Port Security Seminar & Expo

Radiation Portal Monitor Program Update

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JUST THE FACTS

WORKING IN MORE THAN 100 COUNTRIES

$2.8 billion ANNUAL REVENUE

FOUNDED IN 1966

WORKED ON 60,000 PROJECTS IN FY2017

400 OFFICES WORLDWIDE

Publicly traded on NASDAQ as TTEK GLOBAL SELECT

17,000 ASSOCIATES
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<th>WATER</th>
<th>ENVIRONMENT</th>
<th>INFRASTRUCTURE</th>
<th>RESOURCE MANAGEMENT</th>
<th>ENERGY</th>
<th>INTERNATIONAL DEVELOPMENT</th>
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<td>Airports and Aviation</td>
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<td>Utilities and Market Analytics</td>
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<td>Water Resources and Infrastructure</td>
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Tetra Tech provides the total spectrum of Port Development and Security Services:

- Security Services
- Coastal Engineering
- Infrastructure Planning & Design
- Waterfront Development
- Environmental Assessment
- Remediation & Air Quality
- Full Port & Harbor Construction
- Oceanographic & Bathymetric Mapping
Supporting the mission since 1998
- Second Line of Defense (SLD)
- National Nuclear Security Administration (NNSA)

Program growth from initial Border Crossing design through to Mobile Platforms and Personal Detection Systems
- Seaports, Airports, Border Crossings, Training Centers, Central Alarm Stations
  - 1,600+ RPMs installed,
  - 50+ Countries serviced
  - 239 Sites
  - 100+ Mobile Detection Systems (vans)

Comprehensive Scope of Work:
- Design-Build of RPM Systems
  - Design and Engineering,
  - Communications,
  - Construction Management,
  - Technical Services,
  - Testing, Calibration and Turnover.

Domestic and International Seaport RPM Support
• Minimize impacts to commerce while efficiently detecting and deterring illicit Nuclear and Radiological materials.
• Port radiation security systems must be considered early in the port expansion process to make sure that they are integrated into effective port operations.
• Applies to:
  • Design
  • Construction
  • Operations
  • Maintenance
BACKGROUND- DOMESTIC RADIATION DETECTION PROGRAM

• SAFE Port Act of 2006
  – Requirement for radiation screening for containers arriving to the US seaports.
  – Radiation Detection Equipment is deployed at Ports of Entry.

• Department of Homeland Security (DHS) program
  – US Customs and Border Protection (CBP)
  – Countering Weapons of Mass Destruction Office (CWMD)
    • Transitioned from Domestic Nuclear Detection Office (DNDO)

• Deployments:
  – Initial Deployment,
  – Technology Upgrades,
  – RPM Relocation,
  – Remote Operations,
  – RPM Replacement Program.

• Initially Government-Funded
• New/future DHS ‘Cost Sharing’ Program approach
  – Port expansion and configuration changes.
  – CWMD RPM Technology Enhancements.
  – CWMD RPM Replacement Program.
• Port Authority/Terminal Operator
  – Provide space and infrastructure.
  – Subcontract Design/system Integrator (Buyer’s representative).
• Countering Weapons of Mass Destruction
  – Radiation Portal Monitoring Program Management
  – RDE acquisition and deployment
  – Support contractors (PNNL)
• Customs and Border Protection
  – Approval authority and responsible for equipment operation
  – Various Departments (OFO, ILD, BSDP, etc.)
• Local and State Regulators- Permitting, etc.
SUCCESSFUL INTEGRATION MODEL

- Comprehensive design-build approach.
- Establish clear nuclear detection and operational objectives.
- Defining current and future requirements, stakeholders, process.
- Engineering considerations
  - Infrastructure requirements
  - Future planning - Port systems integration
- System Training
- Accelerated project timeline (from planning through completion)
- Oversight

Gaining Consensus

- Executive Buy-in (Port Authority and CBP management)
- Understanding the needs and the requirements of each of the stakeholders.
- Determine how to best address the needs.
- Make the stakeholders part of the design process.
- Gain concurrence at each step of the process.
Ports contracted directly with Tetra Tech for design-build of RPM relocation, remote operations conversion & terminal expansions.

Tetra Tech worked on behalf of Ports with CWMD/CBP for project initiation, negotiation and process/project management.

Port controls the design process, completes approved designs through an iterative design and review process with CBP/CWMD.

Reduced project costs and improved operational efficiencies for Ports.

Developed multiple templates for Remote Operations (RO) for future domestic ports.

CWMD may provide RPMs and ancillary equipment to Port.

CBP / CWMD Testing, Inspection and Acceptance.
• RPM ‘Cost Sharing’ Project
  • Proactively integrated strategic goals/plans for future expansion.

• Project activities:
  – Relocate RPMs to maximize screening efficiency and minimize impact on Port operations & footprint
  – RPM design for Refrigerated Container Terminal expansion
  – Relocate the Secondary Inspection station (CPB) to a practical and efficient location

• Optimization
  – Types of equipment and location of RPMs to coincide with the Port layout
  – Complementary security enhancements
PORT TAMPA BAY PERSPECTIVE

• Challenges:
  – Securing Management support,
  – CBP requests/requirements.

• Benefits to PTB:
  – Operational Efficiencies,
  – CBP Footprint Optimization,
  – Improved security posture,
  – Increased container volumes,
  – Relocation of the CPB monitoring allowing Main Gate expansion,
  – Cost Benefits.
Discussion/Questions