

Transforming
Chemical and
Biological Defense
Acquisition



World-Wide Chemical Conference 12 September 02 Fort Leonard-Wood, MO. COL(P) Stephen V. Reeves
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Overview

- Setting the Conditions for Success
 - Organizations
 - Processes
 - Capabilities

- New
 - Fieldings
 - Systems
 - Business Opportunities
 - Challenges







Organization - Near Term

- Army Program Executive Office (PEO)
 - Merged JPO Bio Defense and PM NBC Defense
 - New PM's For Medical Systems
 - New PM For Civil Support

PEO DPEO APEO - Medical

PM Chem/Bio Medical Systems

PM Joint Vaccines
PM Med. ID and Treatments

PM NBC Def

PM Point Detection
PM Stand-off and Recon.
PM Protection
PM JBPDS (Bio)
PM Obscurants Decon
PM Civil Support



Organization -Joint Program Executive Office (JPEO)

- Merge Joint Services PM's Under One JPEO
 - Unity of Effort and Unity of Command
 - Greater Integration Less Deconfliction
 - Focus Service Cultures Leverage Unique Capabilities
 - Joint Service Leadership
 - Commodity Based PM's

JPEO

- **PM Contamination Avoidance**
- **PM Collective Protection**
- PM Individual Protection
- PM Decontamination

- PM Chem/Bio Medical Systems
- PM Civil Support
- PM Modeling and Simulation



Process – Capabilities Cycle Time

- Issue: Bureaucracy Wants Processes Phased, Sequential, Linear, and Predictable
- Need: Processes that are Immediate, Simultaneous, Coherent and Adaptive
- Challenges:
 - Aligning <u>Event Driven Process</u> (Acquisition) with <u>Calendar</u>
 Driven Process (Budget)
 - Accepting Prudent Risks
 - Compressing Processes

PEO-CBD IIII



Process Solution: Integrated Digital Environment





IDE Collaborative Information

- Currently Capabilities:
 - 1. Share documents and information via the Internet
 - 2. Use Project spaces to collaborate on a project
 - 3. Use of Discussion Groups
 - 4. Use of News Channels to share information
 - 5. Task creation and assignment
- Future Capabilities:
 - 1. Real time web meetings
 - 2. Instant Messaging
 - 3. Whiteboard space
 - 4. Application sharing
 - 5. Access to personal and group calendars



Process Solution: Collaborative Environment

Solution: Civil/ Military Integration

Time 0 30 Days

R&D System Operational Assessment Results Concept

Fabrication — — — — — Fielding

LRIP Production — — — — — — — — \rightarrow



Joint Biological Point Detection System









Process Solution

- Prudent Risk
- Immediate, Adaptive RDA

Dry Filter Unit



45 Days

Time 0

Concept → Prototype → Testing → Production/ → Fielding Training





Urban Design



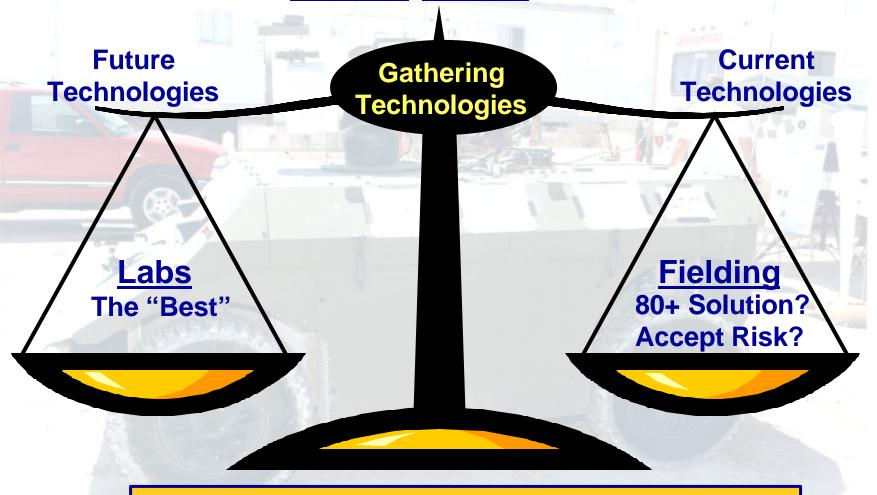
3-Filter HVAC Design



Capabilities:

Technology Is A Solution... And A Problem

Issue: Provide Immediate, Relevant Capability



Leverage U.S. Asymmetric Technology Advantage



Capabilities: Is The Glass Half Full, Half Empty or Twice As Big As it Needs to Be?

Issue: Meeting the Immediate Need

Solution: Range of Technology Options

Low End



Hand-Held Assay (HHA)



Dry Filter Unit (DFU)



Portable Biological Aerosol Sampler (PBAS)



Biological Integrated Detection System (BIDS/ BIDS P3I)



Joint Portal Shield



Joint Biological Point Detection System (JBPDS)



Capabilities:

"The Future Ain't What It Used To Be"

- Transformation "A Fundamental Change in Nature, Function, Condition or Essential Characteristics..."
- "Capability Based" Acquisition:
 - Distributed, Interoperable, Networked Systems -**Not Self-contained Models**
 - Horizontally Integrated Manned, Unmanned, Ground, Air and **Space Systems**
- **Investment Strategy**
 - S&T
 - Development/Procurement



Capabilities:

All Technology Is Not Useful Technology

Issue: Selling "Anti-Gravity Boots"

Solution: Technology Readiness Evaluations

Redirect Efforts or Discontinue Development

Dugway Proving Ground

Ŋo

EMD/Production Contract Modification

Yes

Government Evaluation Report

Conduct TRE

Technologies

Continue
Advanced
Development/
Tech Base

Maybe

Assign
Technology
Readiness
Level

14



Capabilities: Do You Buy A Ticket To Ride Or Do You Buy The Train?

Multi Mission Sensor Program



- **Use Existing Radar Systems**
- **Integrate Software Only**



Develop and Test Concept of Operations







Horizontal Technology Integration



New

- Fieldings

- Systems

- Business Opportunities

- Challenges



FY99-02 New Systems Fieldings 18 New Systems



M45 Aircrew Protective Mask



JWARN Block I



Pocket Radiac – AN/UDR-13



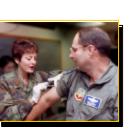
Fox Recon Vehicle



Light Vehicle Obscuration Smoke System



M58 'Wolf'



Anthrax Vaccine Immunization



Joint Portal Shield



M22 ACADA



DOD Biological

Sampling Kit

Radiac Set - AN/PDR-77



Radiac Set - AN/VDR-2



Improved Chemical Agent Monitor

OVER 200,000 NEW PIECES OF EQUIPMENT



Fielding-What's Coming Up

PM Medical Systems

System	Fielded in last 12 months/ where	FY03 Testing	FY03 Production Decision	Planned FY03 Fielding	Planned FY04 Fielding
ATNAA			1Qtr	YES	
SERPACWA		YES		YES	
JBAIDS		YES	YES		YES

ATNAA = Antidote Treatment, Nerve Agent, Autoinjector
SERPACWA = Skin Exposure Reduction Paste Against Chemical Warfare Agents
JBAIDS = Joint Biological Agent Identification Diagnostic System



Fielding-What's Coming Up

PM NBC

FY03 Testing	FY03 Production Decision	Planned FY03 Fielding	Planned FY04 Fielding			
ECTA – Prod Acceptance T&E – 4Q02-4Q03; LUT – 4Q03	ICAM – MWO – Title IX Funds	ACADA -Stryker III; ICAM –Various NGB sites	ACADA -Stryker IV			
CBMS –Chemical Testing – 2Q02-3Q03, IAV PQT/LUT 3Q03- 1Q04	CBMS - LRIP JSLNBCRS Units and IAV units Oct02		JSLNBCRS 1Q04 IAV 3Q04			
Fox Trainer PQT 2Q03; NBCV-PQT 3Q03-1Q04		M93A1 -Kitzingen, and Ft Hood; Fox Trainer – Ft Polk	M93A1 - Ft Polk, and Richardson			
JSLSCAD/MCAD – PQT 3Q02-1Q04; Shipboard OT 2Q03-3Q03; IOT&E 4Q03-1Q04			JSLSCAD			
		SDS M100 – Hawaii, Korea, Alaska, FT Drum, and Hood	SDS M100 – Ft Stewart, Bragg, Riley and Germany			
MMW – Chamber Tests – 1Q03; PQT/IOT&E 2Q03		M56 - Various ARNG and USAR units; LVOSS - Various ARNG and USAR units	M56 -Various ARNG and USAR units			



DoD Bio Detection Kit (Hand - Held Assays)

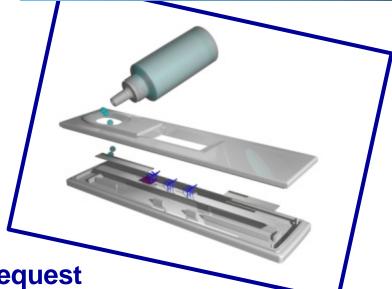
- Available Through Supply System*
- Unit Price Is \$59.39 Per Kit
- Assigned National Stock Number:

Operational: 6665-01-494-8725 Training: 6665-01-497-7811

- Kit Contains:
 - •8 Agent HHA Panel
 - Sample Dilution Buffer
 - Surface Swabs
 - •10x10cm Instruction card that can be used to measure the sample area









UpComing Business Opportunities

Bulk Antibody Production

RFP for Production, 1QFY03

Joint Biological Point Detection System (JBPDS)

RFP for Block I - Production 1st/2QFY03 - 900 Systems

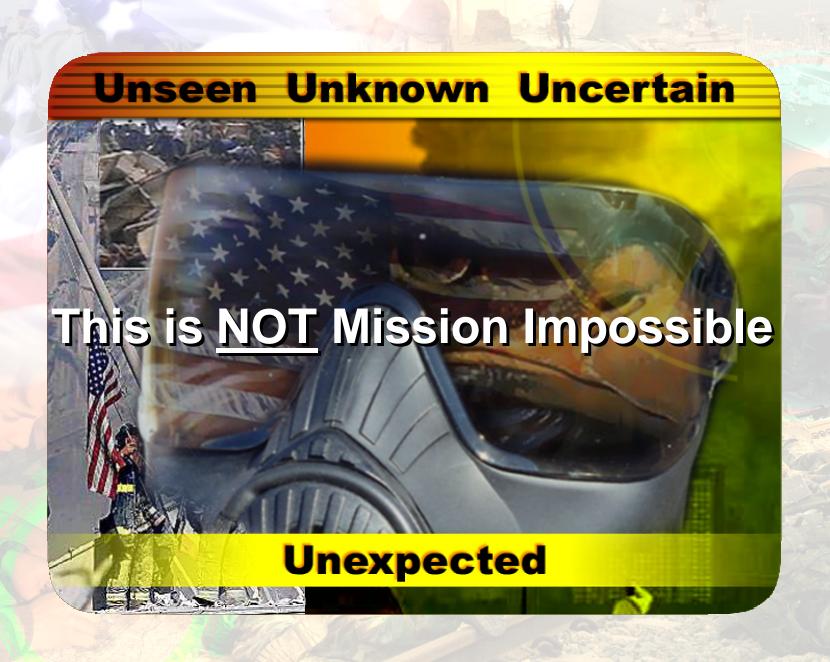
Joint Biological Standoff Detection System (JBSDS)

RFP for Block I Test Article 1QFY03

PCR Reagent Manufacturing

RFP for Production 1QFY03

Joint Service Sensitive Equipment Decontamination RFP for Block II- R&D- FY04







Educating Your Leadership



New Missions



Terrorist Threats & Response



System Capabilities (and limitations)

"What's an Expert? A Guy From Out of Town,"- Mark Twain



Chem/Bio Warfare & Chem/Bio Terrorism ARE DIFFERENT

Chem/Bio Warfare

- Objectives: Incapacitate/
 Degrade Military Forces
- Military Population
 - Healthy
 - Vaccinated
 - Trained
 - Detection Available
- Mobile Infrastructure
 - Prepared to Respond
- Clear Chain of Command

Chem/Bio Terrorism

- Objectives: Specialized
 - Mass Casualties/ Incapacitated
 - Crops
 - "Hit & Run" or "Making a Statement"
- Civilian Population
 - Unexpected
 - Unvaccinated/Unwarned
 - Varying Health/ Age
- Fixed Infrastructure
- Multiple Lines of Authority/ Responsibility

Drives Technology/ Equipment Selection



Chem/Bio Terrorism: What's The Plan?

Initial Detection

H+ 15 minutes H+
30 minutes

H+ 1 hour

Local Authorities

Police Department

Fire Department

Hospitals

National Response

Public Affairs

etc

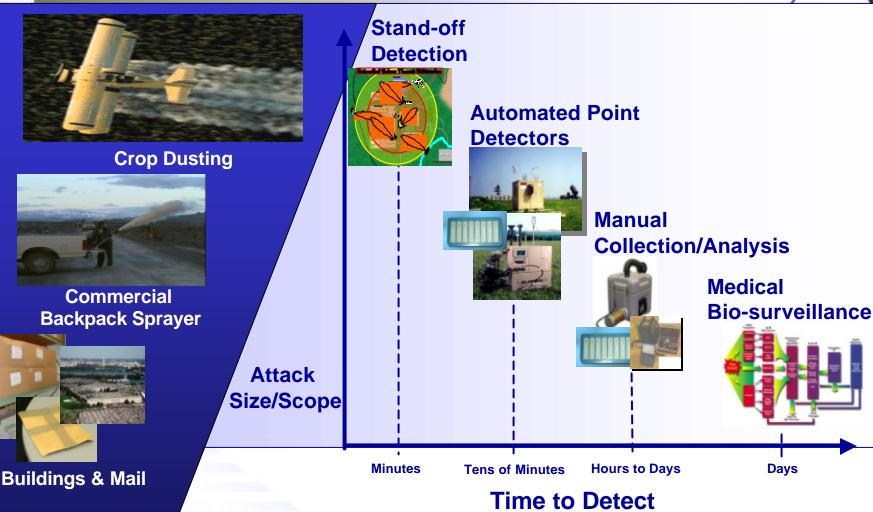
- Who is in Charge? Where?
- Who Synchronizes All Activities?
- Are First Responders Trained?
- Is Required Equipment On-Hand?
- Is Required Medical Support Available?

....Etc....

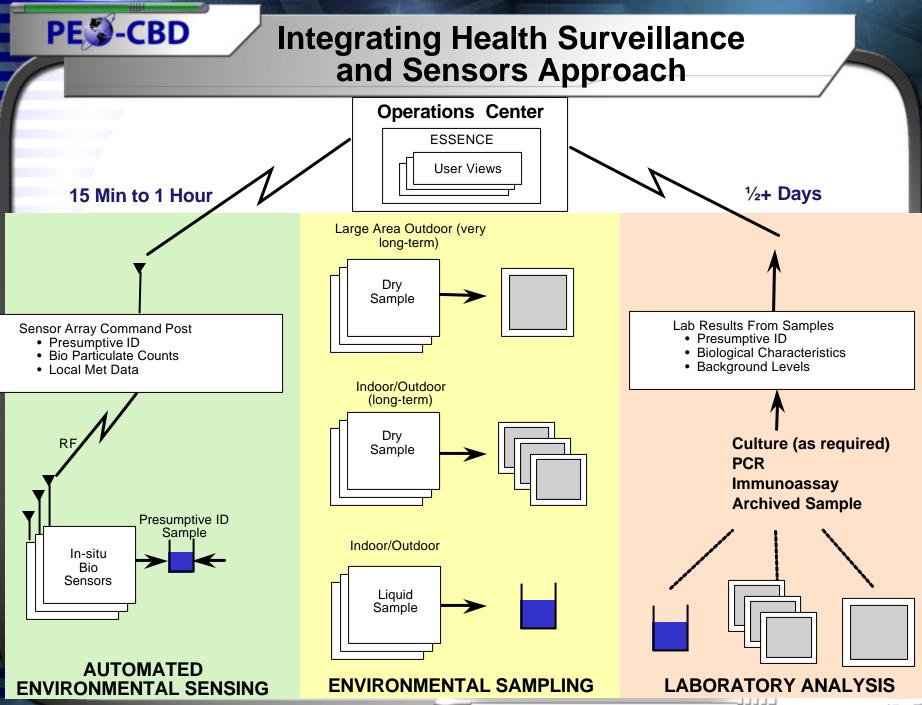
What Support Does The Military Provide?



Range of Bio-terrorist Threats: Detection Options Available



Effective Bio-detection Employs the Complete System of Systems to Counter the Entire Threat Spectrum





Our Future Challenges

- Terrorism, By Definition, Seeks the Weak Spots
 - Where, What to Defend?
 - Response Modes in a Democracy- Active/ Passive?
 - How Much Can We Afford?
- Civil/ Military Integration
 - National Standards Required
 - NIOSH/ EPA
 - Equipment Criteria, Decon, Protection Levels, etc
 - Where/ How Does Military Support?
 - Equipment
 - Testing
 - Technology
 - Training
 - Vaccines/ Drugs
- Commercial Marketplace Now Incentivized for Chem/Bio Defense
 - Leverage Current and Gathering Technologies
 - Re-look S&T Focus on Future Technologies



WE NEED YOUR INNOVATIVE IDEAS!



