Project ATHENA
Overview

March 30, 2006
What is Needed...
Maritime Domain Awareness

“Wide Area Surveillance” of maritime environment
- Cooperative and non cooperative tracking and analysis for long range/early warning

ISR data integration to determine intent
- Information from ports of origin, AIS, shipping manifests, intelligence sources

Common Operating Picture of maritime environment
- All participants (NORTHCOM, USN, USCG, First Responders, etc) provide relevant information as needed
- Disseminate actionable Intelligence to respond to threats

Build a North American “Maritime Picture”
Project ATHENA provides a National Domain Awareness test bed that:

• Evaluates system concepts and operational doctrine
  – Define and evolve the capability roadmap
  – Demonstrations planned to evaluate current feasibility and build future roadmap

• Integrates local, regional and long range surveillance and communications to first responders
  – Integrated sensor system for comprehensive identification, detection, monitoring and interdiction
  – Detect, identify, track, fuse and disseminate actionable intelligence to appropriate responders concerning threats originating within the maritime domain
  – Scaleable and flexible, integrating proven Off-The-Shelf investments

• Integrates Sensors and Systems that contribute to a National Maritime Domain Awareness System
Spiral Development in a Test Bed Environment

Customer Needs

- Evaluate System Capabilities Tradeoffs
- Refine Objectives
- Evolve Capabilities Roadmap
- CONOPS Development
- Rapid Development in Open Architecture Framework
- Test and Evaluate with Stakeholders
- CONOPS Testing
- Feedback
- Customize and Field
- CONOPS Deployment
- Feedback
- Tested, Proven Capabilities

Border Patrol Operations Center
Tonawanda

Sensor Locations
USCG STA
Interdiction Forces
Existing Border Patrol
Remote Video System
Border Patrol
Operations Center
Tonawanda

Lake Ontario Maritime Domain Awareness

For Official Use Only
Project Athena capabilities fielded in Buffalo NY in support of Joint Task Force-North operations

- System fielded in 3 weeks
- Operation 24/7 Jul-Sep 05

Provided situational awareness of maritime traffic in Lake Ontario

Mobile platform deployed to provide coverage on Lake Erie

Integrated into existing command and control facilities of the Border Patrol
Fielding Project Athena: Operation Gulf View

Provide shared situational awareness to facilitate synchronization and coordination of enhanced Homeland Security efforts in the Joint Operations Area – maritime, air and ground domains.

- System fielded in 3 weeks
- Operation 24/7 Feb -Mar 06

Provide information and intelligence on the void of knowledge regarding illicit narcotics trafficking.

 Demonstrate the operational capability to integrate multi-sensor and multi-source information to detect, identify, track, fuse and disseminate actionable intelligence to appropriate responders, primarily concerning threats originating from the maritime domain.
Results: Operations Lake View & Gulf View

Lakeview

- During 3 Months Jul – Sept 05
  - 7905 Vessel Tracks Monitored
  - 843 Designated Vessels of Interest
  - 278 Passed to Canadian LEAs
  - 110 Intercepted by U.S Authorities for Boarding/Interviews

(During 2004, Zero Vessels Monitored or Boarded)

Gulf View

- During 6 Weeks Feb – Mar 06
  - 8115 Vessel Tracks Monitored
  - 157 Designated Vessels of Interest
  - >1790 Apprehensions – 2 ASIC
  - 10 Seizures – 3259 lbs Marijuana; 106.1 lbs cocaine
Summary

The National Security Threat... dictates a firm understanding of what is occurring within the maritime domain

Athena delivers:

- System of systems approach for fast and flexible maritime domain awareness
- Speed and accuracy of maritime threat information as far from our shores as possible
- Integrated MDA demonstration model for international and national use

Athena demonstrates maritime domain awareness today that is extendable to “all domain” (land, sea, air) capabilities, which can be brought to bare against a variety of narco-terrorist threats.