Tackling The Pirate Problem

Submitted as a tutorial to Military Operations Research Society (MORS) Special Meeting Analytic Support for Maritime Domain Awareness and Counter-Piracy (Unclassified) Chateau Cartier; Ottawa, Ontario, Canada Monday, 26 October, 2009. Prepared by by Dr. Larry Howard and Joseph Trindal

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WHERE DO WE START?

- Under international law, pirates pirates are considered mere criminals not connected with the greater forces of contention between nation states.

"Private Ends"

What the law says…

The 1958 Geneva Convention on the High Seas, of which the U.S. is a party, recognizes that an act committed against a ship or plane need *not* be committed purely as an act of greed in order to qualify as piracy, the phrase in Article 15 of the convention is that piracy is "…any act of depredation, committed for private ends…"

Vol. 450 United Nations Treaty Series (UNTS) pp. 11-82

Stateless Actors

Since only nation states are subjects of international law, a stateless terrorist, however self-styled, by definition is pursuing private ends. A recent Rand Corporation report assessing the challenges of piracy and seaborne terrorism referred to the both as manifestations of nonstate violence at sea.

Chalk, Peter (2008) The Maritime Dimension of International Security: terrorism, piracy and challenges for the United States. Rand Project Air Force, p. iii (preface).

What is "Security?"

- The "subject index" of standard textbooks for college classes on international relations, global politics, or even American foreign policy, rarely have an entry for "national security." In the rare case that you find an entry chances are overwhelming that it leads ***not*** to a definition of the phrase and a substantive discussion of the principle of it.

- Why that is the case tells us something about our current political culture, even after 9/11 – about how we view security, including the problem of pirates.

What Most People Think…

- Start talking in general about "security" to most people and the initial image that will start to conjure in their minds is something close to this:

…or this

…combine the word "national" with "security" and you might begin to conjure an image like this:

Security Defined

- The basic concept that all visions of security try to embody or to play from even in satire, is one of well-being, freedom from a level of risk and the anxiety associated with it that connotes ***danger***
- ***National Security,*** then is to keep the nation free of unacceptable dangers.**

A Threshold Crossed?

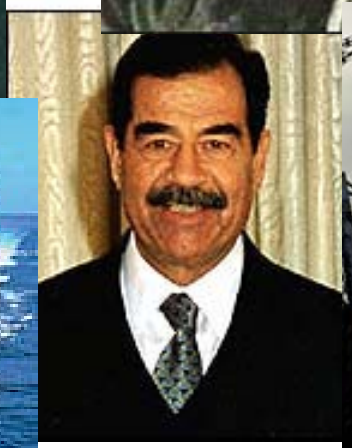
- Does "national security" include warding off and/or redressing the depredations of pirates?
- The threshold of "unacceptable danger" is a movable concept in a cultural milieu of competing interests.

The Question Then Becomes…

- What is an "unacceptable danger?"






Is Piracy "Unacceptable?"

- Many people in the shipping industry have accepted piracy as a cost of doing business and pass on the costs of higher insurance premiums, paying ransoms, etc.

- But…are there other costs?

Direct Effects of Piracy

- Death and casualties
- Hostages lose their liberty
- Emotional pain and turmoil for families and friends of victims
- Loss of cargo and ships
- Volatile cargos and sophisticated vessels brought under the control of criminals
- Generation of corruption/undermining of legal regimes
- Generation of a range of crimes from fraud to murder
- Interdiction of strategic trade routes
- Increased cost of doing business

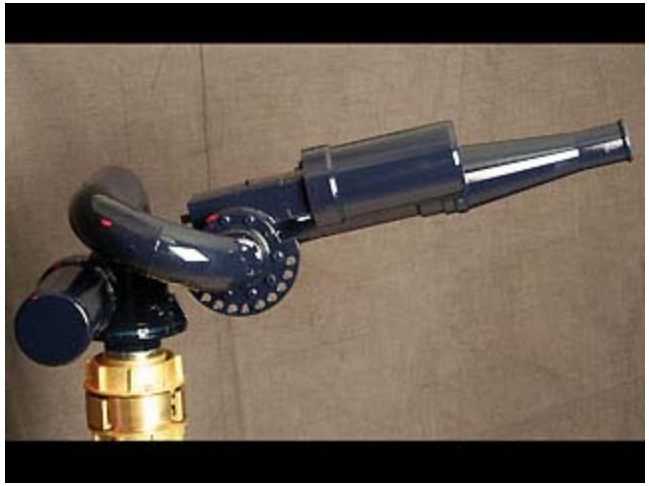
Indirect Effects of Piracy

- Absorbs/requires resources that could be allocated elsewhere, e.g. intelligence assets, naval assets, political assets
- Liability and other legal issues loom for ship owners and crew
- Stifles trade, making optimum economic activity problematic
- Encourages, by successful example, more piracy/terrorism
- Creates higher retail prices as the increased costs of doing business are pushed into the pocket book of the consumer

Lethal vs. Non-lethal

"Nonlethal" Strategies

- Nonviolent strategies can include both proactive and passive elements, and no doubt several methods could be combined:



Less Lethal Weapons:

AREA DENIAL
- Water
- Acoustic
- Light
- Electronic Countermeasures

Applies to Outer, Middle, & Inner Perimeter Protective Zones

ACCESS DENIAL
- Foams
- Impact Weapons
- Chemical Agents

Applies to On-Deck Protective Zone

Remote Controlled Fire Monitor:

- Applies High Pressure Water
- Remote Control Capability Protect Crew
- Volume and Flow Rate Threaten to Sink Target Vessel
- Limited Range

LRAD

- Long Range Acoustical Device:
  - Warning & Acoustical Denial of Access
  - +500m Range for Warning & +1000m Deterrence
  - 15 - 30° Beam

Active Denial Technology

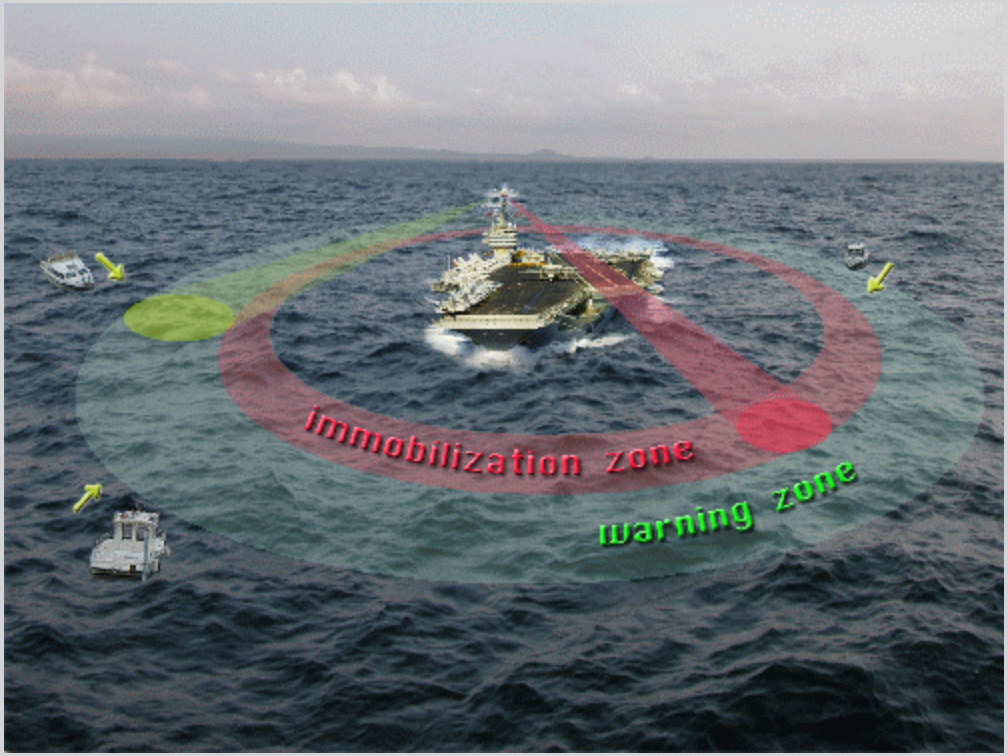
- Vessel-Mounted Active Denial System (V-MADS)
  - Electromagnetic Microwave Emission
  - Intense heat sensation.
  - 700m range.

PHaSR

- Personnel Halting and Stimulation Response
  - Handheld
  - Dual Wavelength Laser
  - Light Disorientation and Denial.

HPEMS

- High Power Electromagnetic System:
  - Microwave Area Denial
  - 5km Radius
  - Microprocessor Immobilization



Mobility Denial System

- Non-Lethal Slippery Foam (NLSF):
  - Repel Boarders
  - Especially Effective on Deck Surfaces
  - Conjunction with Lock down.

Impact Munitions

- Modular Crowd Control Munitions
  - Remote Firing
  - 60-80° Projectile Array
  - 600 Rubber Balls

Chemical Agents – Crowd Control

- CS, CN, OC
  - Irritants – Liquid & Solid (particulate)
  - Disorientation
  - Remote Release
  - Legal Implications
  - Residual Effects
  - Interior Use – HVAC implications.

Are Nonlethal Solutions Effective or Desirable?

- Avoid the area; don't give the pirates anything to attack

- This approach requires that "the area" that civilian ships avoid be defined. Based on the live piracy map of the International Maritime Bureau, "the area" would include several large and strategic parts of our globe.

Humanitarian Assistance?

- Increase humanitarian assistance to Somalia by quantum leaps and under the auspices of the United Nations do some nation-building in Somalia to eliminate the reasons why Somalis become pirates

Anybody Remember "Blackhawk Down?"

- An upgraded "humanitarian" effort need not descend to the depths it did in 1993, but remember, we are dealing with the same culture, the same chaotic situation; a well-organized humanitarian effort would immediately carry the perpetrators of it into nation building and in to direct conflict with the Islamicists.

The UN?

- The United Nations has a deplorable track record in these things; from taking a Pilate stance to the genocide in Rwanda-Burundi to the fraud of the Oil for Food Program in Iraq, the United Nations has often been part of the problem rather than part of a viable solution.

The Cost of Avoidance

- One estimate regarding avoiding the domain of the Somali pirates puts the additional cost diverting around the Cape of Good Hope at approximately $40,000 per day over an additional 8-10 more days. CBS/AP (April 15, 2009) Pirates vow to slaughter Americans. *CBS News.* Retrieved April 16, 2009 from http://www.cbsnews.com/stories/2009/04/15/world/main4945788.shtml

Payoffs??

- Negotiate in advance with the pirates and pay them off for safe passage

International Convoys?

- Create international convoys so that every commercial ship going through the area has an overwhelming deterrent against piracy

Better Training Needed?

- Train ship crews better so that at the first sign of trouble they can call for help and go into a protective stance, disabling the ship and securing themselves so as to out wait their would-be captors

Shipboard Resilience

- Training
  - Prepare Crew for Detection
  - Drill Response Procedures – Shipboard & Coordinated Regional
  - Lock-Down Crew
- Equip/Design
  - Detection Measures – Distance/All Weather
  - Deny Access Countermeasures
  - Secure Lockdown – Zonal Delays

Lethal Solutions

Why was the U.S. Navy created?

Throughout history, whether used as a last resort or something less, violence has been a successful strategy, e.g. the Navy Seals freed Captain Phillips, the "surge" overcame the insurgents in Iraq, and persistent and organized violence pushed the Soviets out of Afghanistan and the Americans out of Vietnam.

Lethal Course of Action

Use our intelligence…

Use our intelligence agencies to good effect; if news correspondents can contact the pirates in Somalia and tell us who they are one imagines it is not beyond the capabilities of the various intelligence agencies of the United States, Britain, France, Russia, and India to compile names and locations. Then, in quick, well-supported commando operations or by using drones as the CIA has done so successfully against Al Qaeda leaders, seek out the pirates and kill them or grab them where possible, and put them on trial.

Weapons of the 21st Century Pirate:

- "Fast Boats" – 70 knots.
- Automatic Rifle – i.e. AK-47 et al.
- Heavy Machine Gun – i.e. DShK 12.7mm
- RPGs – i.e. RPG-7

Somalia is Unique

Somalia no longer exists as a nation state. For some foreign policy purposes the U.S. and other nations have maintained the fiction that it still exists; but, the "government" to which we accord representatives diplomatic credentials controls only a few square miles, and that control doesn't even extend throughout the capital city of Mogadishu.

Situational Contexts

Regarding pirates in other parts of the world, each situational context requires careful evaluation, but all pirates deserve higher priority than what they have been getting.

We have little choice…

…until the nations of the world use the tools that they already have in their possession to tackle the pirate problem, all who participate in the maritime world need to be self reliant.

Self Reliance at Sea

- Is Maritime Self-Reliance a Viable Counter-Piracy Approach?
  - Maritime History – Self Reliance
  - Vastness of the Seas
  - Increasing Piracy – Maritime Insurgency
  - Economics
  - Effective Deterrence – Harden Targets
  - Support International Anti-Piracy Initiatives

Counter-Piracy

- Preparedness
  - Preparing for Piracy at Sea & at Anchor
- Mitigation
  - Reduce the Impact of Piracy Attacks
- Response
  - Deny Access; Escape & Evade; Coordinated Response
- Recovery

Vessel Protective Zones:

1. Outer Perimeter
   - Out of Pirate Weapon Range - +1000m
2. Middle Perimeter
   - Within Weapon Range
   - Outside WBIED Range
3. Inner Perimeter
   - Inside WBIED Range
   - Waterborne – Not Boarding
4. On Deck
   - On Decks or Inside Non-Vital Structures.

Conclusion

- Develop Self-Reliance Culture
- Plan Ahead
- Reduce Risk
- Train for Contingencies
- Detect Early
- Protect Zones
- Report
- Recover Swiftly