



**Homeland  
Security**

# **Maritime Homeland Security in Hawaii**

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# Overview

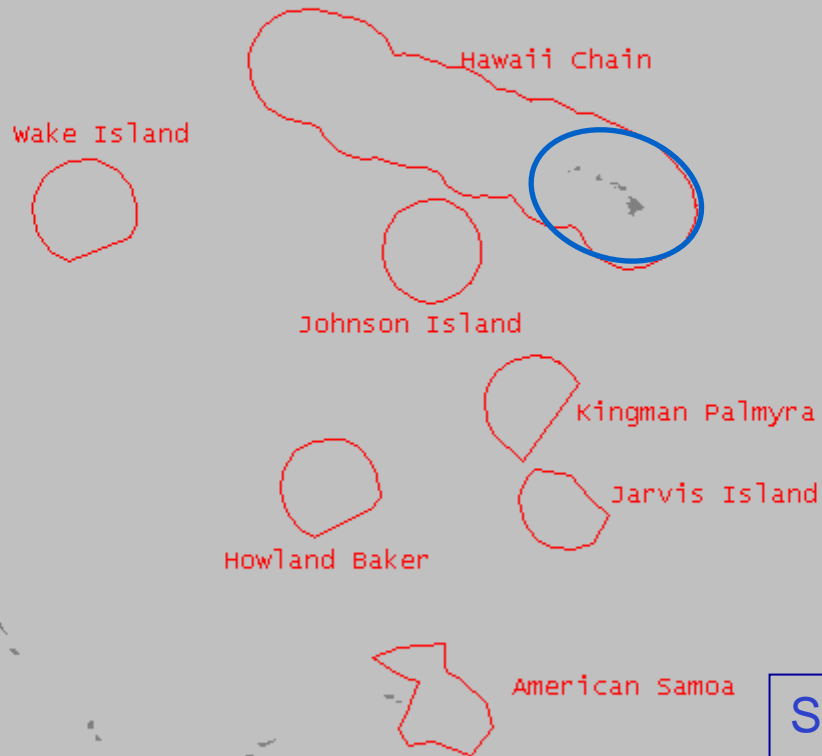
- Hawaii
- Sector Honolulu Role
- Areas for Cooperation & Collaboration
  - Coordinated Operations
  - Maritime Domain Awareness
  - Maritime Risk Assessment & Planning
  - Vertical and Horizontal Information Sharing



## Hawaii

- World's most remote population center
  - 2,390 miles from California; 3,850 miles from Japan; 4,900 miles from China; and 5,280 miles from the Philippines
- Stretches 1600 miles from Hawaii to Kure
- One of the worlds largest, most pristine coral reef ecosystems in the Papahanaumokukea Marine National Monument
- Maritime Economy is critical to the State
  - 98% of all goods enter through port
  - Electricity sourced 100% from fuel oil
  - 3 day supply of most consumables
  - Hub & spoke system of commercial cargo

# AOR



SMC – 200NM

COTP/FMSC/FOSC/OCMI



## Inspected Facilities



Oahu  
 Fixed Facility: 20  
 Mobile Facility: 16  
 Add'l MTSA: 4

All Islands  
 Fixed & Mobile Oil  
 Facilities: 81  
 MTSA: 64

Kauai  
 Fixed Facility: 6  
 Mobile Facility: 1  
 Add'l MTSA: 1



Maui  
 Fixed Facility: 8  
 Mobile Facility: 2  
 Add'l MTSA: 2

American Samoa  
& Midway  
 Fixed Facility: 6  
 Mobile Facility: 5  
 Add'l MTSA: 1

Molokai  
 Fixed Facility: 2  
 Mobile Facility: 0  
 Add'l MTSA: 0



Lanai  
 Fixed Facility: 2  
 Mobile Facility: 0  
 Add'l MTSA: 0

Hawaii  
 Fixed Facility: 10  
 Mobile Facility: 1  
 Add'l MTSA: 2





## Refuge for Trans-Pacific Voyages

- Medevacs
- Diversion for repair
- Vessels in Need of Assistance





# Homeland Security Sector Statutory Responsibilities

## *“our missions”*

- Sector Commander
  - Operation Neptune Shield
- Captain of the Port (COTP)
- Federal Maritime Security Coordinator (FMSC)
  - Maritime Transportation Security Act/SAFEPORT
- Officer In Charge, Marine Inspection (OCMI)
  - Facility Security Inspection
- Federal On-Scene Coordinator (FOSC)
- SAR Mission Coordinator (SMC)



## Enduring Coast Guard Roles “integrated operational execution”







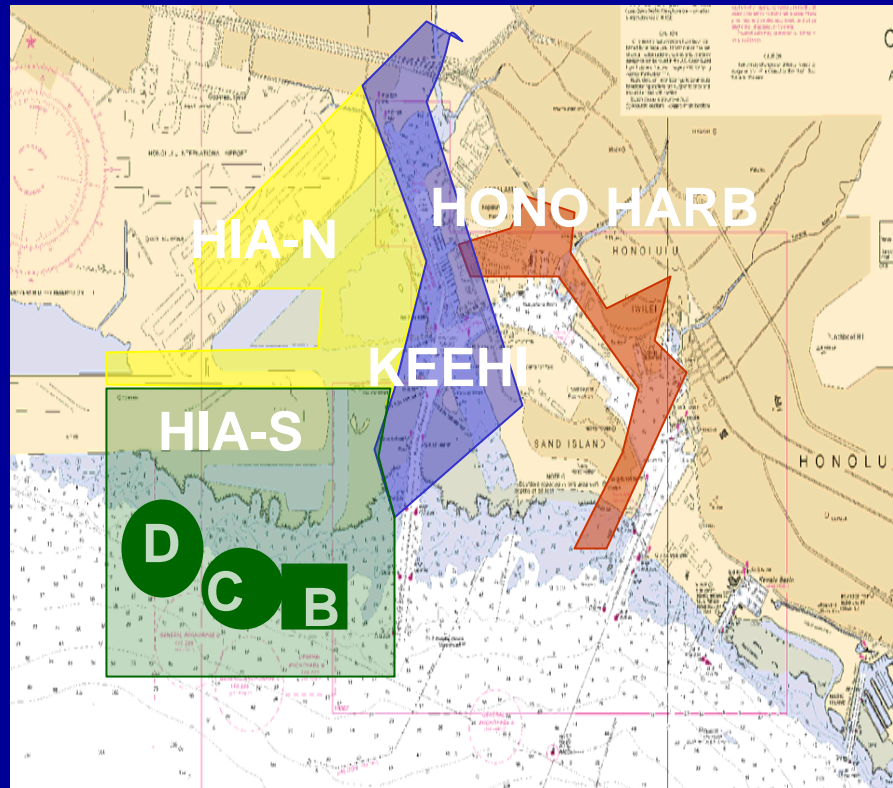
# Coordinated Operations

- Sector Commander/FMSC role
  - Operation Neptune Shield
- ONS = multiple, layered kinetic activities
  - Maritime Domain Awareness
  - Surveillance
  - Patrols
    - Maritime Critical Infrastructure
    - Security Zones
  - Facility Inspections and Spot Checks
  - Vessel Escorts
  - Boardings of High Interest Vessels
  - Area Maritime Security Coordination
  - Military Outload Security



## Honolulu Harbor – Security Zones

13 total zones  
Oahu-7  
Maui-2  
Hawaii-2  
Kauai-2



Red zone and yellow zone activated and enforced at all times. Blue zone and light green zone activated and enforced after threat or MARSEC level increase.

Dark green zone activated and enforced when a large vessel (300 GT) is at the anchorage.



## Maritime Domain Awareness

- Challenges of geography
- Convergence of multiple initiatives
  - Enhanced CG sensor package
  - State MDA
    - Infrastructure Protection Program via Port Security Grant Program
  - Marine Exchange
    - Initiated through partnership of Hawaii Harbor Pilots and San Francisco Marine Exchange



# Risk-Based Decision Making

“What should drive our intelligence, policies, operations, and preparedness plans and the way we are organized is the strategic matrix of threat, vulnerability and consequence. And so, we'll be looking at everything through that prism and adjusting structure, operations and policies to execute this strategy.”

*Secretary Chertoff 4/20/05*



# Simple Terrorism Risk Model

$$\text{Risk} = \text{Threat} * \text{Vulnerability} * \text{Consequence}$$

- **Scenario** – combination of a target and attack mode

What can go wrong?

- **For each scenario, assess the following:**

- **Threat** – likelihood of a specific terrorist attack
- **Vulnerability** – likelihood that the attack will be successful

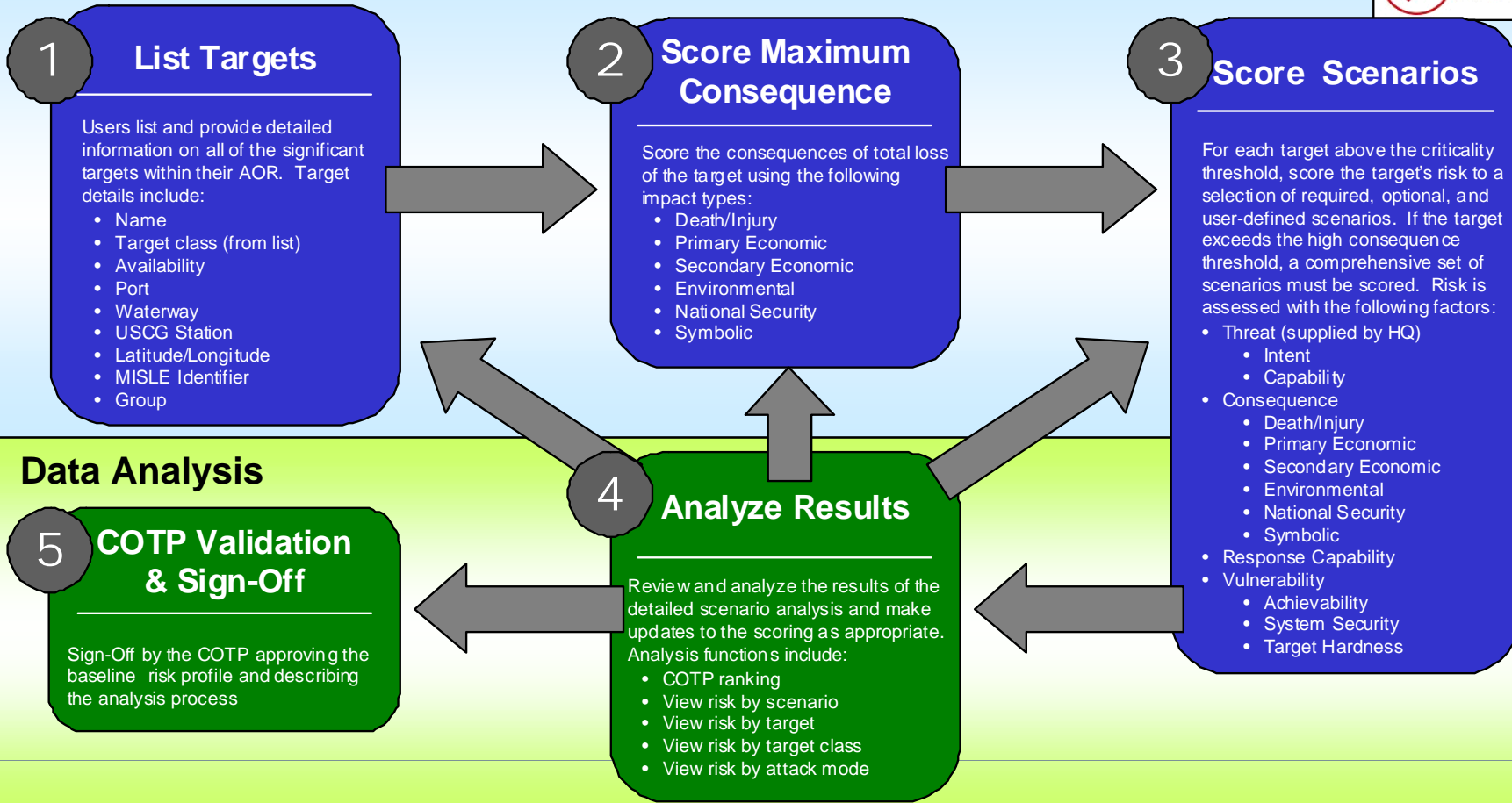
How likely is it?

- **Consequence** – level of impact associated with a successful attack

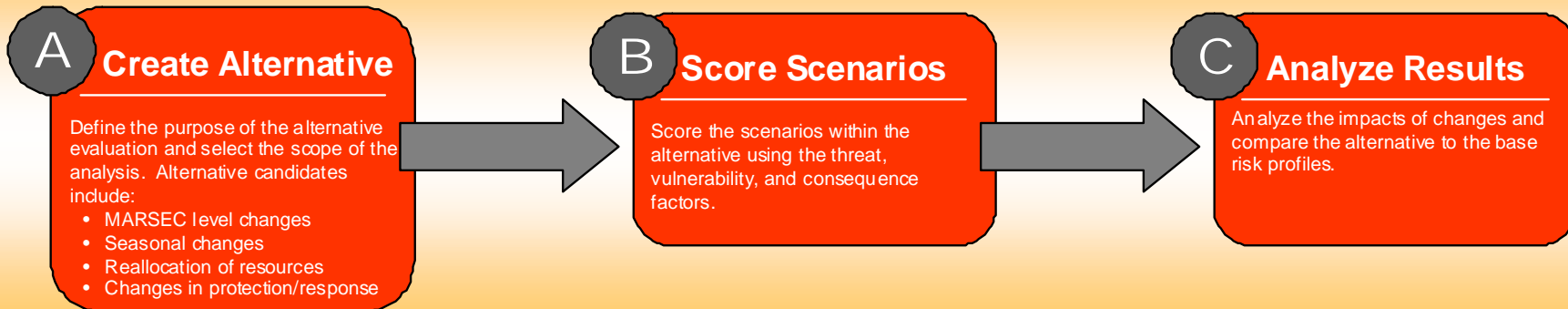
What are the impacts?

# Data Input

# MSRAM Process

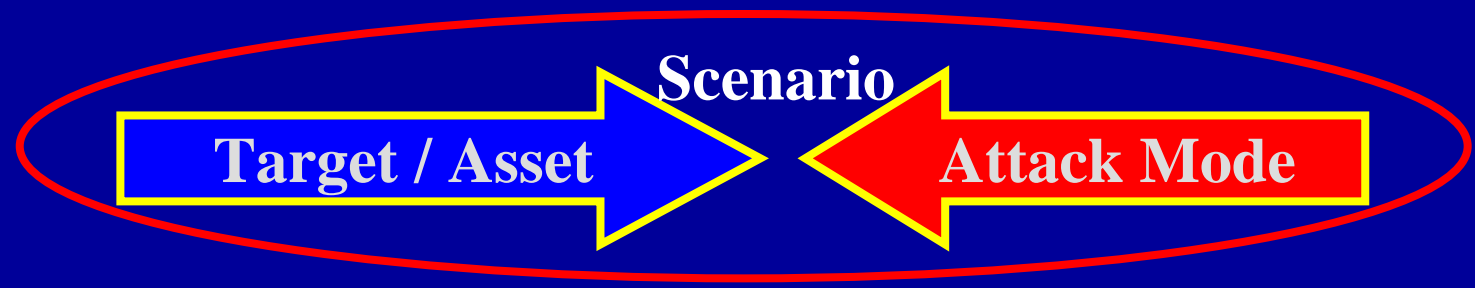


# Alternatives Evaluation





# MSRAM Risk Model

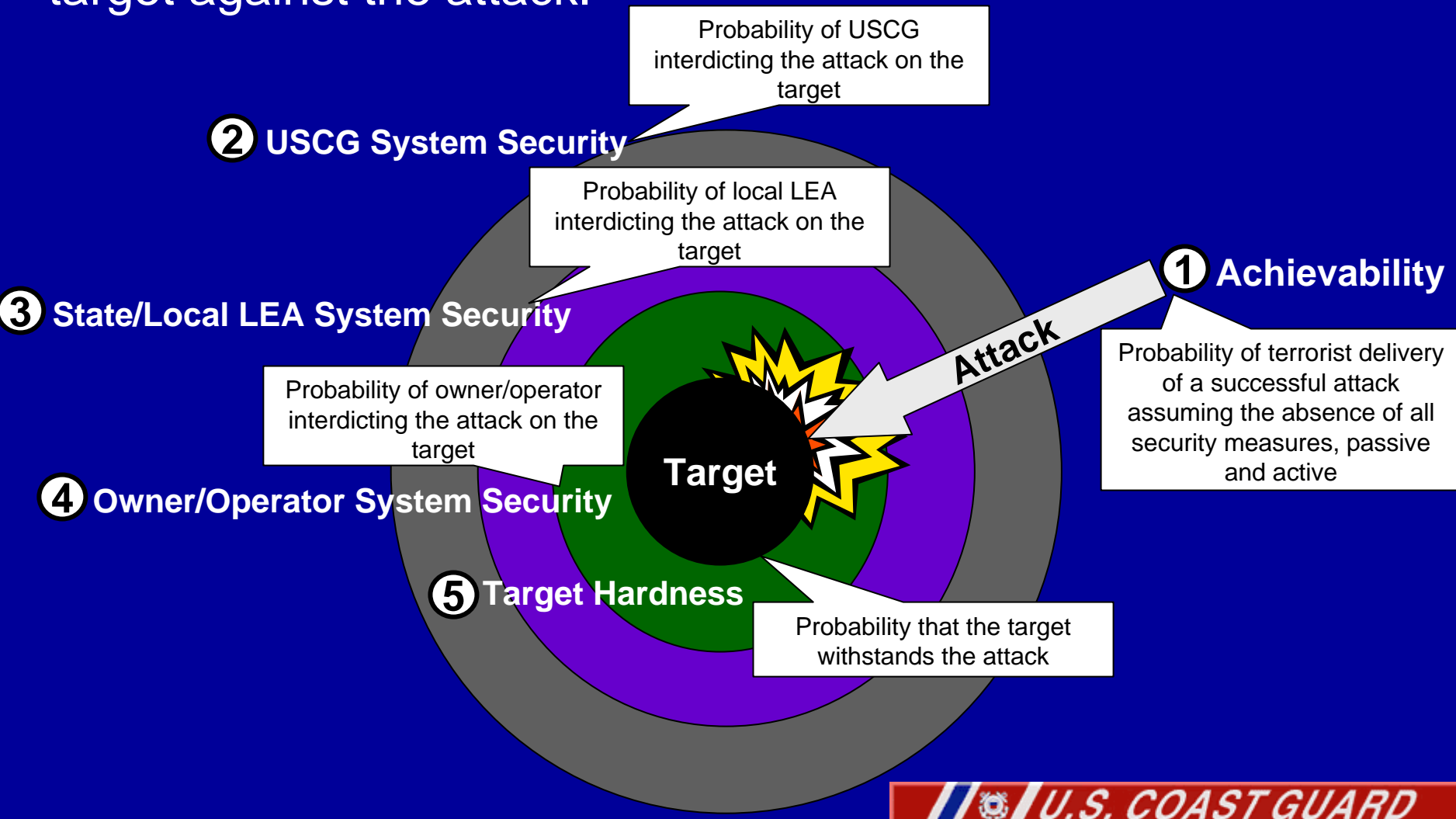


<b>Threat Attack Probability</b>		<b>X Scenario Consequence</b>										<b>X Vulnerability</b>				<b>Risk</b>		
		<b>Primary Consequence +</b>							<b>Secondary Economic Impact</b>									
<b>Intentions &amp; Confidence</b>	<b>Capability &amp; Confidence</b>	<b>Geographic Threat</b>	<b>Death Injury</b>	<b>Primary Economic Impact</b>	<b>Symbolic Effect</b>	<b>National Security</b>	<b>Environment Impact</b>	<b>Response - Owner/Operator</b>	<b>Response - Local 1st Responder</b>	<b>Response - USCG</b>	<b>Recoverability</b>	<b>Redundancy</b>	<b>Secondary Economic Impact</b>	<b>Achievability</b>	<b>System Security - Owner/Operator</b>	<b>System Security - LEA</b>	<b>System Security - USCG</b>	<b>Target Hardness</b>



# Vulnerability

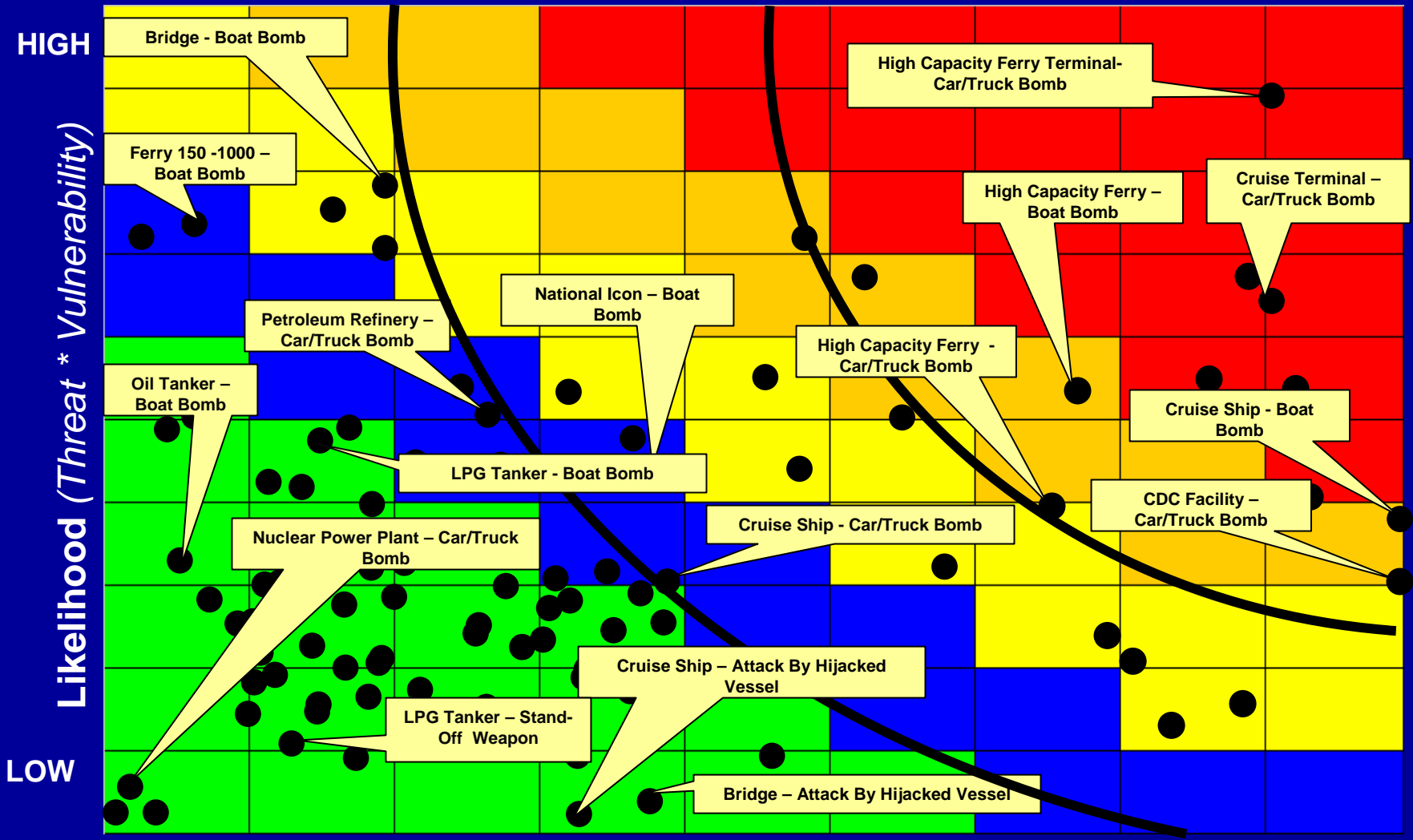
The vulnerability factors in MSRAM assess the probability that the layered defense strategy in place successfully protects the target against the attack.







# MSRAM creates a Risk-Based Risk-Informed Security Profile



LOW Consequence

HIGH Consequence





## Operational Use

- MSRAM provides list of high priority CI/KR (fixed or mobile)
- MSRAM creates a relative risk profile for use at the Area, District, Sector, and COTP level.
- Resource allocation

SENSITIVE SECURITY INFORMATION / FOR OFFICIAL USE ONLY

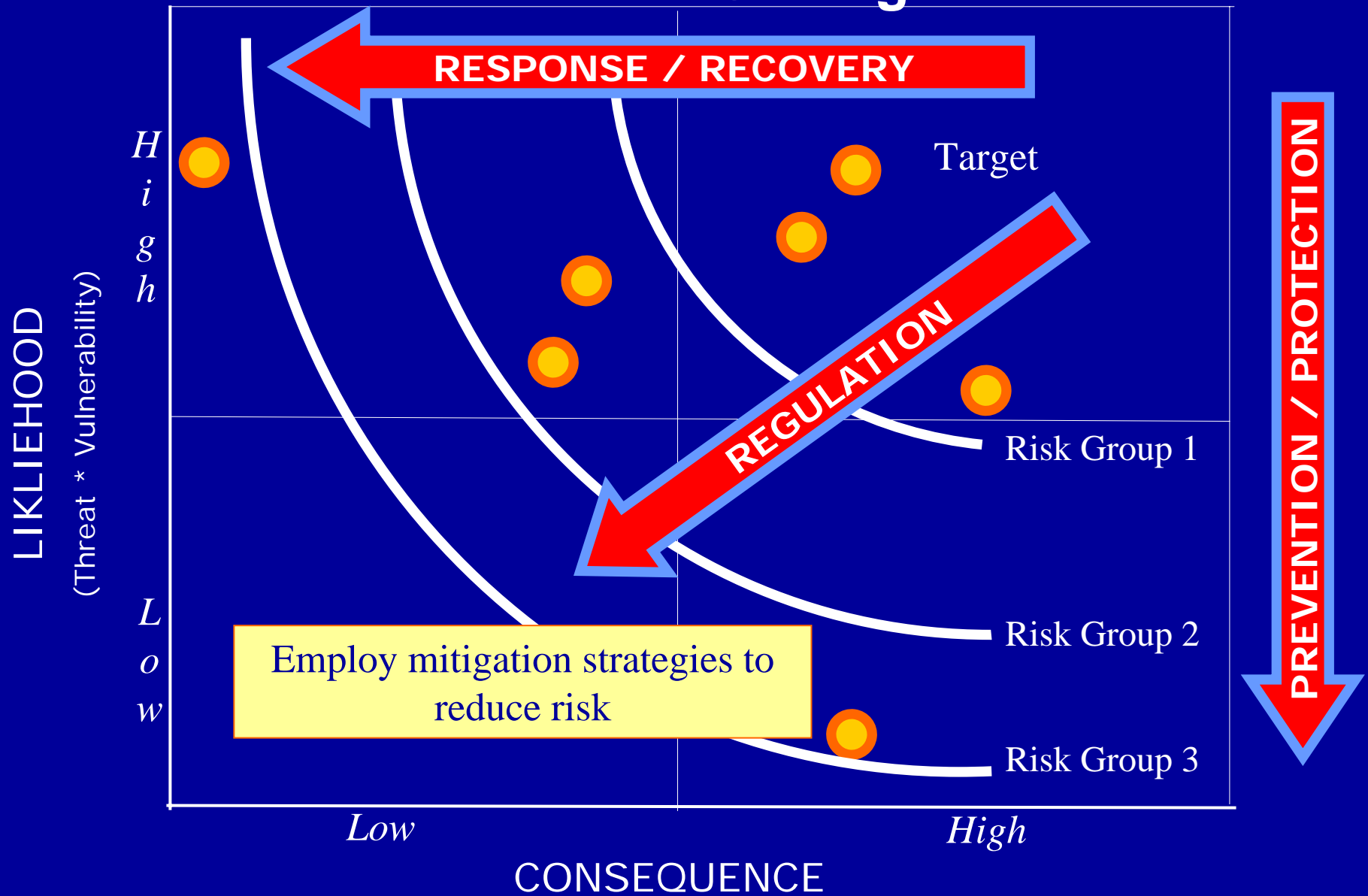
SCENARIO SCORING - CONSISTENCY ANALYSIS PORT (BY SCENARIO TYPE) - SCORED / REQUIRED SCENARIOS ONLY

TARGET	COTP	PORT	RIN		THREAT		CONSEQUENCE - PRIMARY						CONSEQUENCE - SECONDARY			VULNERABILITY								
			UN-CLASSIFIED RISK	CLASSIFIED RISK	CAVABILITY	INTENT	DEATH INJURY	SCDN	ENVIRON	NAI'L SECURITY	SYM-BOLE	IS I	RESPON	USCC	SCDN - SECOND	RECOVER-ABILITY	RESOU-RS	ACHIEVE-ABILITY	OWNER OPRN	LEA	USCC	ASUSE I	MAINT NEEDS	
<b>Agricultural and Food</b>																								
<b>Car/Truck Bomb</b>																								
PORT OF PORT ARTHUR BRIDGE		PORT ARTHUR, TX	DB	77	84	70%	70%	3	2	2	1	3	7	7	7	2	4	4	7	6	7	7	6	
PORT OF PORT ARTHUR BRIDGE	Port Arthur	PORT ARTHUR, TX	DB	16	19	70%	70%	2	2	1	1	1	6	6	6	2	3	3	7	6	7	7	6	
<b>Bridges and tunnels (HWY/RR)</b>																								
<b>Attack (Boat Bomb)</b>																								
H-10 Bridge	Houston Galveston	HOUSTON, TX	DB	304	429	80%	80%	4	4	2	1	1	7	6	6	4	4	4	4	7	6	6	4	
RAINBOW/VETERANS BRIDGE	Port Arthur	PORT ARTHUR, TX	DB	292	521	80%	80%	2	3	1	4	3	7	5	5	4	4	4	5	7	6	5	6	
Beltway 8 Bridge	Houston Galveston	HOUSTON, TX	DB	115	171	80%	80%	3	4	2	1	1	7	6	6	3	4	4	4	7	6	6	4	
MLK BRIDGE	Port Arthur	BEAUMONT, TX	DB	114	131	80%	80%	2	1	1	4	3	7	7	6	3	4	4	5	7	7	7	6	
I-45 Causeway Bridge	Houston Galveston	GALVESTON, TX	DB	112	171	80%	80%	3	3	1	1	1	6	6	6	4	4	4	4	7	5	6	4	
Washburn Tunnel	Houston Galveston	HOUSTON, TX	DB	89	97	80%	80%	3	3	1	1	1	7	7	7	3	4	4	5	7	7	7	5	
San Louis Pass Bridge	Houston Galveston	FREESPORT, TX	DB	70	82	80%	80%	3	2	1	1	1	7	6	6	3	4	4	5	7	7	7	6	
Surfside Bridge	Houston Galveston	FREESPORT, TX	DB	49	68	80%	80%	3	3	1	1	1	7	6	6	2	4	4	5	7	6	7	5	
HWY 148 Bridge	Houston Galveston	BAYTOWN, TX	DB	46	65	80%	80%	3	3	1	1	1	7	6	6	3	4	4	5	7	6	6	4	
Pelican Island Bridge	Houston Galveston	GALVESTON, TX	DB	45	68	80%	80%	3	3	1	1	1	7	6	6	2	4	4	5	7	6	6	5	
Rail Causeway Bridge	Houston Galveston	GALVESTON, TX	DB	34	47	80%	80%	2	2	3	1	1	7	6	6	3	4	4	5	7	6	6	4	
146 (Dickinson Bayou) Bridge	Houston Galveston	DICKINSON, TX	DB	30	43	80%	80%	3	3	1	1	1	7	6	6	3	4	4	4	7	6	6	4	
WEST PORT ARTHUR BRIDGE	Port Arthur	PORT ARTHUR, TX	DB	22	11	80%	80%	1	2	1	1	3	7	7	6	2	5	5	5	7	6	5	7	
146 Causeway Bridge	Houston Galveston	HOUSTON, TX	DB	1	5	80%	80%	3	3	1	1	1	5	4	4	3	4	4	3	4	4	5	3	
<b>Boat Bomb</b>																								
146 Causeway BRIDGE	Port Arthur	BEAUMONT, TX	DB	44,257	70,767	70%	70%	2	3	1	5	3	7	6	5	6	5	5	6	7	6	5	7	
H-10 Bridge	Houston Galveston	HOUSTON, TX	DB	620	875	70%	70%	4	4	2	1	1	7	6	6	4	4	4	5	7	6	6	4	
RAINBOW/VETERANS BRIDGE	Port Arthur	PORT ARTHUR, TX	DB	601	1,583	70%	70%	2	2	1	5	4	7	7	5	2	5	5	6	7	5	5	7	

SAMPLE DATA



## Tactical Use: Risk Mitigation Strategies



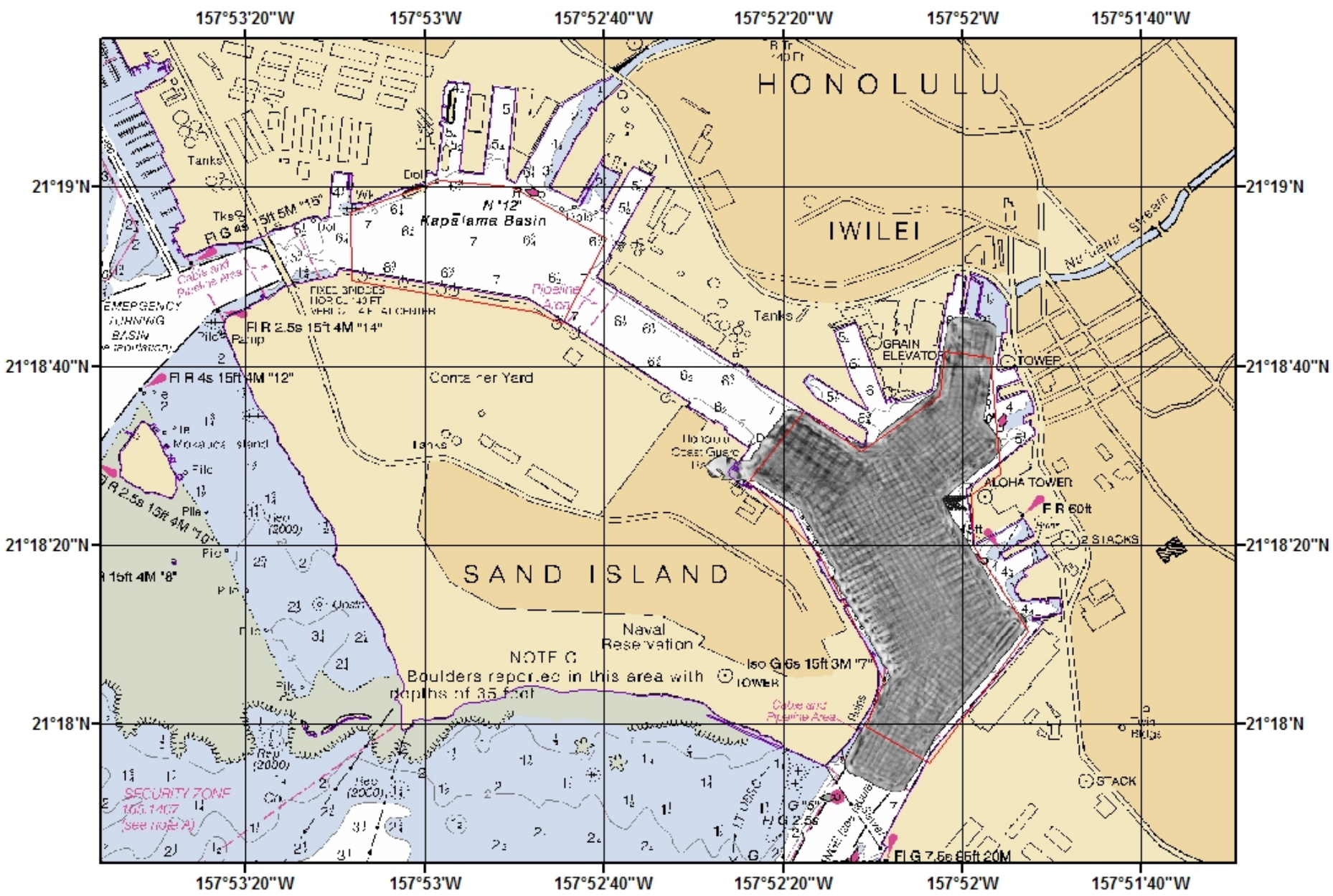


# Planning Use

**“KAIMALU O HAWAI’I 08”  
Hawaii Statewide WMD  
Exercise 2008**

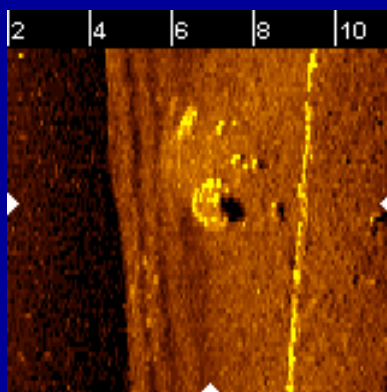


- Refines and strengthens Coast Guard and State exercise program
- Port Security Grant Process
  - including critical infrastructure, key resources and high consequence events.
  - MSRAM is used to identify the threat, consequence and vulnerability for ferry systems for the transit security grant program.
  - MSRAM is used to assess risk impact of grant proposals

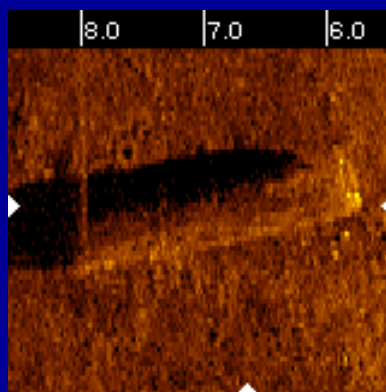




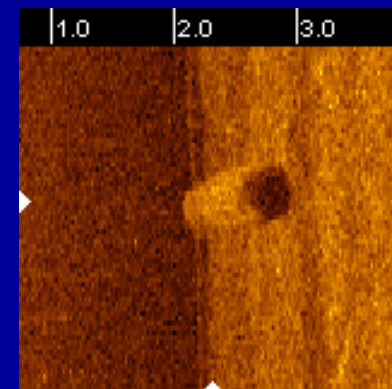
# Reacquisition Missions



44-012



44-004



44-017

- 22 contacts reacquired
- 19 dropped to confidence level 1 or 2
- 3 with confidence level 3 or 4

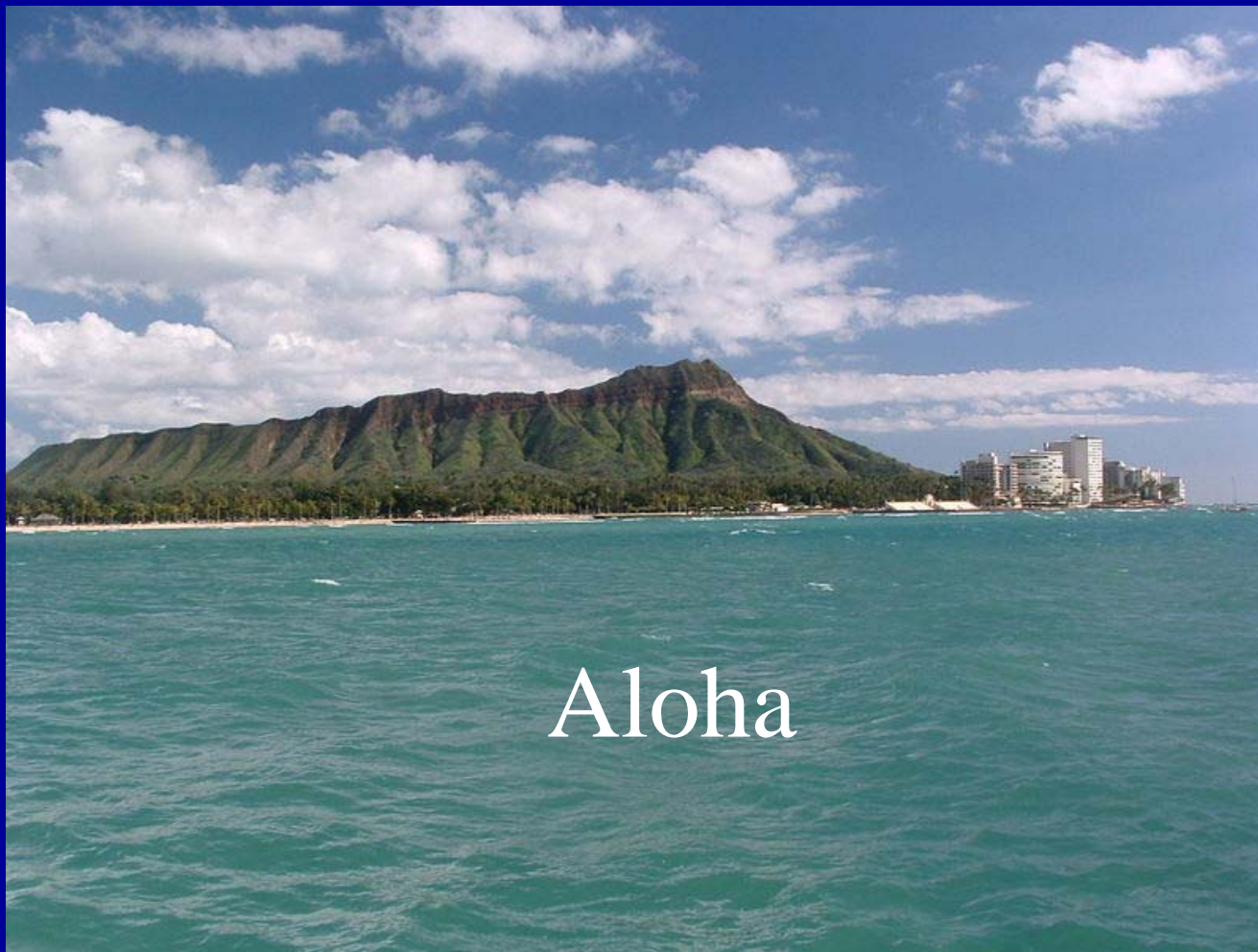


# Information Sharing

- Coast Guard Homeport System
  - National web portal
    - [homeport.uscg.mil](http://homeport.uscg.mil)
  - Tailored to each COTP zone
  - SBU information sharing
- Alert Warning System
  - List serve notification system
  - Phone, email, fax notifications
  - Bridge for security of SBU dissemination across multiple domains
- Participate/subscribe to HOMEPORT



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Aloha