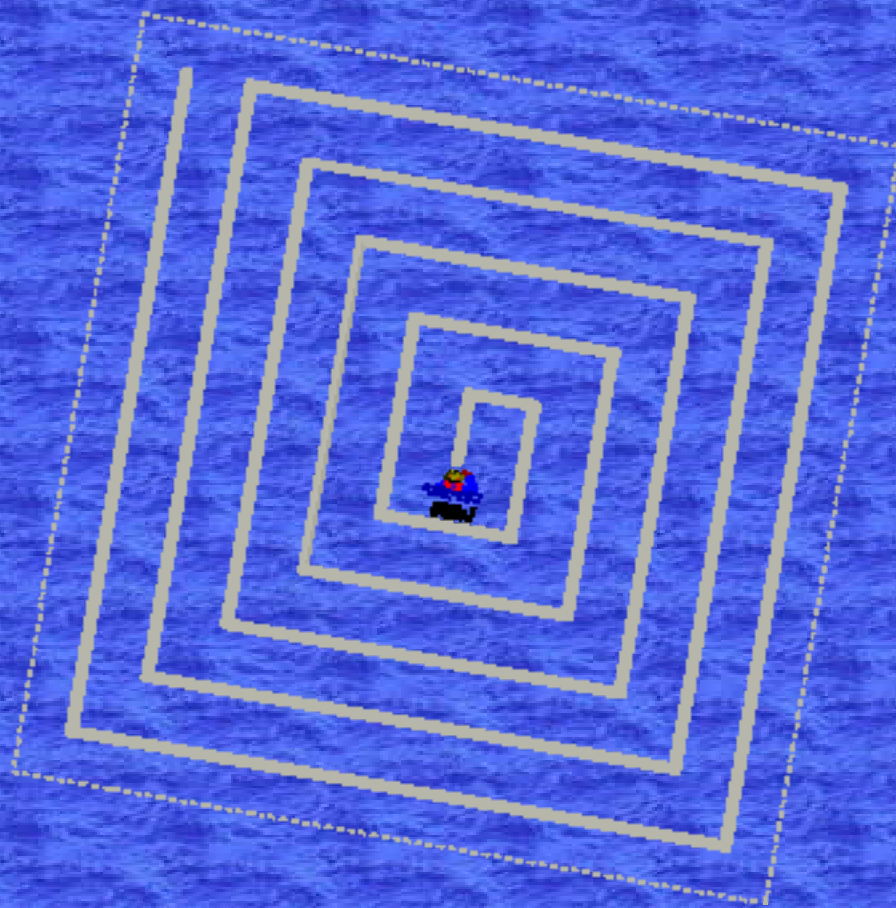


Search And Rescue Optimal Planning System (SAROPS)



Robert Netsch

robert.c.netsch@uscg.mil, (757) 638-2762

Command and Control Engineering Center, Portsmouth, VA



U.S. COAST GUARD



**Homeland
Security**

US Coast Guard (est. 1790)

Homeland Security Missions:

- Port, Waterway, Coastal Security
- Defense Readiness
- Drug Interdiction
- Migrant Interdiction
- Other Law Enforcement



U.S. COAST GUARD



**Homeland
Security**

Traditional Missions:

- Marine Safety
- Aids to Navigation
- Marine Environmental Protection
- Living Marine Resources
- Ice Operations
- Search and Rescue



U.S. COAST GUARD



**Homeland
Security**

Regardless of the mission, it's about...

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

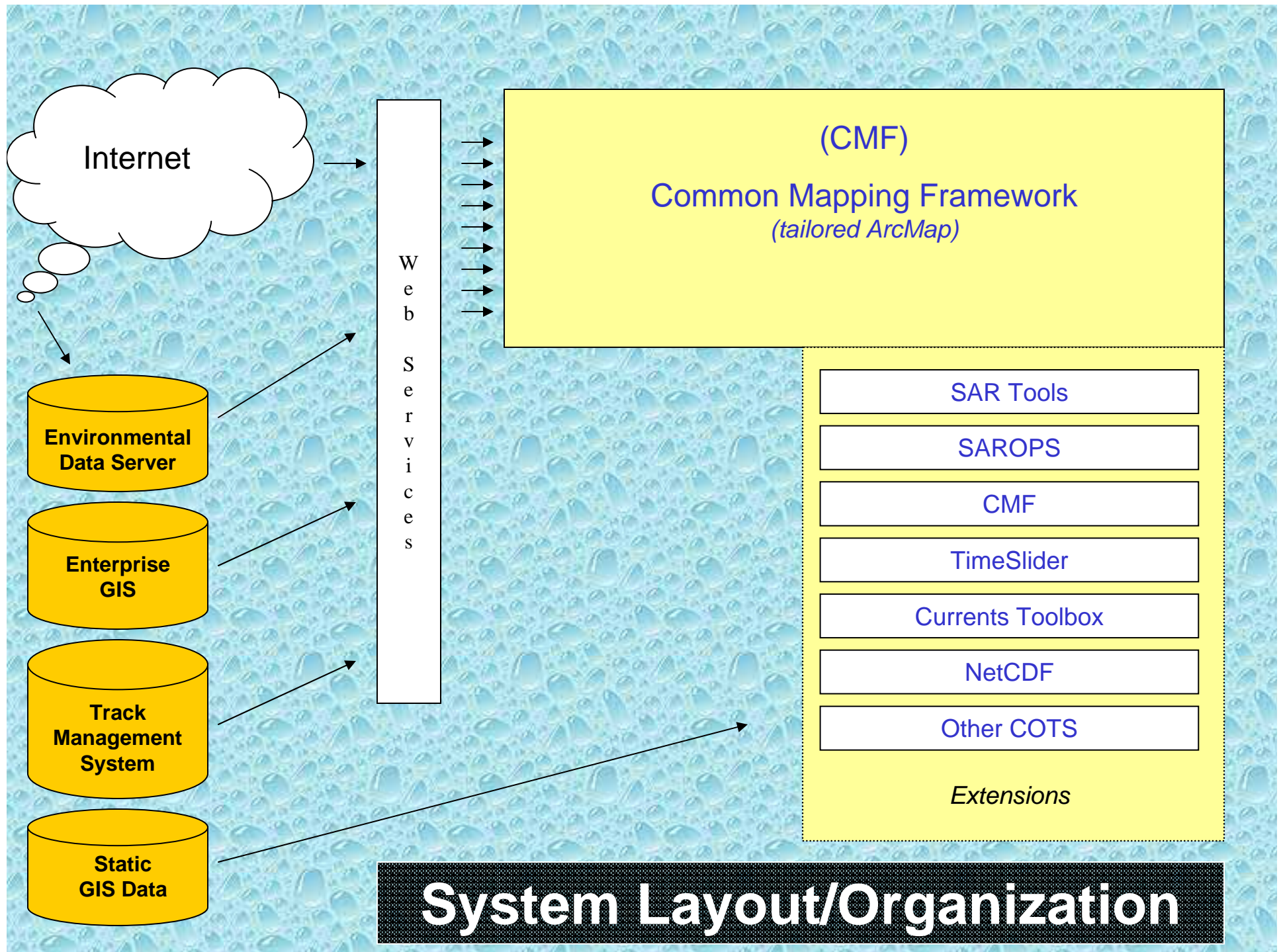
... where things are

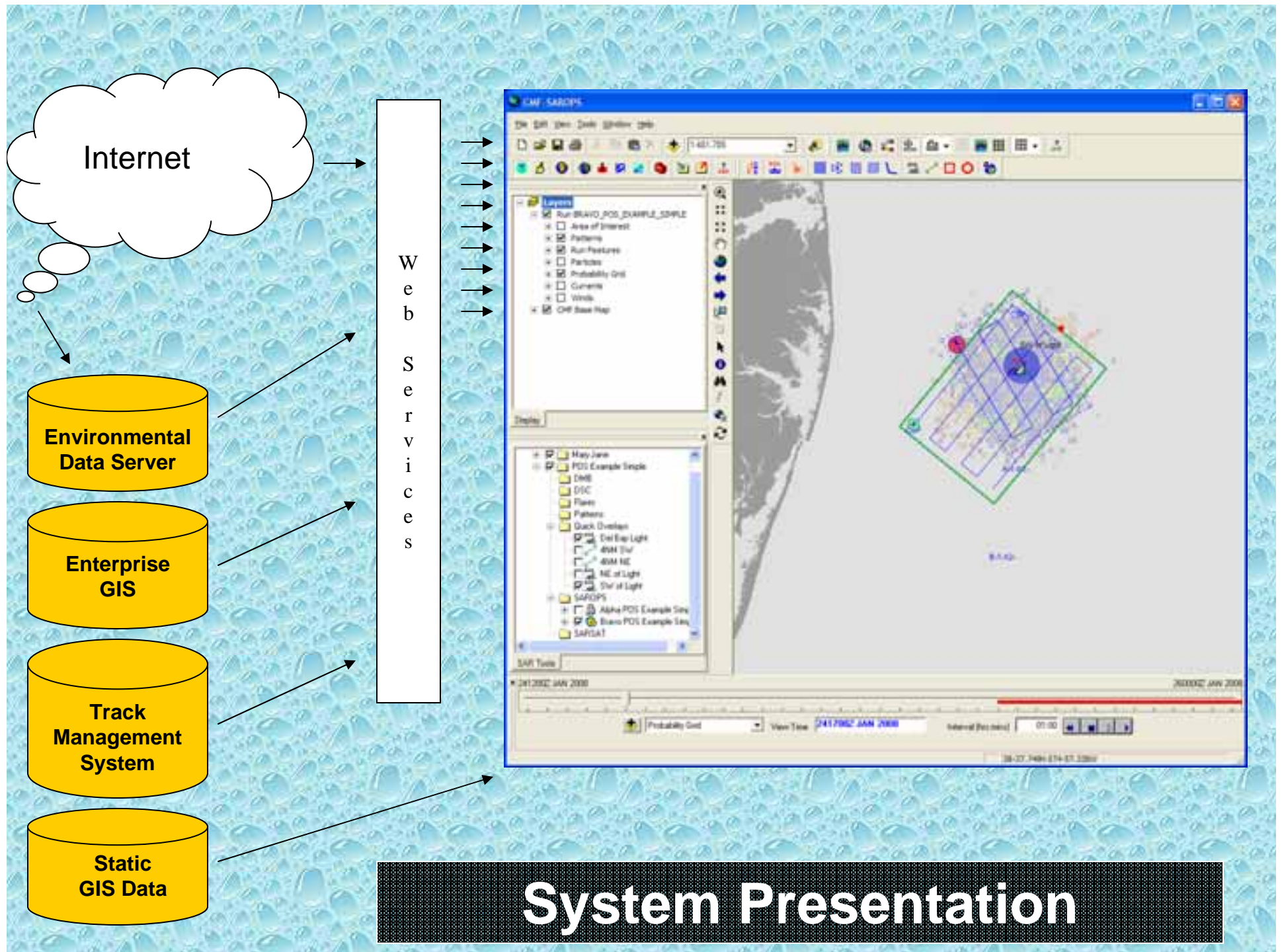


U.S. COAST GUARD

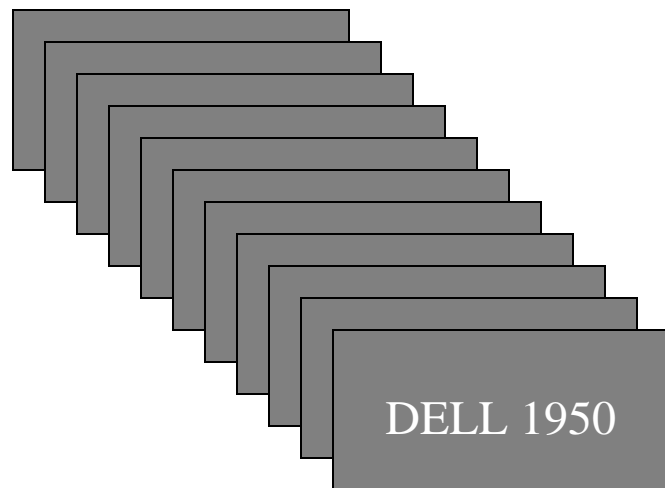
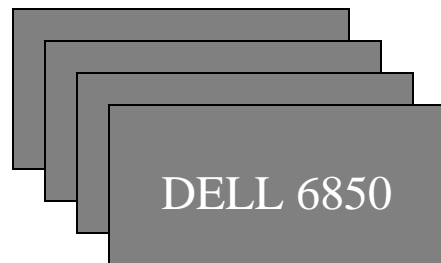


**Homeland
Security**



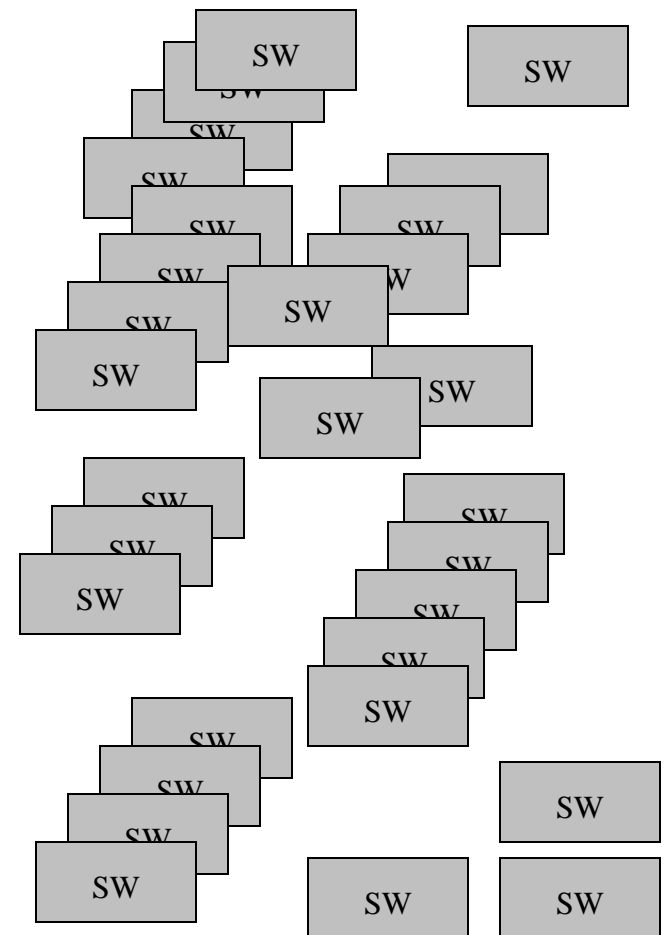


Distributed Pool of Terminal Servers



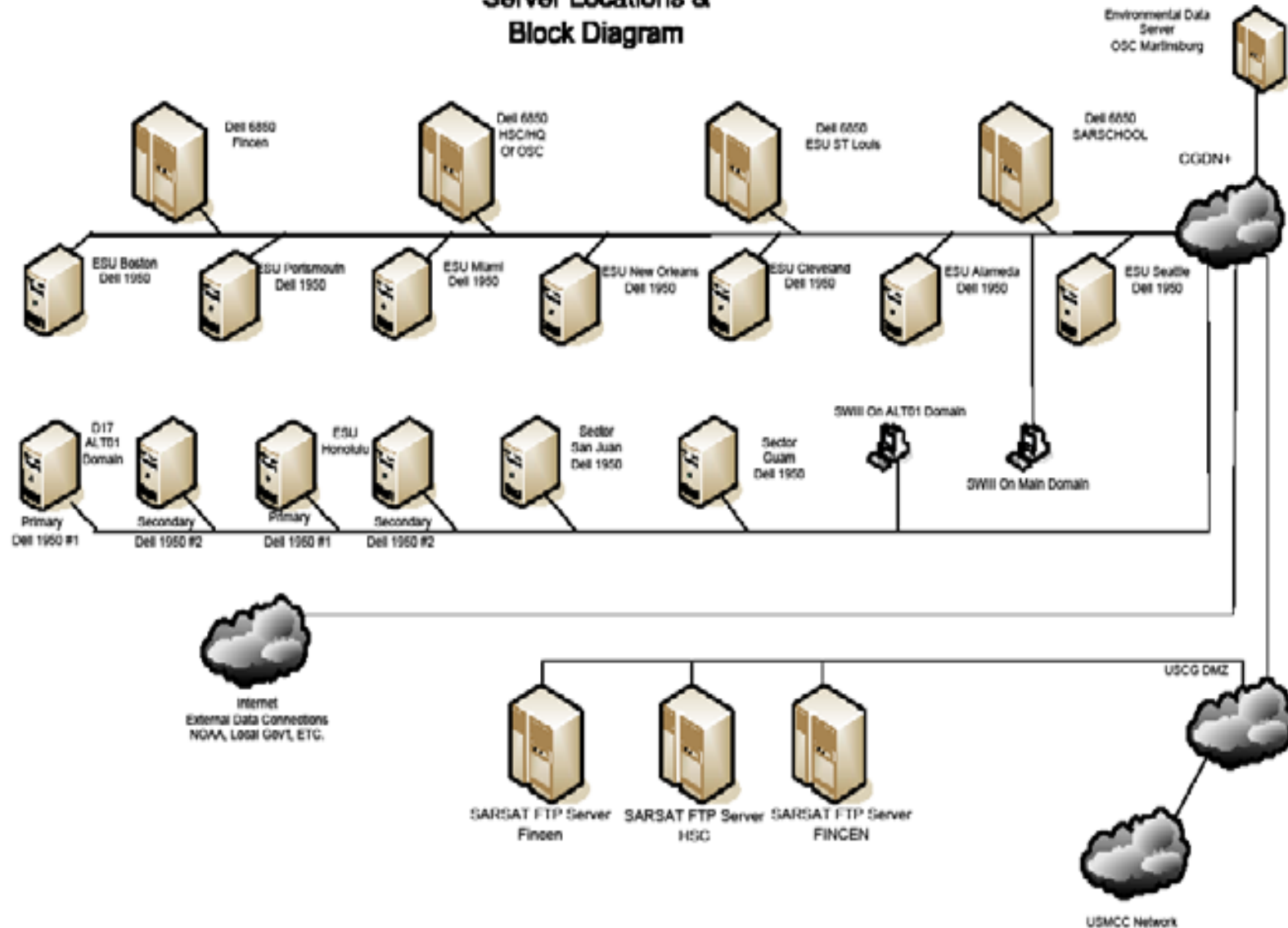
Intranet

Enterprise-wide Standard Workstations



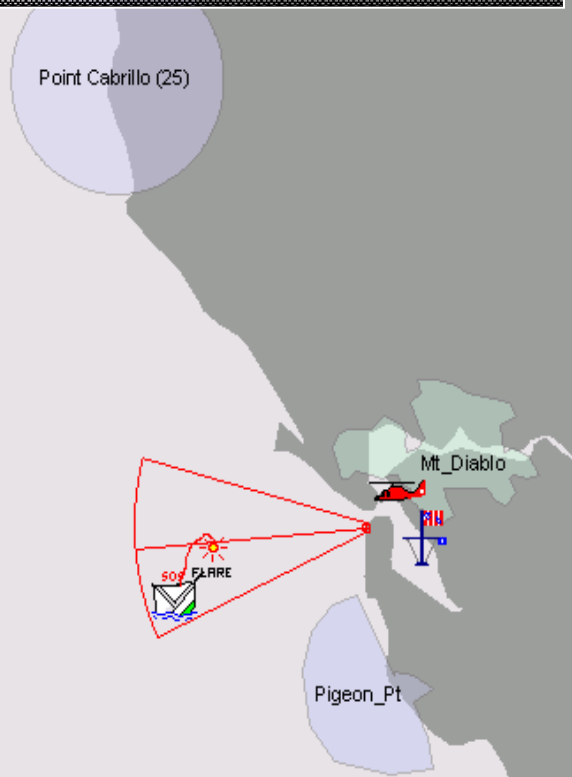
Deployment Approach

SAROPS Terminal Services Server Locations & Block Diagram



TS Server Pool

SAROPS/CMF Screen Shot 1



U.S. COAST GUARD



**Homeland
Security**

SAROPS/CMF Screen Shot 2

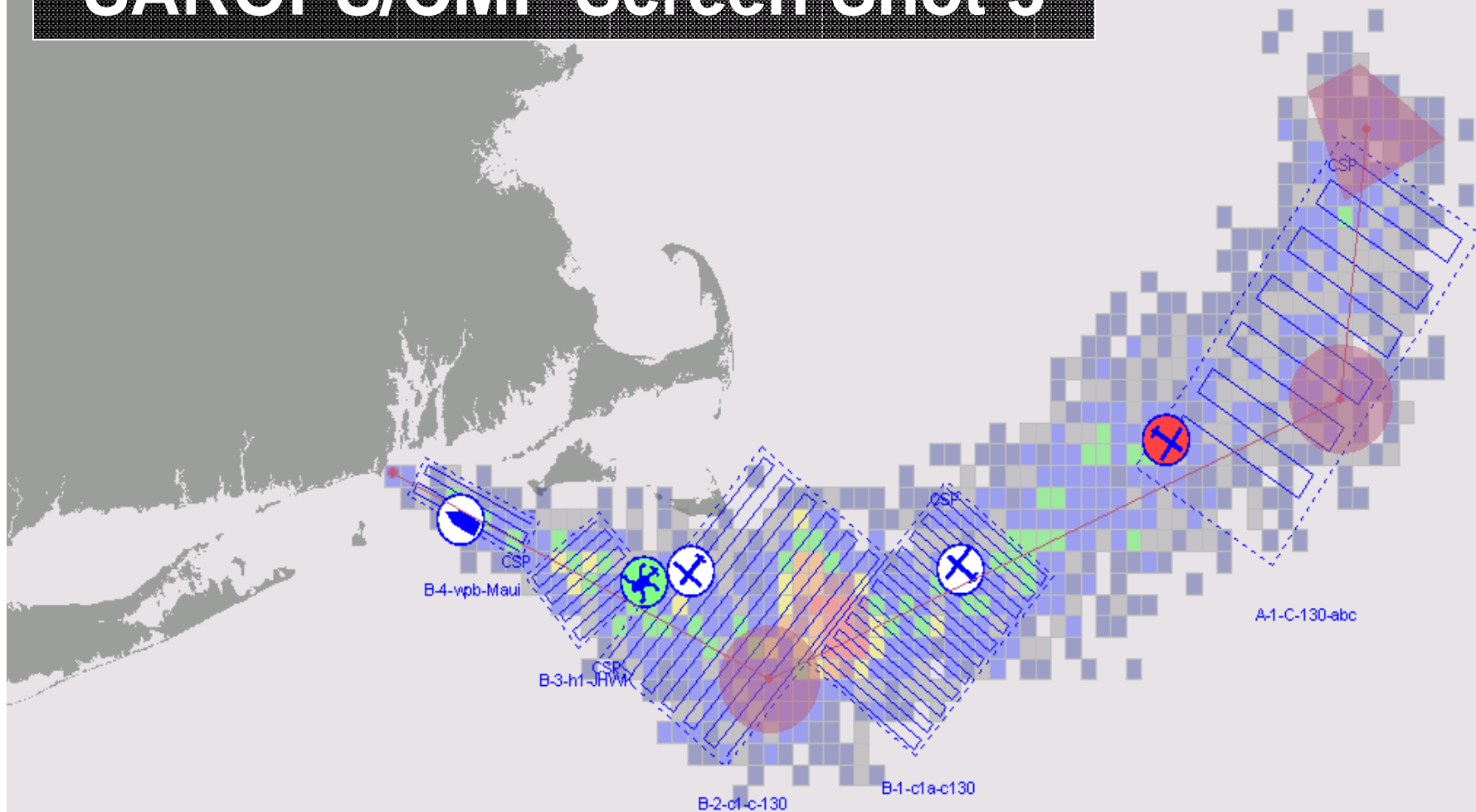
CAUTION - 2007 EDITION

On July 1, 2007, the Bureau of the Geographic Names Board (BGNB) has approved the 2007 edition of the chart. This chart has been revised to show the new alignment of the TSS. In order to give mariners time to adjust to the changes, this chart is available in two editions, one for the usual approach to the TSS and one for the alternative alignment. Please use the previous edition of the chart until the usual approach to the TSS is shown only on the National Ocean Service (NOS) Charts 13000, 13001, 13002, and 13003.



Homeland
Security

SAROPS/CMF Screen Shot 3

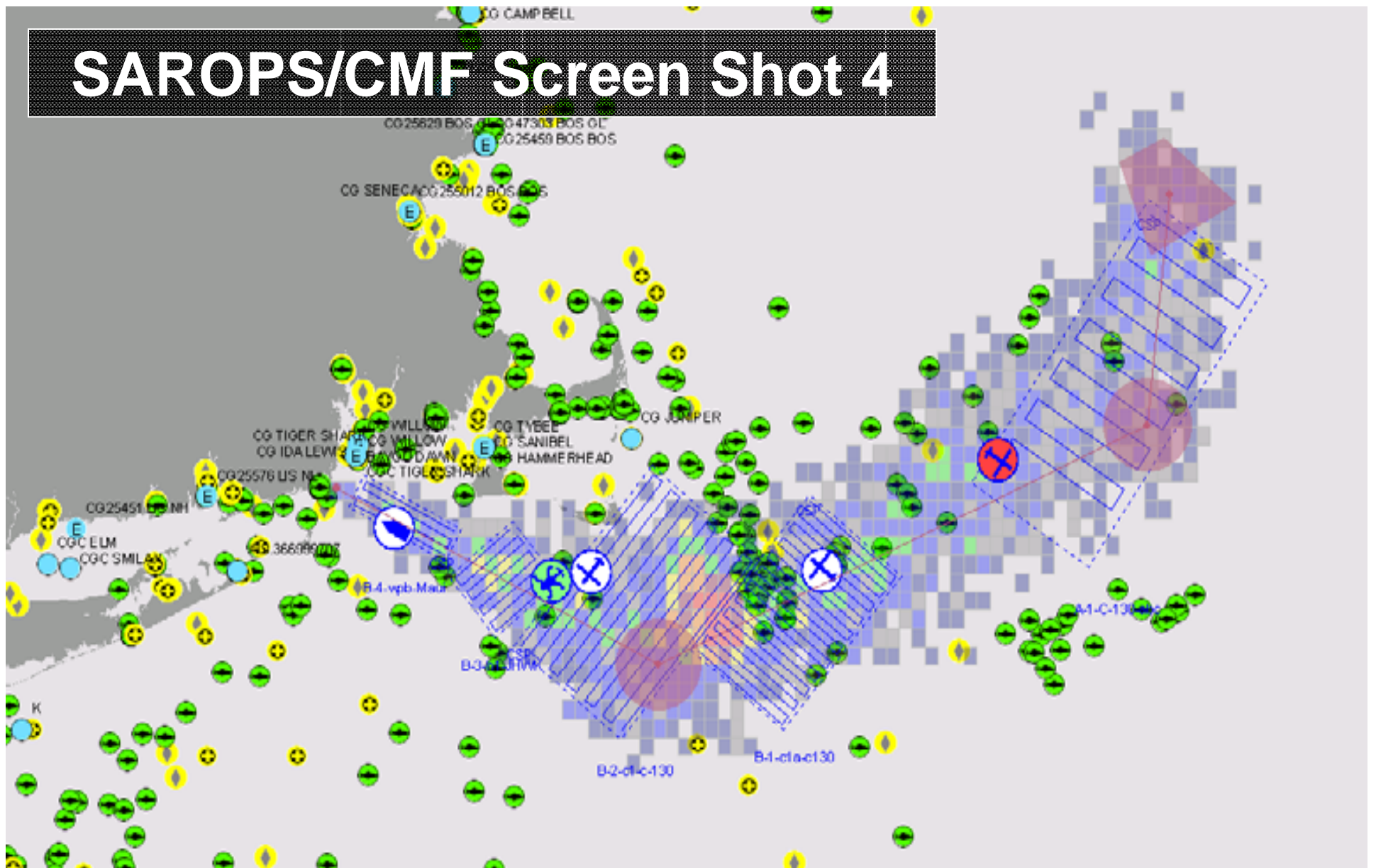


U.S. COAST GUARD



**Homeland
Security**

SAROPS/CMF Screen Shot 4

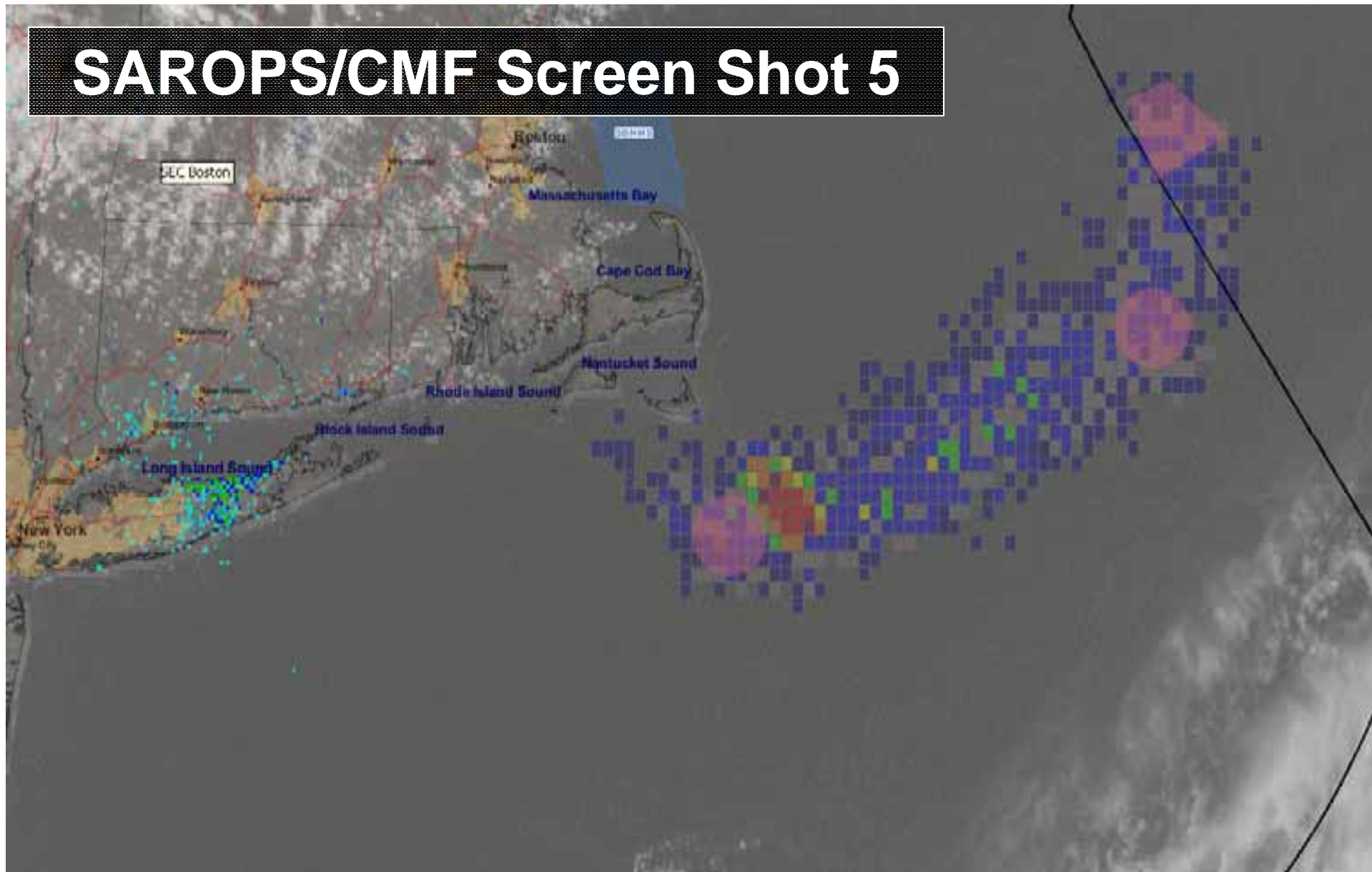


U.S. COAST GUARD



Homeland
Security

SAROPS/CMF Screen Shot 5

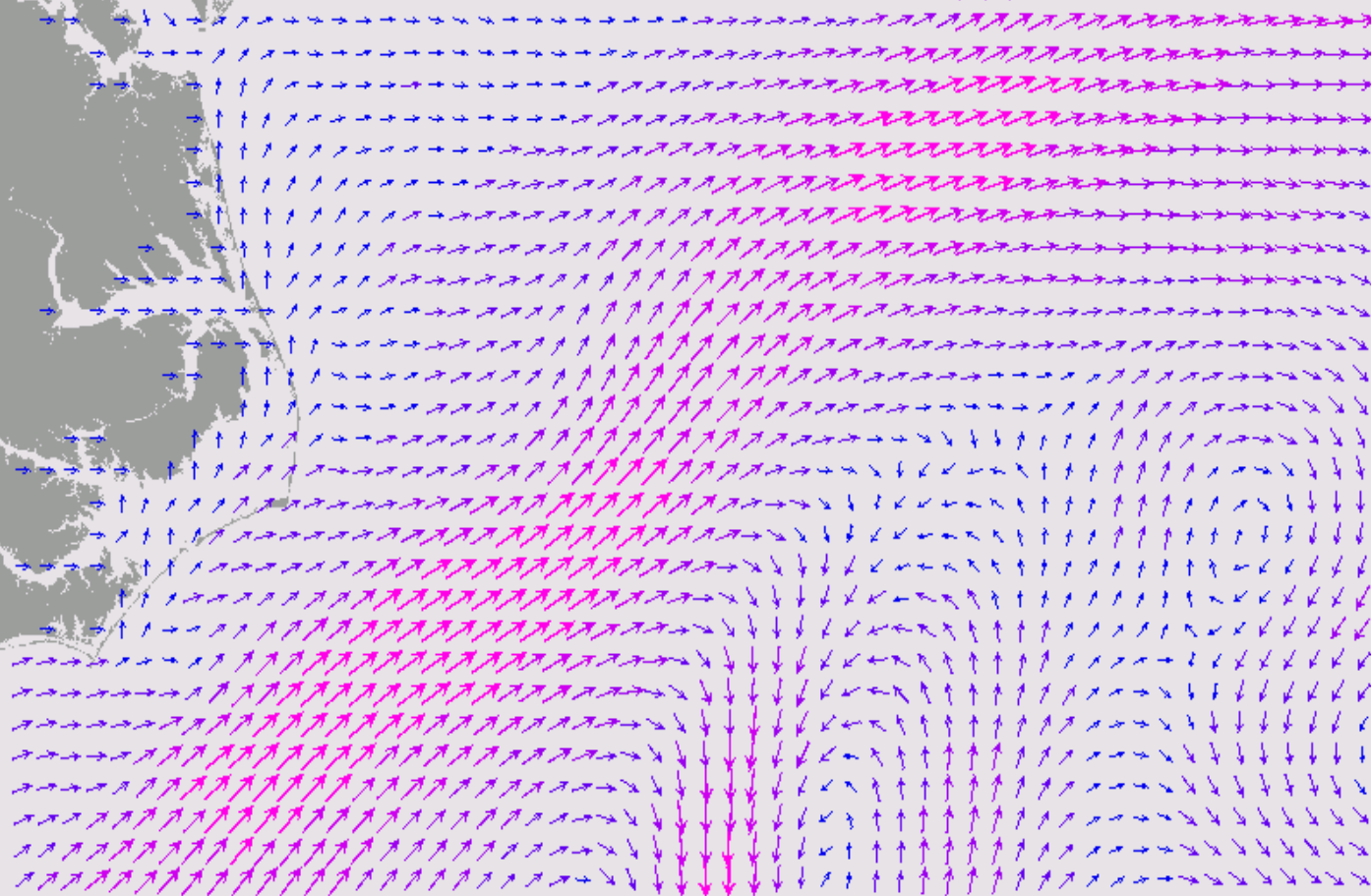


U.S. COAST GUARD



**Homeland
Security**

SAROPS/CMF Screen Shot 6



U.S. COAST GUARD



**Homeland
Security**

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)



U.S. COAST GUARD



Homeland
Security

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



U.S. COAST GUARD



Homeland
Security

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



U.S. COAST GUARD



**Homeland
Security**

Lessons Learned

- KISS
- Training
- Support
- Performance



U.S. COAST GUARD



**Homeland
Security**

Thank You



U.S. COAST GUARD



Homeland
Security