

# MORS Workshop

## Analytic Support for Maritime Domain Awareness and Counter-Piracy

Working Group 5  
*-- Counter-Piracy --*

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# WG 5 Purpose/Focus

- Better understand what deterrence and avoidance activities currently work effectively
- Better understand the current and projected costs of actions . . . and no actions
- Identify and transform available and new data into maritime domain awareness actionable intelligence
- Enable acting inside the pirates' decision, staging and attack cycles
- Explore integration, modeling, and predictive methodologies that could provide greater actionable advantages to those vessels that are potential targets of pirates
- Better understand the divisions of labor within Governments to deter/resolve piracy
- Better understand the current respective roles of international Navies and Coast Guards in the most active piracy areas
- Document consensus and recommendations on strategies, activities, and participants to enable efforts to anticipate, dissuade and deter pirates

# WG 5 Approach

- Progression of Working Sessions
  - Setting the stage, understanding contexts, and understanding terms
  - Exploring various aspects of piracy situations, from methodologies tried to information sources used
  - Capturing identification of opportunities and actions
    - Information and detection
    - Dissuasion, deterrence, prevention
    - Response
    - Resolution
    - Coordination and collaboration
    - Mission management

# WG 5 Approach

- Nagging questions
  - How many data are enough? How many data become too many? . . . And when?
  - As analysts working to better inform a decision, how do the decision makers (and we) define success?
  - What are the appropriate standards for data accuracy, sufficiency, completeness, and timeliness in a given situation?
  - Who . . . What . . . When . . . Where . . . Why . . . How . . . Linkages?

# WG 5 Findings – Action Steps Proposed

- Information and detection
  - Conduct Pattern of Life analyses \*

# WG 5 Findings – Action Steps Proposed

- Dissuasion, Deterrence, Prevention
  - Establish metrics for the venue \*\*
  - Provide persistent access to data
  - Provide access to unclassified timely data (MSCHOA, Wiki) \*\*
  - Establish metadata format options and cross-map data elements as appropriate \*
  - View an unsuccessful attack as a precursor trigger

# WG 5 Findings – Action Steps Proposed

- Response
  - Reassess/refine response action lists on commercial vessels – broadcast alert triggers are the start of the “golden x minutes” response period;  $x = (30 - \text{delay in alert})$



# WG 5 Findings – Action Steps Proposed

- Resolution
  - Track situational awareness – vessel and crew status and location

# WG 5 Findings – Action Steps Proposed

- Coordination and collaboration
  - Ensure data are in easily storable and recoverable formats
  - Provide automated analyses and alerts where feasible (36 inch pipe problem) \*\*
  - Provide coordinated collection and integration of surveillance data \*\*
  - Enable coordinated multinational analyses
  - Establish networked Communities of Interest with multinational support of servers and management \* (US, CAN, UKMTO, CMF, EU, NATO, ONI)

# WG 5 Findings – Action Steps Proposed

- Coordination and collaboration (cont.)
  - Establish structured security levels
  - Establish networked real-time analyst networks \*\*
  - Establish a Wiki for Counter-Piracy \*\* (US, CAN, UKMTO, CMF, EU, NATO, ONI)
  - Establish common regional taxonomies

# WG 5 Findings – Action Steps Proposed

- Mission management
  - Establish and enable better and more effective interfaces between policy individuals and analysts and operators (ensuring common understandings of “success” and supporting analyses needed and used)
  - Ensure coordination of metrics \*\*
  - Document assumptions and propose action alternatives
  - CMF start enforcing Exclusive Economic Zone (EEZ) strictures
  - Assess costs and contributions of current and alternative current and proposed future assets (surface/air/other)

# WG 5 Findings

## Tools and models required

- Dynamic positioning of assets
- Analyses of false positives and false negatives in data and data errors
- Common plot and track repositories
- Hypothesis testing (data limitations) – test assumptions and bounds
- Meteorological feeds and predictions (route vessels toward worse weather and sea states as feasible)
- Modeling impacts of justice efforts (or lack thereof)
- Social science modeling and analyses of clans and of pirate tactics, techniques and practices
- Model and validate characteristics of specific vessels at risk

# WG 5 Recommendations

- Establish shared databases with high resolution images and high fidelity of information AND awareness thereof AND sharing thereof
- Enhance the Traffic Tracker in the Arabian Gulf
- Build a Traffic Tracker capability for the Gulf of Aden
- Improved planning and coordination of surveillance assets – including UAVs with mixed payloads and mixed endurance levels
- Ensure continued emphasis on enhanced coordination and integration
- Dynamic suggested rerouting of commercial transits to avoid concentrations of smaller vessels and take advantage of more adverse weather
- Integrate political/economic events into incident data analyses

# Immediate Opportunities/Actions

- Improved data reporting and formatting \*\*
  - Coalition forces
  - Commercial vessels

# Longer-term Opportunities/Actions

- Integration of military vessel efforts with statecraft and stability operations
- Address piracy through activities ashore
  - Address political and economic stabilities
    - Improved self-regulation
    - Redirected labor forces (a western construct?)
    - Disrupted illicit supply/weapons logistics chains
    - Organic coast guards (within limits)
    - Alternative income streams more widely distributed
- Assess impacts of efforts ashore
- Quantify the costs/values of current and alternative activity chains through end state, including costs of lives



# WG 5 Summary

- The piracy problem is but a microcosm of the larger MDA challenge
- Piracy specifics of data and context vary significantly between venues ( Somali basin, western coast of South/Central America)
- Lexicons and taxonomies need common understandings in a venue and between participants
- “If the bricks all do their jobs and the building still falls down, the problem’s gotta be in the mortar.”