and humanitarian aid to Somalia, while coalition forces have been instrumental in thwarting several attempted hijackings. According to US officials, naval convoys off the Horn of Africa are currently preventing between 12 and 14 attacks per month.[52] Nevertheless, the overall utility of the international response is questionable in many respects:

- The area to be monitored is enormous (measuring over 1 million sq. miles) and completely beyond the coverage range and capacity of the vessels that have been dispatched to the region.
- Issues of national interest are bound to arise. Indeed, India, China, Russia, Malaysia and Pakistan are all acting outside coalition forces. Even with regard to multinational teams such as EUNAVFOR it is not apparent whether the potentially thorny issue of cost-sharing has even been broached.
- Questions of legal jurisdiction are yet to be settled (especially, in terms of prosecuting detained pirates)[53] and appropriate rules of engagement have still to be fully laid out.
- Employing force against pirate communities in Somalia raises the obvious specter of large-scale collateral civilian (and associated accusations that the West is once again intent on destroying innocent Muslim lives).
- The deployment of naval vessels will only be able to address piracy at its end point, on the sea, rather than at its root, on land.[54]

The use of armed guards is even more problematic. Moves in this direction would, at the very least, have immediate ramifications for the right of innocent passage as

most coastal states do not allow ships to enter their territorial waters if they have weapons on board. Equally, because most traditional flag states do not allow armed personnel on vessels they register, they could increase the incentive for shipowners to sail under flags of convenience; such a trend would merely compound what is an already amorphous and poorly regulated industry. Death or injury to an innocent party as a result of an exchange involving security contractors would almost certainly expose shipowners to exorbitant compensation claims (not covered by insurance) and could very well result in criminal charges being laid against them. Underscoring all of these considerations is the real possibility of pirates, faced with prospect of having to engage armed guards, elevating their own threshold of violence, storming vessels with an active intent to use lethal force against any they confront (including crew, who until now have been relatively well treated).[55]

These various issues have made shipowners and the shipping industry, in general, wary of contracting out to private security firms. Certainly, the IMB has not endorsed this line of action, commenting in its 2008 Annual Report:

> *On balance there is little to be gained and much to lose from having private security on board... vessels transiting this high risk area. The IMB supports the view of all ship owning associations and international organisations that the arming of merchant vessels through private security companies is not the answer [to piracy off the Horn of Africa].*[56]

Conclusion

Long considered a thing of the past, piracy remains an enduring and, indeed, growing threat to maritime shipping, trade and commerce. Gangs now routinely operate far from shore, are extremely well-armed and are clearly capable of seizing even the largest ocean-going carriers. While attacks have to be seen in the context of the overall magnitude of the international maritime industry, it is clear they carry important ramifications for human, economic, political and, potentially, environmental security. Managing this particular manifestation of transnational crime will require a response by the international community that goes well beyond the purely militaristic actions currently being witnessed off the Horn of Africa and, therefore would require far more nuanced, innovative non-kinetic strategies. In future, there are at least five things that could be done:

(i) Greater focus should be given to boosting the coastal monitoring and interdiction capabilities of littoral states abutting pirate-infested waters. Provision of surveillance assets, training and technical support by major flag states would be a good beginning. The USA could play a pivotal role in this regard, not least by broadening and fully funding the "Global Train and Equip" Programme under Section of 1206 of the National Defence Authorisation Act of 2006.[57]

(ii) The international community should make increasing efforts to sponsor public-private partnerships aimed at better commercialising and marketing communication and defensive technologies such as ShipLoc (a basic, but effective satellite tracking system that has long been endorsed by the IMB), SecureShip (a non-lethal electrical perimeter fence designed to prevent unauthorised boarding), and long-range acoustic devices that emit loud disorienting blasts of sound. One way of achieving this would be for member states of the International Maritime Organisation (IMO) to expand the Maritime Trust Fund that, among other things, provides financial support to facilitate the fusion of public and private security efforts in the wider shipping industry.[58]

(iii) Shipping companies must be given greater financial incentive to institute basic security protocols – including avoiding dangerous routes, maintaining constant anti-piracy watches, keeping in close contact with shore and nearby vessels, developing and practicing anti-piracy contingency plans – through the offer of lower insurance premiums (or, in the event of non-compliance, the threat of higher ones).

(iv) The current international framework for countering piracy, which is based on the 27-year old UNCLOS regime, should either be modified to make it more relevant to contemporary maritime violence or accompanied by additional accords that impose greater obligations and responsibilities on signatory states. The Japanese-sponsored Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships (ReCAPP), which has been operating with some success in Asia, could serve as a potentially useful template in the latter case.[59] The accord has already helped form the contents of a Memorandum of Understanding (MoU) to counter piracy in the western Indian Ocean, Gulf of Aden and Red Sea that was concluded in Djibouti on January 29, 2009[60]

and there is no reason why it could not be similarly applied for agreements in other parts of the world.[61]

(v) Probably the most vexing, because the root cause for piracy primarily stems from land, is that more attention needs to be devoted to ameliorating the underlying socio-economic drivers that give rise to piracy in the modern world. This is particularly true of armed maritime violence off the Horn of Africa but also relevant to regions such as South Asia, Southeast Asia and West Africa. In all these areas, underdevelopment and lack of opportunity serve as powerful triggers for engaging in maritime (and other types of) crime while the proceeds garnered from ransoms and ship thefts frequently play a key role in stimulating the local communities of otherwise impoverished local communities. Until these contributing factors are comprehensively addressed piracy will continue to proliferate, adding yet another destabilising dimension to what is an already highly complex transnational security milieu.

Notes

1. For more on the concept of "gray area phenomena" used in this context see Peter Chalk, *Non-Military Security and Global Order: The Impact of Extremism, Violence and Chaos on National and International Security* (London: Macmillan, 2000), Chapter 1; Peter Chalk, *Grey Area Phenomenon in Southeast Asia. Piracy, Drug Trafficking and Political Terrorism* (Canberra: Strategic and Defence Studies Centre, 1997), Chapter 1; Jim Holden-Rhodes and Peter Lupsha, "Horsemen of the Apocalypse: Gray Area Phenomena and the New World Disorder," *Low Intensity Conflict and Law Enforcement* 2/2 (1993): 212-26; and Richard Matthew and George Shambaugh, "Sex, Drugs and Heavy Metal,: Transnational Threats and National Vulnerabilities," *Security Dialogue* 29/2 (1998).
2. This equates to some 2.42 times the planet's terrestrial surface area.
3. Rupert Herbert-Burns, "Terrorism in the Early 21st Century Maritime Domain," in Joshua Ho and Catherine Zara Raymond eds., *The Best of Times, the Worst of Times: Maritime Security in the Asia-Pacific* (Singapore: World Scientific Publishing, 2005), 157.
4. See, for instance, International Maritime Bureau (hereafter referred to as IMB), *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008* (London: International Chamber of Commerce, January 2009), 3; and Derek Johnson, Erika Pladdet and Mark Valencia, "Research on Southeast Asian Piracy," in Derek Johnson and Mark Valencia eds., *Piracy in Southeast Asia* (Singapore: ISEAS, 2005), xi-xii.

5. Peter Chalk, *Non-Military Security and Global Order: The impact of Extremism, Violence and Chaos on National and International Security*, 58; Edward Fursdon, "Sea Piracy: Or Maritime Mugging?" *INTERSEC* 6/5 (May 1996): 166; Stanley Weeks, "Law and order at Sea: Pacific Cooperation in Dealing with Piracy, Drugs and Illegal Migration," in Sam Bateman and Stephen Bates eds., Calming *the Waters: Initiatives for Asia-Pacific Maritime Cooperation* (Canberra: Strategic and Defence Studies Centre, 1996), 44.
6. Peter Chalk, *Non-Military Security and Global Order: The Impact of Extremism, Violence and Chaos on National and International Security*, 58; 123; Edward Fursdon, "Sea Piracy: Or Maritime Mugging?" 66; Mark Valencia, "Piracy and Terrorism in Southeast Asia," in Derek Johnson and Mark Valencia eds., *Piracy in Southeast Asia* (Singapore: ISEAS, 2005), 80-81.
7. In a number of instances, shipowners were also known to have arranged the hijacking of their vessels in order to defraud hull insurers.
8. Shipping bureaus in these states are favoured largely due because their registration requirements are neither expensive nor stringent.
9. Peter Chalk, *Non-Military Security and Global Order: The Impact of Extremism, Violence and Chaos on National and International Security*, 58, 62. For a good overview of the 'mechanics' of the phantom ship phenomenon see Jayant Abyankar, "Phantom Ships," in Eric Ellen ed., *Shipping at Risk* (London: International Chamber of Commerce, 1997), 58-75.
10. See IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008*, 26.
11. Admiral William Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence (Public Affairs), Washington, D.C., January 13, 2009.
12. Louis Hansen, "Anti-Piracy Task Force Hits Choppy Waters in African Seas," *Norfolk-Virgian Pilot*, January 30, 2009; Mohammed Ibrahim and Graham Bowley, "Pirates Say They Freed Saudi Tanker for $3 Million," *The New York Times*, January 10, 2009; "Pirates on the Sirius Star Drown with $3 Million Ransom," *Associated Federated Press*, January 11, 2009; Robert Worth, "Pirates Seize Saudi Tanker Off Kenya: Ship Called the Largest Ever Hijacked," *The New York Times*, November 18, 2008; Hari Kumar and Alan Cowell, "Indian Navy Sinks Ship," *The New York Times*, November 19, 2008; and Sharon Otterman and Mark McDonald, "Hijacked Supertanker Anchors Off Somalia," *The New York Times*, November 19, 2008.
13. IMB, *Piracy and Armed Robbery at Sea: Annual Report, 1 January-31 December 2008*, 6.
14. According to analysts in Malaysia it is the losses that are incurred by delays to onward journeys (known as demurrage costs) that hurt shipowners the most; the extent of these losses, which can run to US$ 20,000 to 30,000 per day, are especially great in countries where police authorities are either inefficient or lacking in professionalism, both of which

can result in investigations that take weeks or even months to complete. Author interview with maritime analysts and IMB officials, Kuala Lumpur, August 26, 2006.

15. Author interviews, Kuala Lumpur, August 2006.
16. IMB, *Piracy and Armed Robbery at Sea: Annual Report, 1 January-31 December 2008*, 13.
17. James Kraska and Brian Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates," *Harvard International Review*, December 2008, available at www.harvardir.org/index.php?page=article&id=1882 (accessed on February 10, 2009).
18. As of November 2008, 15-18 groups were operating in Somali waters. The largest gang is the Somali Marines (or Central Regional Command), which is thought to have 350 men and at least 100 skiffs at its disposal.
19. IMB, *Piracy and Armed Robbery at Sea: Annual Report, 1 January-31 December 2008*, 6, 23-24.
20. Figures for Horn of Africa include attacks in the Gulf of Aden, Red Sea and Somalia.
21. Today, roughly 80 per cent of global freight is shipped by sea, with an estimated 12 to 15 million containers on the world's oceans at any one time. See Michael Richardson, *A Time Bomb for Global Trade* (Singapore: Institute of Southeast Asian Studies, 2004), 3; Organisation for Economic Cooperation and Development, *Security in Maritime Transport: Risk Factors and Economic Impact*, Paris, July 2003, 3.
22. The high volume of shipping that passes through these choke points necessarily forces vessels to significantly reduce speed to ensure safe passage (in the Bosphorus Straits, for instance, at least six accidents occur every 1 million transit miles), which dramatically heightens their exposure to mid-sea interception and attack. Author interviews, Singapore, London and Amsterdam, September 2005. See also Ali Koknar, "Maritime Terrorism: A New Challenge for NATO," *Energy Security*, January 24, 2005.
23. Author interviews, Singapore, London and Amsterdam, September 2005.
24. Author interviews, Washington, D.C., Singapore, London and Amsterdam, August-September 2005.
25. Author interviews, Abuja, September 2008. See also Stephanie Hanson, "Combating Maritime Piracy," *Council on Foreign Relations* (January 27, 2009), available at www.cfr.org/publication/18376/combating_maritime_piracy.html? (accessed on February 10, 2009).
26. Author interviews, Washington, D.C., December 2008 and January 2009. Human development statistics compiled by international relief agencies typically designate over 70 per cent of the Somali population as undernourished.
27. Roger Middleton, cited in "Somali Piracy Threatens Trade, Boosts Terrorists, Analysts Say," *CNN.com*, October 01, 2008, available at www.cnn.com/2008/WORLD/africa/10/01/piracy.terror/index.html (accessed on January 30, 2009).
28. IMB, *Piracy and Armed Maritime Violence: Annual Report, 1 January-31 December 2008*, 26; Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence; Kraska and Wilson, "Diplomatic Efforts Against the Gulf

of Aden Pirates." In the words of one former Captain in the Somali Navy: "All you need is three guys and a little boat and the next day you are millionaires."

29. Cited in Kraska and Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates."
30. For a concise overview of the dynamics of the global proliferation of small arms and their impact see Gideon Burrows, *Kalashnikov AK47* (Oxford: The New Internationalist, 2006).
31. Author interview, Kuala Lumpur, August 2006.
32. IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008,* 26.
33. *NUMAST Telegraph* 25.7 (July 1992, piracy supplement): i.
34. Captain Graeme Hicks, Secretary of NUMAST, cited in "For Those in Peril on the Sea," *The Economist*, August 9, 1997.
35. One noteworthy case concerned the 1995 seizure of the *Anna Sierra*, which was eventually discovered at the port of Bei Hei registered under the name of *Arctic Sea*. By the time the vessel was released, losses from cargo theft, the imposition of a "finder's fee" by Chinese authorities and post-incident investigations had run into the millions, all of which were ultimately borne by the ship's rightful owners. See IMB, *Piracy and Armed Robbery Against Ships: Special Report* (London: ICC, 1997), 33-9.
36. See, for instance, Robert Beckman, Carl Grundy-Warr and Vivian Forbes, "Acts of Piracy in the Malacca Straits," *Maritime Briefing* 1/4 (1994); Kazuo Takita and Bob Couttie, "ASEAN Pressured to Act Against Pirates," *Lloyds List* 29 (May 1992): 3; and Michael Pugh, "Piracy and Armed Robbery at Sea: Problems and Remedies," *Low Intensity Conflict and Law Enforcement* 2/1 (1993): 11.
37. Author interview, IMB, Kuala Lumpur, August 2006.
38. Two main factors account for the lack of empirical analysis – the impunity of attacks, which often makes accurate data difficult to gather, and disagreement over precisely what costs should be included in any individual calculation.
39. See, for instance, Martin Murphy, *Contemporary Piracy and Maritime Terrorism: The Threat to International Security* (London: International Institute for Strategic Studies, Adelphi Paper 338), 20; John Burnett, *Dangerous Waters: Modern Piracy and Terror on the High Seas* (New York: Dutton, 2002), 70; Vijay Sakhuja, "Sea Piracy: India Boots Countermeasures," *Institute of Peace and Conflict Studies*, Article Number 987 (March 2003); and Joshua Ho, "Maritime Counter-Terrorism: A Singaporean Perspective, *IDDS Commentary*, n.d.a., available at www.observerindia.com/reports/maritime/psingapore.pdf (accessed on August 18, 2006); and Hanson, "Combating Maritime Piracy."
40. World Trade Organisation, *International Trade Statistics 2008,* Table 1.4, "Intra- and Inter-Regional Merchandise Trade, 2007," 9, available at www.wto.org/english/res_e/its2008_.pdf (accessed on January 30, 2009).
41. See, for instance, Murphy, *Contemporary Piracy and Maritime Terrorism: The Threat to International Security*, 21.

42. Author interviews, Washington DC, December 2008 and January 2009.
43. Author interviews, IMB and maritime analysts, Kuala Lumpur, August, 2006.
44. Author interviews, Kuala Lumpur, August 2006.
45. See, for instance, Greg Chaikin, "Piracy in Asia: International Cooperation and Japan's Role," in Johnson and Valencia eds., *Piracy in Southeast Asia*, 127; and Jayant Abyankar, "Piracy and Ship Robbery: A Growing Menace," in Hamzah Ahmad and Akira Ogawa eds., *Combating Piracy and Ship Robbery* (Tokyo: Okazaki Institute, 2001).
46. Mark Valencia, "Piracy and Politics in Southeast Asia," in Johnson and Valencia eds., *Piracy in Southeast Asia*, 114.
47. Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence. See also "Australia May Join Anti-Piracy Force," *AAP*, January 8, 2009; Chip Cummins, "US to Lead New International Piracy Force," *Wall Street Journal*, January 8, 2009; Gregory Vuscusi, "Pirate Attacks Cut Dramatically by Navies, US Admiral Says," *Bloomberg Press*, January 27, 2009; Kraska and Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates"; Hansen, "Anti-Piracy Task Force Hits Choppy Waters In African Seas"; Hanson, "Combating Maritime Piracy."
48. IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008*, 41; Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence; Hanson, "Combating Maritime Piracy"; Vuscusi," Pirate Attacks Cut Dramatically by Navies, US Admiral Says"; Jeffery Gettleman, "Somalia's Pirates Flourish in a Lawless Nation," *New York Times*, October 31, 2008.
49. Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence; IMB, *Piracy and Armed Robbery Against Ships: Annual Report, 1 January-31 December 2008*, 37; Viscusi, "Pirate Attacks Cut Dramatically by Navies, US Admiral Says"; Gettleman, "Somalia's Pirates Flourish in a Lawless Nation"; Otterman and McDonald, "Hijacked Supertanker Anchors Off Somalia"; Barbar Demick, "China May Fight Piracy Off Somalia," *The New York Times*, December 18, 2008.
50. IMB, *Piracy and Armed Robbery at Sea: Annual Report, 1 January-31 December 2008*, 41-42; Kraska and Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates"; Neil MacFarquhar, "US Proposes Going Ashore to Hunt Pirates," *The New York Times*, December 11, 2008; "Action Against Pirate Bases OKd," *The New York Times*, December 17, 2008; Michael Evans, "American Commandoes Get UN Go-Ahead to Hunt Down Somali Pirates," *The Times* (UK), December 18, 2008; Donna Leinward, "US Targets Pirates on Somali Coast," *USA Today*, July 21, 2008.
51. Hanson, "Combating Maritime Piracy"; Jacquelyn Porth, "Piracy Off the Horn of Africa Threatens Relief Efforts, Trade," *Peace and Security*, 31 October 2008; Jeffrey Gettleman, "Pirates in Skiffs Still Outmanoeuvering Warships Off Somalia," *The New York Times*, December 16, 2008.

52. Gortney, transcript of news briefing with the Department of Defence, Office of the Assistant Secretary of Defence; Viscusi, "Pirate Attacks Cut Dramatically by Navies, US Admiral Says."
53. It should be noted that the US has reached an agreement with Kenya whereby any pirates that are apprehended by the US Navy can be handed over to the East African State for prosecution. However, the legal details of the accord are still being worked out and the deal only extends to the US. Other countries such as the UK, France and Denmark will continue to hand over captives to Somalia, which given the lack of a functioning government, much less judicial system, is tantamount to releasing them. Comments made during the House Transportation and Infrastructure Committee, Subcommittee on Coast Guard and Maritime Transportation Hearing on Maritime Piracy, Washington, D.C., February 4, 2009.
54. Author interviews, Washington, D.C., November 2009. See also Barbara Surk, "Somali Pirates Seize Supertanker with Crude," *Associated Press*, November 17, 2008; and Philip Ewing, "Piracy Plan Goes Global," *Navy Times*, December 8, 2008.
55. Comments and observations made during the House Transportation and Infrastructure Committee, Subcommittee on Coast Guard and Maritime Transportation Hearing on Maritime Piracy, Washington, D.C., February 4, 2009.
56. IMB, *Piracy and Armed Robbery Against Ships: Annual Report*, *1 January-31 December 2008*, 40.
57. Kraska and Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates". The programme aims to address emerging, rapidly developing and acute threats by equipping and training local and regional forces to independently pre-empt problems before they become full-blown crises that require outside intervention. Support includes development of coastal surveillance infrastructure, provision of patrol boats and help with boosting and maintaining an effective maritime interdiction capability.
58. Kraska and Wilson, "Diplomatic Efforts Against the Gulf of Aden Pirates." Thus far, the fund has been used mostly to finance training on compliance with the International Ship and Port Facility Security (ISPS) Code.
59. ReCAPP obliges signatories to: (1) share intelligence and information; (2) interdict vessels that are suspected of committing or attempting to commit an act of piracy; (3) ensure that individuals suspected of engaging in piracy are apprehended and prosecuted; and (4) review their own national legislation to ensure they have appropriate statutes for criminalising piracy and armed maritime violence. For a transcript of the agreement see Japanese Ministry of Foreign Affairs, "Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships," available at www.mofa.go.jp/Mofa/gaiko/kaiyo/pdfs/kyotel_s.pdf (accessed on February 09, 2009).
60. See "High Level Meeting in Djibouti to Conclude Regional Agreement to Prevent Acts of Piracy and Armed Robbery Against Ships," International Maritime Organisation (IMO)

News Archives, available at www.imo.org/newsroom/mainframe.asp?topic_id=1773 &doc_id=10846 (accessed on February 09, 2008).

61. For an interesting account of developing great institutional cooperation to manage the world's nations see Sam Bateman, "Maritime 'Regime' Building," in Joshua Ho and Catherine Zara Raymond, *The Best of Times, the Worst of Times* (Singapore: Institute of Defense and Strategic Studies, 2005).