Best Management Practices for Protection against Somalia Based Piracy



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Piracy Impacts and Risk Perspectives
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Maritime Risk Symposium at Rutgers 7-9 Nov. 2011



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Mariners

Horn of Africa Piracy

Environment & Safety

As an industry facilitator to meet security challenges, one of the roles of the Maritime Administration is to provide useful information to both the private and public sectors in the event of a transportation crisis.

Ports

Piracy off the coast of Somalia escalated in 2008 causing a significant disruption to the Marine Transportation System (MTS), as well as endangering the life of merchant mariners. As part of the Maritime Administration action plan for addressing piracy off the Horn of Africa, pertinent information is consolidated on this site for easy access to current status and advice to counter-piracy and armed robbery. The information is intended to assist ship owners, operators, and other maritime industry representatives to be prepared to prevent seajackings.

For more specific information, a collaboration room may be accessed by registering on MarView and sending an e-mail to Captain Robert Ford at robert.b.ford@dot.gov requesting access to the Somali Piracy collaboration web site once registered.

United States National Security Council

Countering Piracy Off The Horn Of Africa: Partnership & Action Plan

Maritime Advisories

- · Maritime Administration Advisories
- · United States Coast Guard-Homeport
- NATO Shipping Centre (NSC)
- · Maritime Security Centre Horn of Africa (MSCHOA)
- · International Maritime Bureau (IMB)
- ONI/Worldwide Threats to Shipping
- · Maritime Liaison Office (MARLO) Bahrain
- · Marshall Islands
- Liberia

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Counter Piracy Measures

- International Maritime Organization (IMO)/Maritime Safety Committee (MSC)
 - Guidance Circular -MSC/Circ.623/Rev.3 - May 29, 2002
 - MSC 86/18/4 Executive Summary - March 3, 2009
 - MSC.1/Circ. 1302 - April 16, 2009
 - · MSC.1/Circ. 1332 - June 16, 2009
 - MSC.1/Circ. 1333 - June 26, 2009
 - MSC.1/Circ. 1334 - June 23, 2009
 - MSC.1/Circ. 1405 - May 23, 2011
 - · MSC.1/Circ. 1406 - May 23, 2011
- · Factors Affecting Pirate Success in the Horn of Africa (Office of Naval Intelligence)
- Somali Pirate Tactics Pamphlet
- Best Management Practices to Deter Piracy Version 4 (August 2011); Distribution Plan (November 2010)
- Operation ATLALANTA-Self Protection Measures
- · Surviving Piracy Seafarers Leaflet (EUNAVFOR-Somalia
- Anti-Piracy Assistance Team (APAT) Information Paper; APAT Update
- Surviving as a Hostage (United Nations)
- · United States Coast Guard Port Security Advisories
 - PSA 2-09 (rev 3)
 - PSA 3-09
 - PSA 4-09 (rev 4)
 - PSA 5-09 (rev 1)
 - PSA 6-09
 - PSA 8-09; Foreign State matrix (weapons aboard) as of 5/18/10
 - · PSA 9-09
 - PSA 11-09 (rev 1)
- · Anti Piracy Planning Chart (UKMTO)
- · Weapons Used By Pirates

INDIA





Information Services

- <u>EU NAVFOR Somalia</u> Protection of Vessels of the World Food Program
- · International Maritime Bureau Piracy Reporting Center
- Maritime Liaison Office (MARLO), Bahrain Homepage Gulf of Aden Commercial Maritime Concerns
- NATO/Maritime Component Command (MCC) Northwood NATO Naval Forces in Region
- · UK Maritime Trade Operations (UKMTO), Dubai
- MARLO-Bahrain Press Release 1-08-09 Press Release regarding new task force CTF-151
- · Operation Ocean Shield (NATO) NATO Counter-Piracy Mission

Statistics

- Economic Impact (September 2010)
- Piracy Analysis and Warning Weekly (Office of Naval Intelligence)-October 27-November 2, 2011

Contact Group on Piracy Off the Coast of Somalia

CGPCS

Ninth Plenary Meeting
Eighth Plenary Meeting
Seventh Plenary Meeting
Sixth Plenary Meeting

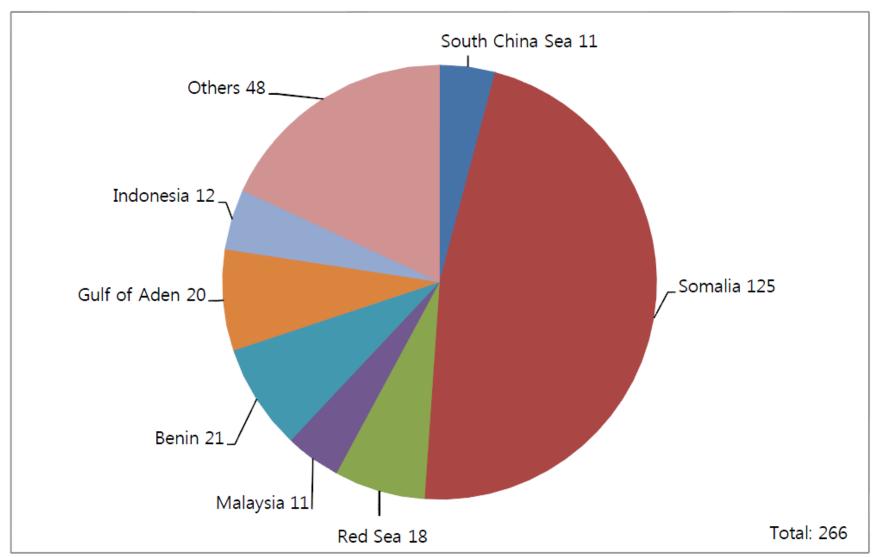
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KENYA

Piracy by Location – Total 266 (During the period of January ~ June 2011)

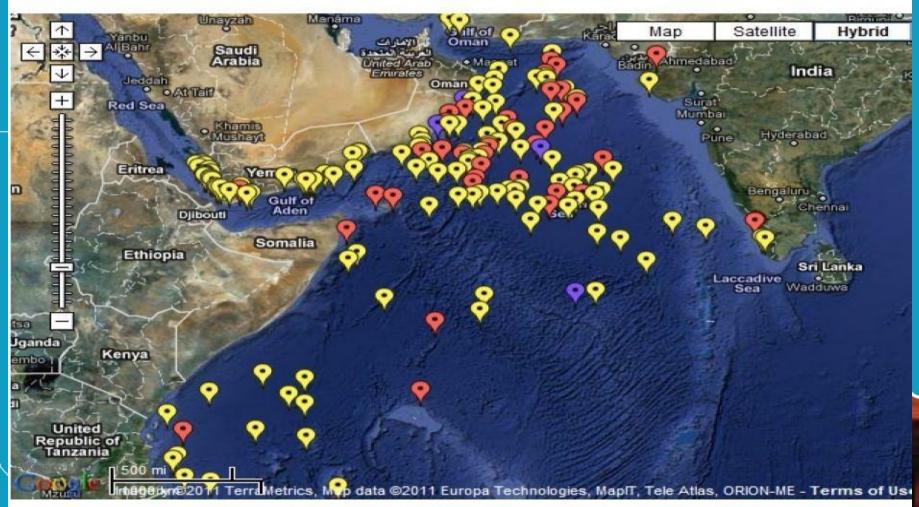
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Piracy Incident Map

(During the period of January ~ June 2011)

= Actual Attack
 = Attempted Attack
 = Suspicious vessel



Total attacks Gulf of Aden, southern Red Sea – 38 Total attacks east coast Africa & Indian Ocean - 125

Current Piracy Status

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(Updated on 16 Sep 2011)

Protection against Somalia Based Piracy



■ Worldwide Incidents
 Total Attacks Worldwide: 335
 Total Hijackings Worldwide: 35

☐ Incidents Reported for Somalia

Total Incidents: 188

Total Hijackings: 24

Total Hostages: 400

Total Killed: 8

□ Current Vessels Held by Somali Pirates

Vessels: 16

Hostages: 301

CAPT D. Moskoff Maritime Risk Symposium at Rutgers 7-9 No

BMP4 IMO Concerns in July 2011

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Ratio of successful attacks versus attacks reported

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"Since August 2008 where approximately 50% of attacks were successful, on a 12 month rolling average the pirate success ratio has been reduced to its current level of below 20%

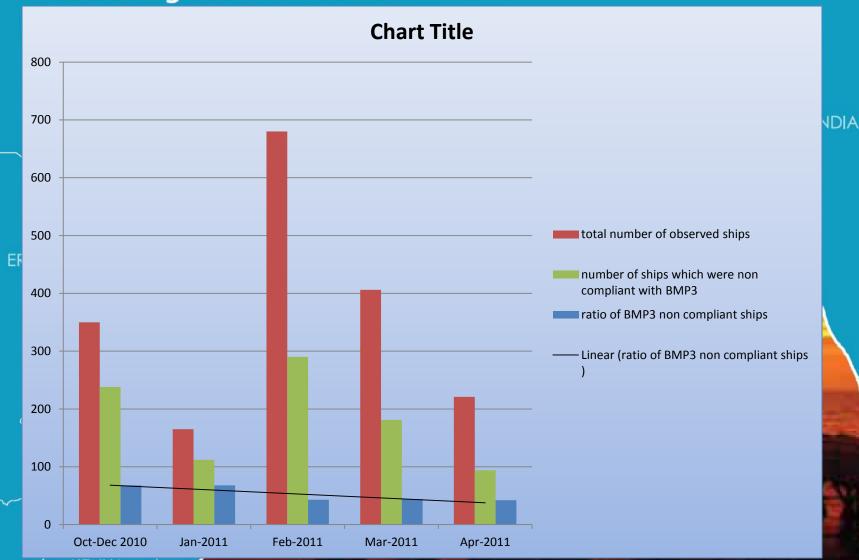
The figures for the first six months of this year (187 attacks leading to 22 hijacks) indicate that 88% of attacks are being defeated, largely by proper application of BMP3

On 1 January 2011 there were 28 ships and 656 seafarers being held. At the official launch of the Action Plan on 3 March 2011, this had risen to 30 ships and 714 seafarers.

At present (20 July) there are 22 ships and 464 seafarers being held, a significant reduction, but indicative that the situation is far from acceptable." - IMO July 2011

EUNAVFOR – Observed Compliance with BMP3

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CONTACT → GROUP

ON PIRACY OFF THE COAST OF SOMALIA

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Contact Group on Piracy Off the Coast of Somalia (CGPCS)

"Pursuant to UN Security Council Resolution 1851, the Contact Group on Piracy off the Coast of Somalia (CGPCS) was established on January 14, 2009 to facilitate the discussion and coordination of actions among states and organizations to suppress piracy off the coast of Somalia. This international forum has brought together more than 60 countries and international organizations all working towards the prevention of piracy off the Somali coast.

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It has increased shipping insurance premiums along one of the world's most traveled routes to near-prohibitive levels, and damaged littoral economies by forcing the diversion of vessels around the Cape of Good Hope. According to a report by the One Earth Future Foundation, maritime piracy is costing the international economy between 7 to 12 billion US dollars per year."

Oceans Beyond Piracy One Earth Future Foundation

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Oceans Beyond Piracy Project

"The world urgently needs to develop a robust system to manage piracy now, before a larger crisis erupts. Through collaboration with stakeholders from all sectors -- industry, civil society, and government -- the Oceans Beyond Piracy Project (OBP) is attempting to develop innovative, unique solutions. In line with OEF's vision, the Oceans Beyond Piracy Project is bringing together all affected stakeholders to establish partnerships under the framework of an inclusive global governance system. The project is made up of three components:

- 1. The OBP Global Working Group
- 2. The National Working Groups
- 3. Supporting Research"



Oceans Beyond Piracy Project

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Project Team: The Economic Cost of Piracy

Anna Bowden (Project Manager)
Kaija Hurlburt, Charles Marts, Andrew Lee, Eamon Aloyo

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- Dr. Theo Notteboom, ITMMA, University of Antwerp, and Antwerp Maritime Academy

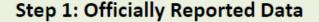
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OBP PROJECT Executive Summary

"At the end of 2010, around 500 seafarers from more than 18 countries are being held hostage by pirates. Piracy clearly affects the world's largest trade transport industry, but how much is it costing the world? One Earth Future (OEF) Foundation has conducted a large-scale study to quantify the cost of piracy as part of its Oceans Beyond Piracy project. Based on our calculations, maritime piracy is costing the international economy between \$7 to \$12 billion, per year."



Piracy Attacks in 2010



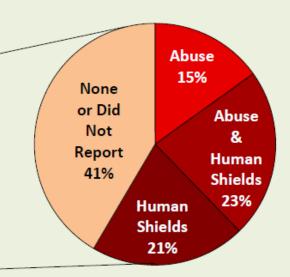
4,185 Seafarers Attacked by Pirates with Firearms

1,432 Seafarers on Vessels **Boarded by Pirates**

> 1,090 Seafarers Taken Hostage

Step 2: Data from Unofficial **News and Media Sources**

Mistreatment of Hostages by **Somali Pirates**



Seafarers attacked

Citadel survivors

Seafarers taken hostage

Seafarers abused & tortured Forced collaboration/human shields

BMP4 OBP Project Introduction and Project Premise

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Contemporary Piracy in 2010 - OBP

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- 80% of world trade by sea, 93,000 merchant vessels
 &1.25 million seafarers
- 430 piracy attacks across the globe
- 2010: 800+ seafarers held hostage

Project Reasoning

- What is the economic cost of piracy?
 - Analysts noted the difficulty in calculating costs
 - An economic analysis would assist policy makers and stakeholders.
- Look at: Horn of Africa, West Africa, Malacca Strait

B Costs: First Order (Direct) & Second Order (Indirect)

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Direct (First Order) Costs of Piracy:

- Ransoms
- Insurance Premiums
- Deterrent/Security Equipment
- Re-routing Vessels
- Naval Presence
- Piracy Prosecutions
- Piracy Deterrence Organizations

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Ransoms

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- Spectacular increase in ransom payments in 2010:
 - -January: \$7 million MV Maran Centaurus
 - -November: \$9.5 million paid MV Samho Dream
- 2005 average ransom = \$150,000
- 2010 average ransom = \$5.4 million
- To estimate the total ransom value paid in 2010: \$5.4 million x 44 successful hijackings = \$238 million
- Total paid in 2009: \$3.4 million x 52 hijackings = \$177 million
- 2009 + 2010 = \$415 million

Cost of Excess Insurance

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Five main types of Marine Insurance:

- 1. 'War Risk' (designated by Lloyds Market Association).
 - GOA designated war risk zone 2008
 - Indian Ocean designated war risk zone January 2011
- 2. Kidnap & Ransom
 - Estimated by insurance companies to increased tenfold 2008 to 2009
- 3. Cargo: goods travelled by a vessel
- 4. Hull: damage to the ship (sinking, collision, capsizing)
- 5. P & I (Protection and Indemnity): Liability, etc.

Cost of Excess Insurance

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To calculate the cost of insurance premiums:

- Take two largest premiums related to piracy: war risk and K&R
- Multiply by 90% of ships transiting the Gulf of Aden (27,000 ships).
- Then create a lower bound estimate (10% of ships) and upper bound estimate (70% of ships):

Direct Costs of Piracy	<u>2009</u>	<u>2010</u>
Kidnap & Ransom Surcharge	\$540 million	\$540 million
War Risk Premium Surcharge	\$4.05 billion	\$4.05 billion
TOTAL INSURANCE COSTS		
(if all ships purchased)	. \$4.59 billion	\$4.59 billion
Lower Bound Estimate (10%)	\$459 million	\$459 million
Upper Bound Estimate (70%)	. \$3.213 billion	\$3.213 billion

Cost of Security/Deterrent Equipment

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Total costs per year: \$363 million to \$2.5 billion

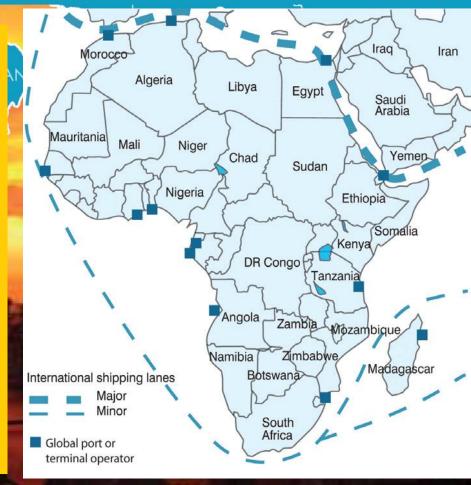
Direct Costs of Piracy

Equipment/Personnel	Cost per transit
Sonic Deterrent	\$1,250
Barbed/Razor Wire	\$12,000
Sandbags	\$1,200
Electric Fences	\$40,000
Licensed Security Guards	\$80,000
Total Per Ship, Per Transit	\$134,000

Alternative Route Repercussions Example: Cape of Good Hope

Re-routing Ships to Avoid Piracy
For some vessels, especially 'low and slow' moving ships, which are at the greatest risk of piracy attack, avoiding risk zones altogether may be a safer or cheaper option. Total excess costs of re-routing to those ships is estimated to be about \$2.4 - \$3.0 billion per year.

- Estimate that 10% of ships re-route
- Use estimated costs for 300,000 DWT VLCC & 10,000 TEU Container Ship
- •Work out cost of hire and fuel per day. Multiply by excess days taken to travel (around 10). (\$2.4 to \$3 billion per year)



Cost of Naval Presence

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- 27+ countries contribute forces off Horn of Africa, 35-45 vessels
- Calculate costs using GAO estimation for US cost/vessel/steaming day = \$83,000
- Multiply by total vessels and annual rates
- Total costs of 43 vessels = \$1.3 billion
- + Administrative budgets EU Operation Atalanta, CTF 151, NATO Operation Ocean Shield, and independent nations' expenditures
- Total costs = \$2 billion per year

BMP4 Secondary (Macroeconomic) Costs

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Indirect Costs of Piracy:

- Regional Trade
 - –E.g. Kenya import costs ↑ \$24m, exports ↑\$10m per month
- Fishing Sector
 - -E.g. Nigeria \$600 million, 50,000 jobs
- Tourism
 - -E.g. Seychelles, Kenya, Singapore
- Oil Industries
- Foreign Direct Investment
- Food Price Inflation
 - -Likely largest effect, large humanitarian consequences
- Loss of revenue from transiting Suez Canal (Egypt)
 - -Using estimate 10% ships re-route x average Suez fee \$300,000 = total loss to Egypt \$642 million per year

Secondary (Macroeconomic) Costs

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Country	Indicated Loss	
	Per Year	
Egypt	\$642 million	
Kenya	\$414 million	
Yemen	\$150 million	
Nigeria	\$42 million	
Seychelles	\$6 million	
Total Macro Costs	\$1.25 billion	

BMP4 Adding up the Costs (Direct + Indirect)

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Total costs: \$7 to \$12 billion per year

Cost Factor	Value (Dollars)
Ransoms: excess costs	\$176 million
Insurance Premiums	\$460 million to \$3.2 billion
Re-Routing Ships	\$2.4 to \$3 billion
Security Equipment	\$363 million to \$2.5 billion
Naval Forces	\$2 billion
Prosecutions	\$31 million
Anti-Piracy Organizations	\$19.5 million
Cost to Regional Economies	\$1.25 billion
TOTAL ESTIMATED COST	\$7 to \$12 billion per year

BUSINESS - MAY 9, 2011 The Wall Street Journal

Piracy Spurs Maersk to Raise Fee: Shipping Company Looks to Recoup Higher Costs as Attacks Off the Horn of Africa Jump Sharply

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BY FLEMMING EMIL HANSEN

COPENHAGEN—Reflecting higher costs stemming from a jump in piracy off the Somali coast, A.P. Moller-Maersk AS raised its emergency-risk surcharge.

Maersk's container-freight division increased the fee on each 40-foot container shipped through risky waters to \$200–\$500 from \$100–\$400, to pass on some of the company's rising costs to customers, said Erik Rabjerg Nielsen, the division's head of daily operations.

He estimated that Maersk's antipiracy costs will rise to \$200 million this year from \$100 million last year as ships are forced to sail faster and longer to prevent hijackings and crews ...

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