Search And Rescue Optimal Planning System (SAROPS)

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Homeland Security Missions:
- Port, Waterway, Coastal Security
- Defense Readiness
- Drug Interdiction
- Migrant Interdiction
- Other Law Enforcement
Traditional Missions:
- Marine Safety
- Aids to Navigation
- Marine Environmental Protection
- Living Marine Resources
- Ice Operations
- Search and Rescue
Regardless of the mission, it’s about…

- Situation/Domain Awareness
- Decision Support
- Command and Control

…where things are...
Environmental Data Server

Internet

Web Services

Common Mapping Framework
(tailored ArcMap)

SAR Tools
SAROPS
CMF
TimeSlider
Currents Toolbox
NetCDF
Other COTS

Extensions

System Layout/Organization
Environmental Data Server

Enterprise GIS

Track Management System

Static GIS Data

Internet

Web Services

System Presentation
Deployment Approach

Distributed Pool of Terminal Servers

DELL 6850

DELL 1950

Enterprise-wide Standard Workstations

SW

SW

SW

SW

SW

SW

SW

SW

SW

SW

SW

SW

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SW

SW

SW

SW

SW

SW

SW

SW

Intranet
TS Server Pool
SAROPS is Operational

SAROPS 1.0 rollout was exactly 1 year ago
- Software built (3 years)
- Servers installed (15)
- Units transitioned (50+/−)
- Persons trained (700+ in 3 months)
SAROPS a year later

SAROPS 1.1 rollout is pending
- 3 software upgrades/patches
- Servers repositioned per network loading
- Hundreds of more persons trained
- Used in hundreds of SAR Cases resulting in the saving of numerous lives and property
SAROPS/CMF in the next years

• Migrate from ArcMap to an ArcGIS Engine App
  – Performance
  – Control
  – License considerations

• Leverage the Geospatial Context for
  – Situation/Domain Awareness
  – Decision Support
  – Command and Control

• Expand beyond SAR mission area
  – Port, Coastal, Waterway Security
  – Law Enforcement
  – Marine Environmental Protection
Lessons Learned

• KISS
• Training
• Support
• Performance
Thank You