



JPEO-CBD

Major Defense Acquisition Program

CBRN Integration

Joint Chemical, Biological, Decontamination & Protection Conference & Exhibition

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Purpose of Briefing Future Systems Team Vision

Purpose

**Inform Community of JPEO CBD efforts Integrating
CBRN Capabilities into MDAPs**

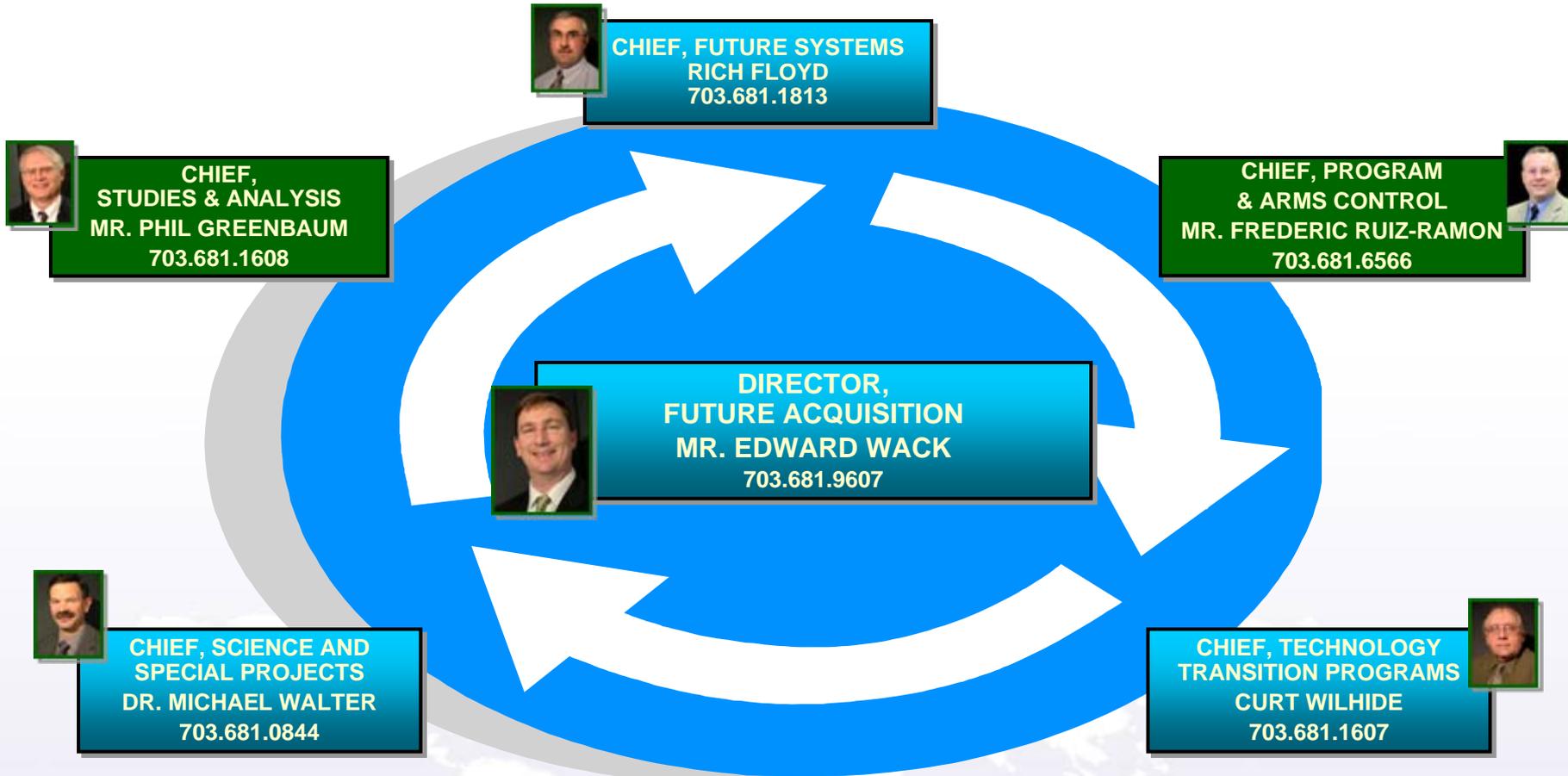
C&C

Vision

**Develop, demonstrate and provide a SoS solution
integrated into MDAP schedules and architectures
providing capabilities to accomplish missions
unencumbered by CBRN hazards**



Future Acquisitions Directorate





Future Systems Team Responsibilities

- **Interface with MDAP PM**
- **Conduct Systems Engineering analysis**
- **Determine component specifications**
- **Map specifications to program or system designs**
- **Facilitate T&E and Life Cycle Management strategies**



Future Systems Chemical/ Biological Defense MDAP Program Support

Working w/
17 MDAPS to
Date

**CBRN
REQUIREMENTS**

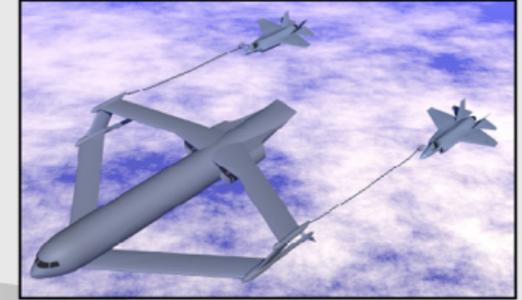
**CBR Detection
Battle Management
Integrated Early Warning
Collective Protection**

**Decontamination
Individual Protection**

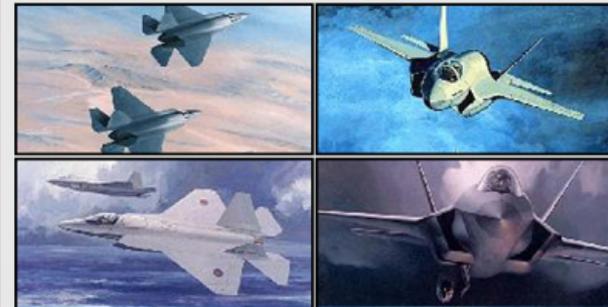
Expeditionary Fighting Vehicle



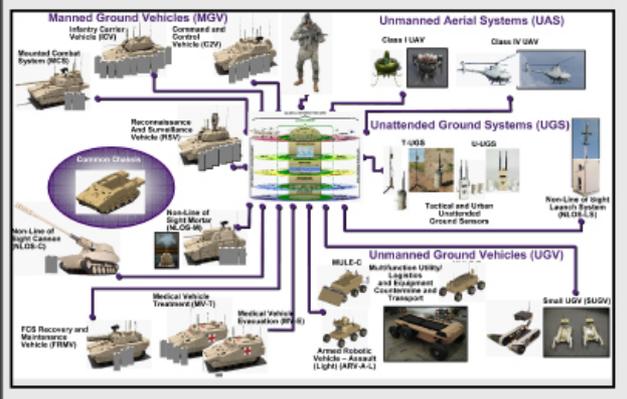
KC-X



Joint Strike Fighter



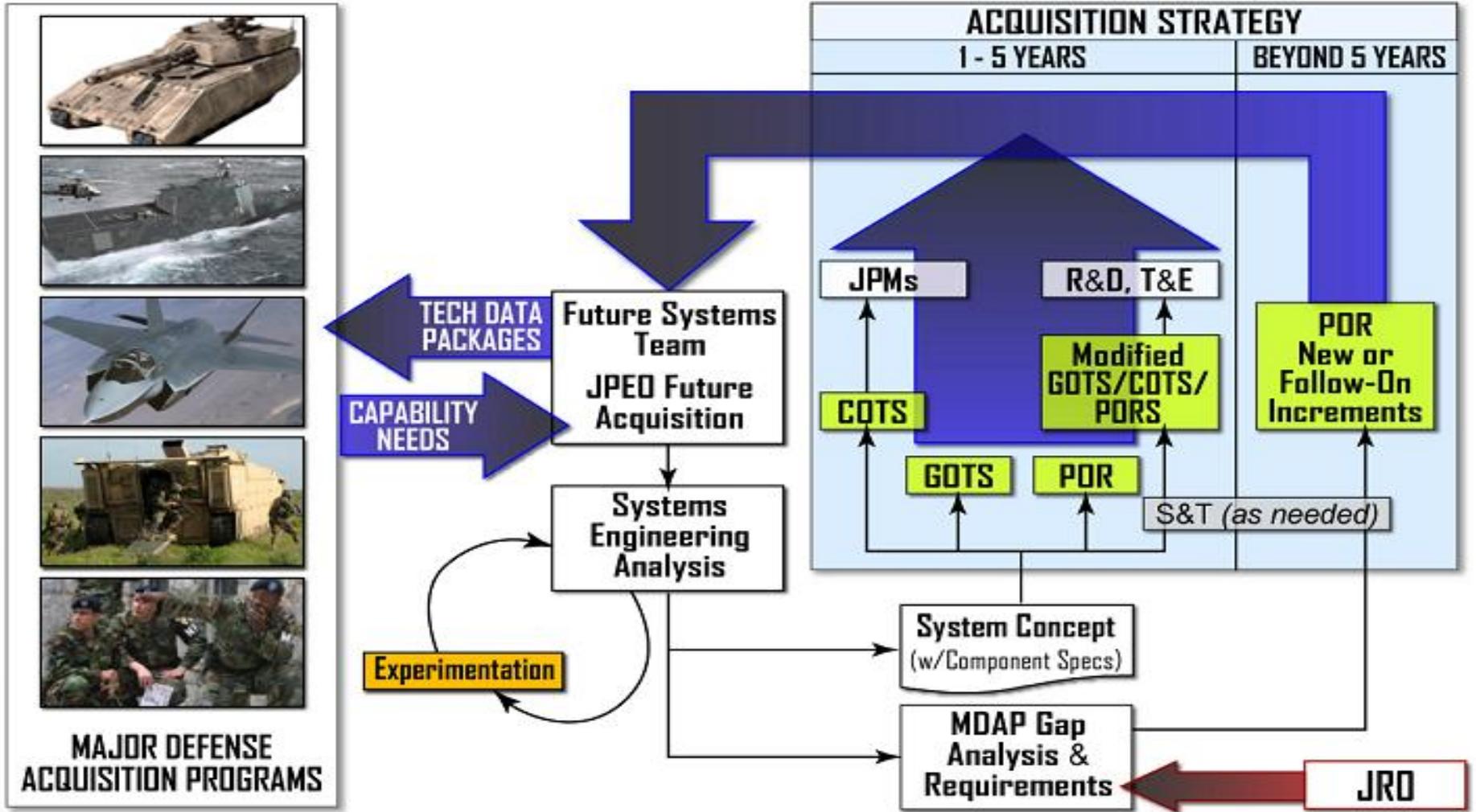
FUTURE COMBAT SYSTEMS



**OTHERS...
JMAC, JLTV, MRAP...**



Delivering A Capability





Recent Activity

- Threat and requirements analysis
- Top-level architecture and system engineering
- Requirements gap analysis leading to Tiger Teams
- CBRN CONOPs supporting MDAP CONOPs and O&O
- Component specifications
- Initiated component acquisition strategies with JPMs
- Drafted Common CBRN Sensor Interface (CCSI) document





Common CBRN Sensor Interface

Defines Sensor and Platform Interfaces

Enables Plug and Play of Modular Sensors

Supports Simple Integration Into Any Platform

Allows Timely Integration of CBRN Data Into the Common Operating Picture

Applicable Across All MDAPs

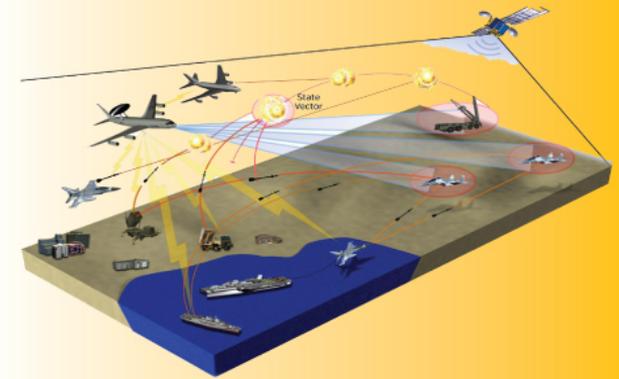
Sensing Package

CCSI

Host System



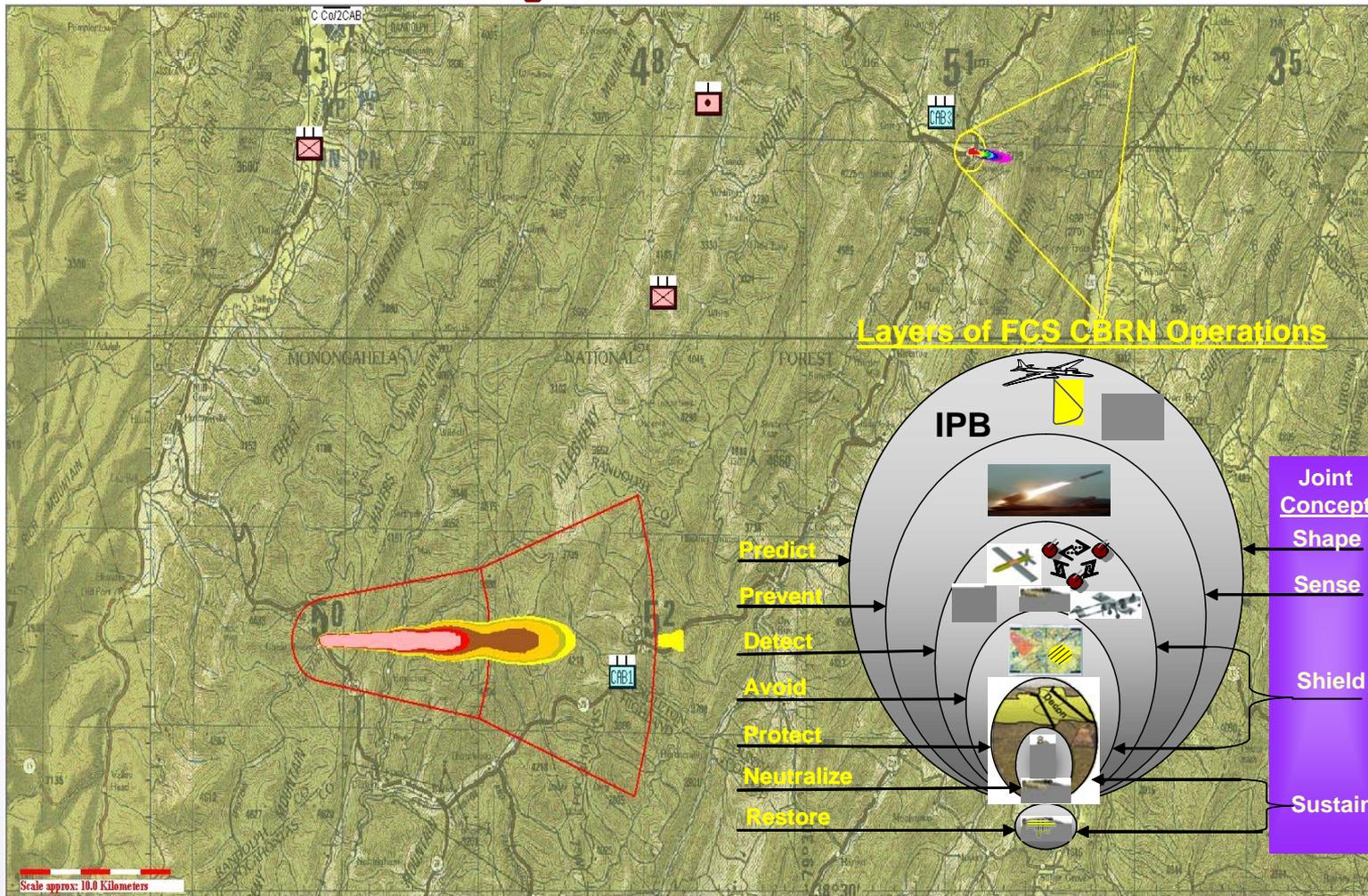
Modular Sensors "Holster"





CBRN Table Top Exercise

Vignette-Based Exercise



Identified disconnects between CONOPs and Capabilities



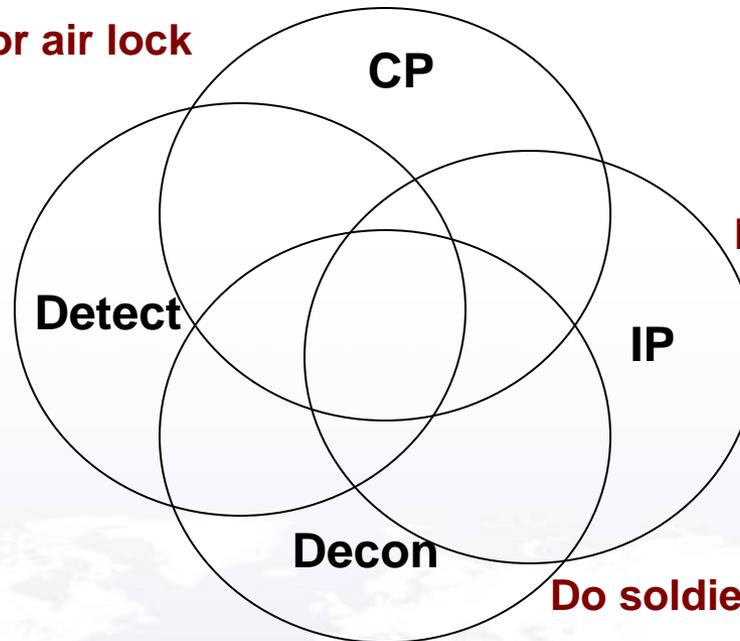
Example to Consider

FCS ORD and CONOPs: ingress and egress from Manned Ground Vehicles

- Identified as a requirement against Collective Protection

Higher CP capacity or air lock

When is soldier clean enough to enter



If MOPP exchange required, where is new suit carried

Do soldiers have adequate decon

Most can be addressed, all need to be considered, all have size, weight or power implications

Are there novel ways to satisfy the requirement



Efforts and Players

CCSI

JPM IS, JPM BD, JPM CA

Cradle

JPM IS, JPM BD, JPM CA

Filtration

JPM CP, JPM IP

Decision Support Aids

JSTO, JPM IS

Data Fusion

JSTO, JPM IS

Collateral Sensing

JSTO

Modular Sensing

JSTO, JPM BD, JPM CA

Reactive Coatings

ARL, S&T, JPM Decon

JPMs Execute Component Acquisition



Future Activities

- **Continue Programmatic support**
 - MDAP program events (design reviews, milestones, BOD)
 - Deliveries to support integration
- **Realize future CBRN systems concepts and architectures through MDAPs**
 - Early involvement in MDAPs to shape CBRN solutions
 - Integrate CBRN systems into platforms
 - Cross-program, cross-platform capabilities development
- **Work to align and synchronize JSTO S&T, Capabilities Documents and Programs of Record to address MDAP capabilities requirements as well as traditional user**

**Consider MDAP requirements in
Future Programs of Record Capabilities Requirements Documents**