



Joint Program Executive Office for Chemical and Biological Defense

Joint Project Manager for Collective Protection

Platform Survivability Integration (PSI) for Chemical Biological Radiological (CBR) Defense

Mr. Stephen Beaudoin
Product Director
Transportable Platform CBR Survivability
Joint Project Manager - Collective Protection

November 3, 2009

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited



Briefing Topics

- **Expanded Role of the Joint PM-Collective Protection**
 - Platform Survivability Integration (PSI) for CBR Defense
- **Joint Strike Fighter (JSF) Decontamination System**





CBRN Survivability Policy

DOD Instruction 3150.09 – September 2008

- Requires all DoD CBRN mission-critical systems be CBRN survivable
 - Mission-critical systems with operational concepts requiring employment and survivability in a CBR environment or a nuclear environment
- Requirements must be addressed in the capabilities documents and reviewed at each milestone



JPM-ColPro/PSI Mission

The Joint Project Manager for ColPro/Platform Survivability and Integration (PSI) Chemical Biological Radiological (CBR) Defense Support will facilitate the research, development, testing, procurement, operations and sustainment, and delivery of CBRN defense system of systems in support of platforms designated as CBRN Mission Critical and those requiring CBRN capabilities.



CBRN Support

Increasing Equipped Platforms...



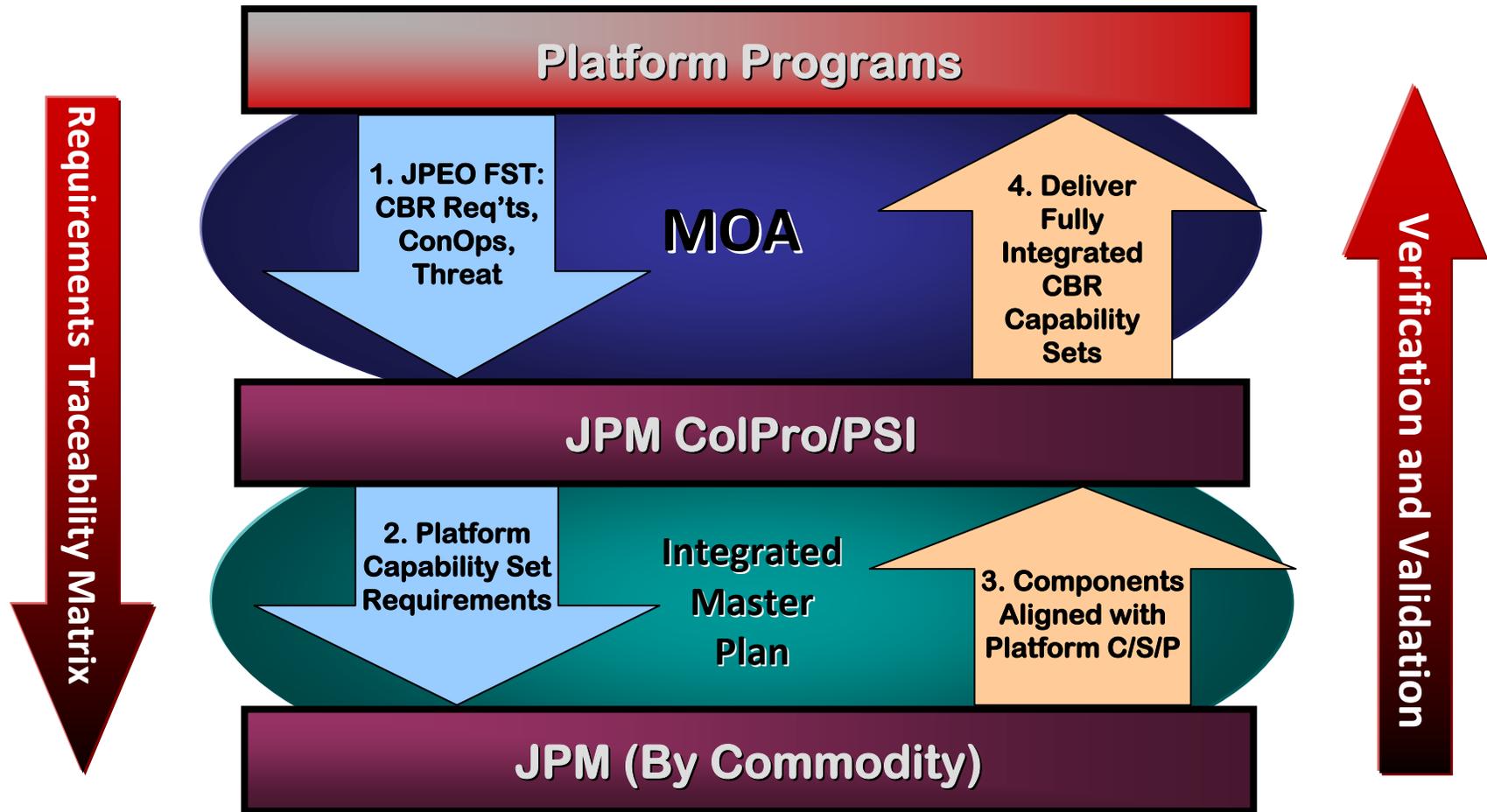
- Improved Surveillance
- Enhanced Situational Awareness

**MAXIMIZE CBR DETECTION
AND EARLY WARNING**

Integrate CBR defense systems as part of design and development



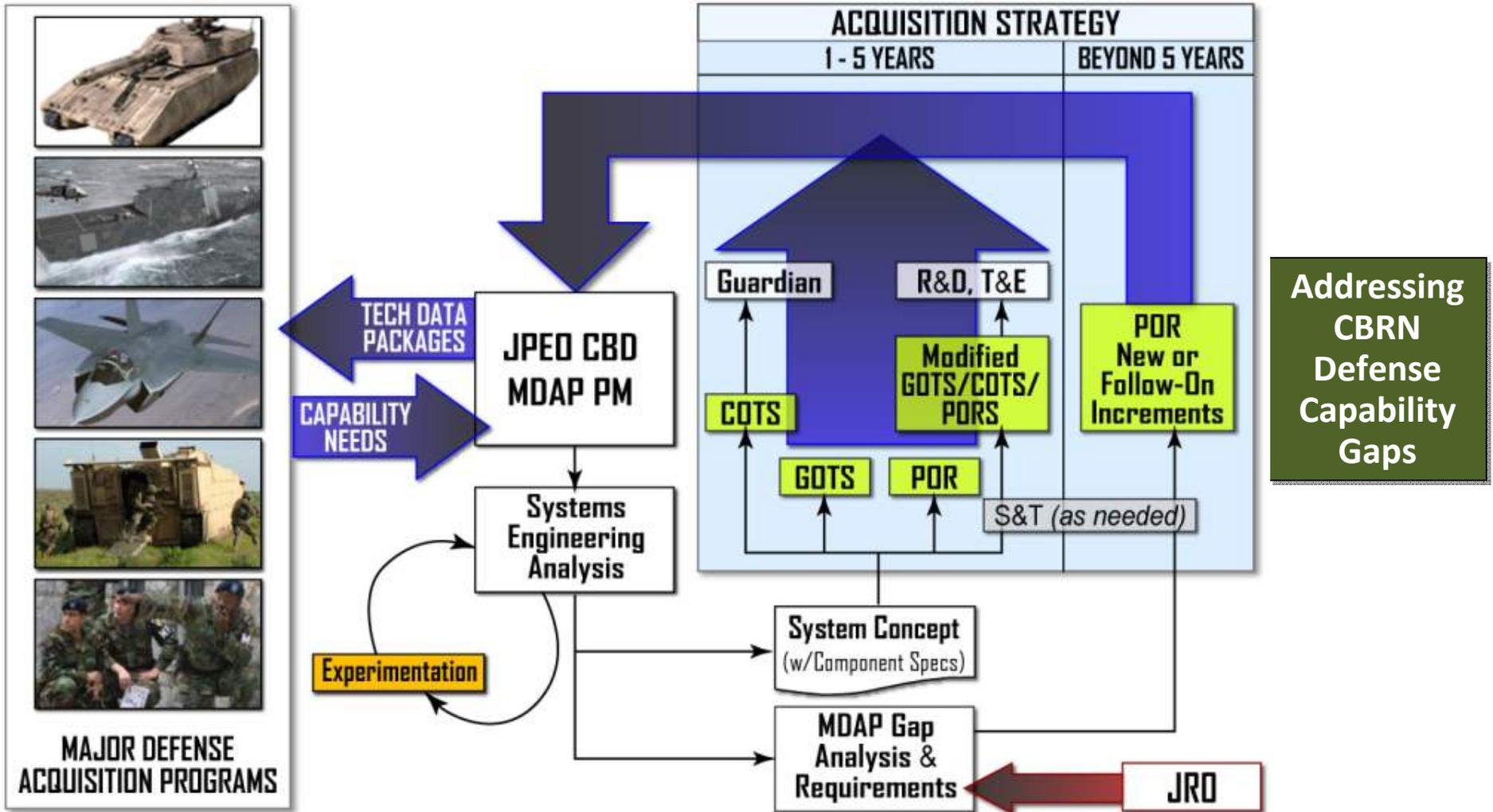
JPM CoIPro/PSI Support Function



Deliver CBR Capability Sets to Support
MDAP CBRN Survivability Needs

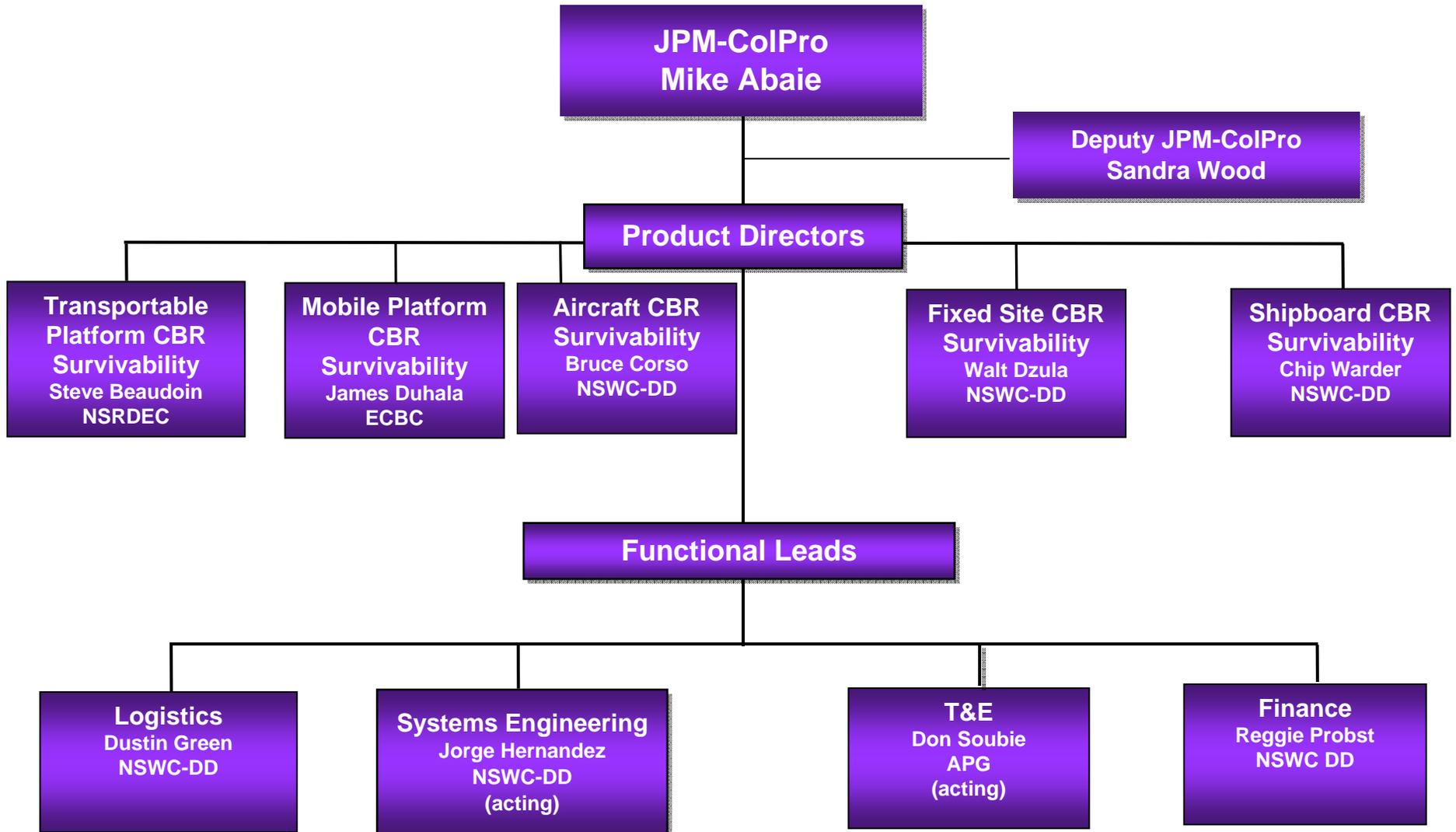


MDAP Support Strategy





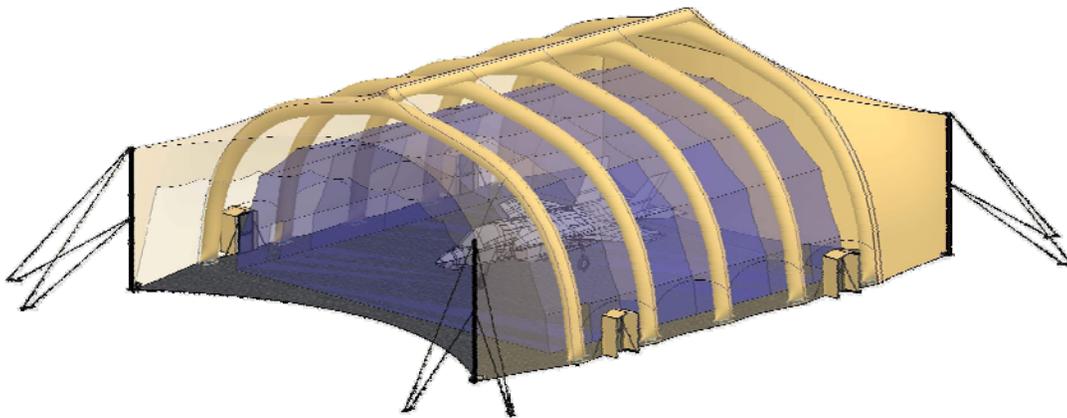
Collective Protection/Platform Survivability Integration Joint Project Management Office





CBR Capability Set Example

Joint Strike Fighter CBR Capability Set



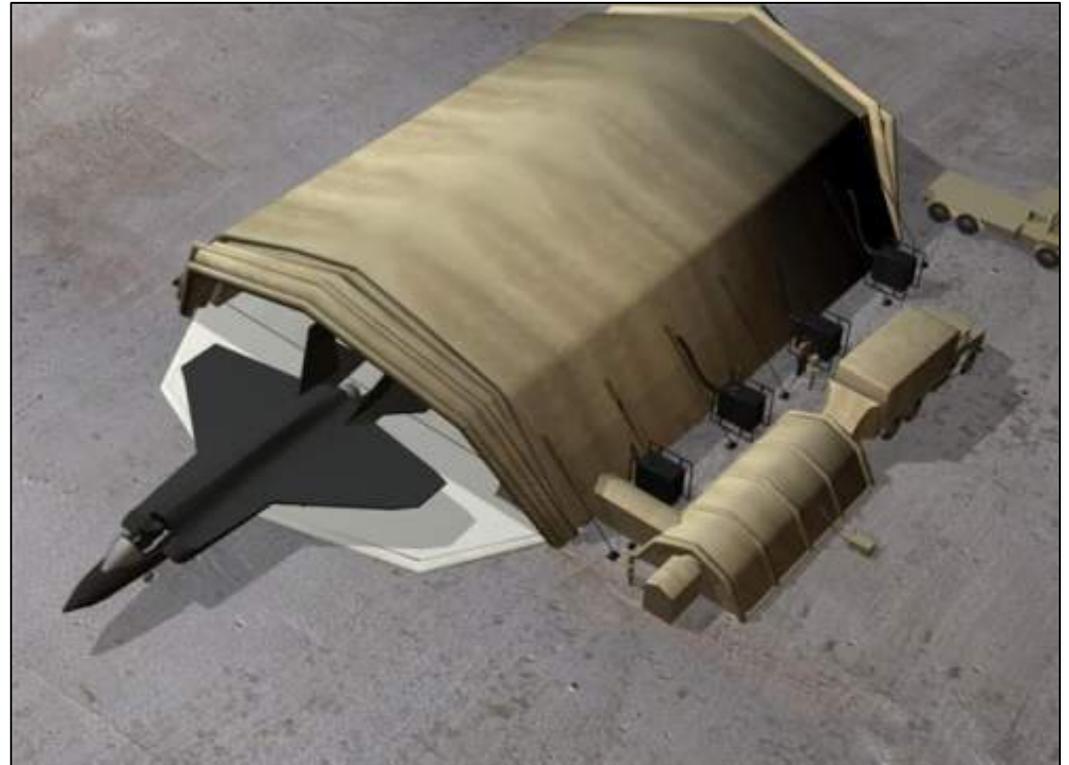
**CBR Subsystem - Decon Shelter.
JPM-CoIPro, JPM-Decon support**



CBR Component – JPM-IP Support



Joint Strike Fighter Decontamination System



UNCLASSIFIED



JSF Decon System Background

- JSF requires pilot CBR survivability CBR decontamination
- JSF CBR survivability support is being coordinated through the JPEO-CBD
- JPM-Decontamination is the lead for the Decon system
 - Environmentally Friendly Aircraft Decon System (EFADS)
- JPM-CoIPro supporting
 - Shelter/liner system
 - Interface with EFADS
 - Heaters for Hot Air Decon



Environmentally Friendly Aircraft Decontamination System (EFADS)



- **Chemical Decontamination**
 - Hot Air Decontamination (HAD)
 - Chemical Filtration included



- **Biological Decontamination**
 - Vaporous Hydrogen Peroxide (VHP)
 - Catalytic destroyer



JSF Decon Shelter Requirements

- Sized to accommodate the JSF Aircraft
- Incorporate a chemical agent resistant liner compatible with VHP and HAD decon processes
- Compatible with negative pressure operation
- Interface with the decontamination equipment
- Thermal insulation to minimize heat loss during HAD
- Minimize air leakage into the liner
- Minimize electric power and manpower required for setup and operation
- Allow personnel entry/exit during operation
- Withstand power loss of 8 hours
- Withstand wind and snow loads



Utilize
Existing
Technology



Aviation Inflatable Maintenance Shelter 2nd Generation (AIMS-2G)



UNCLASSIFIED



Aviation Inflatable Maintenance Shelter 2nd Generation (AIMS-2G)

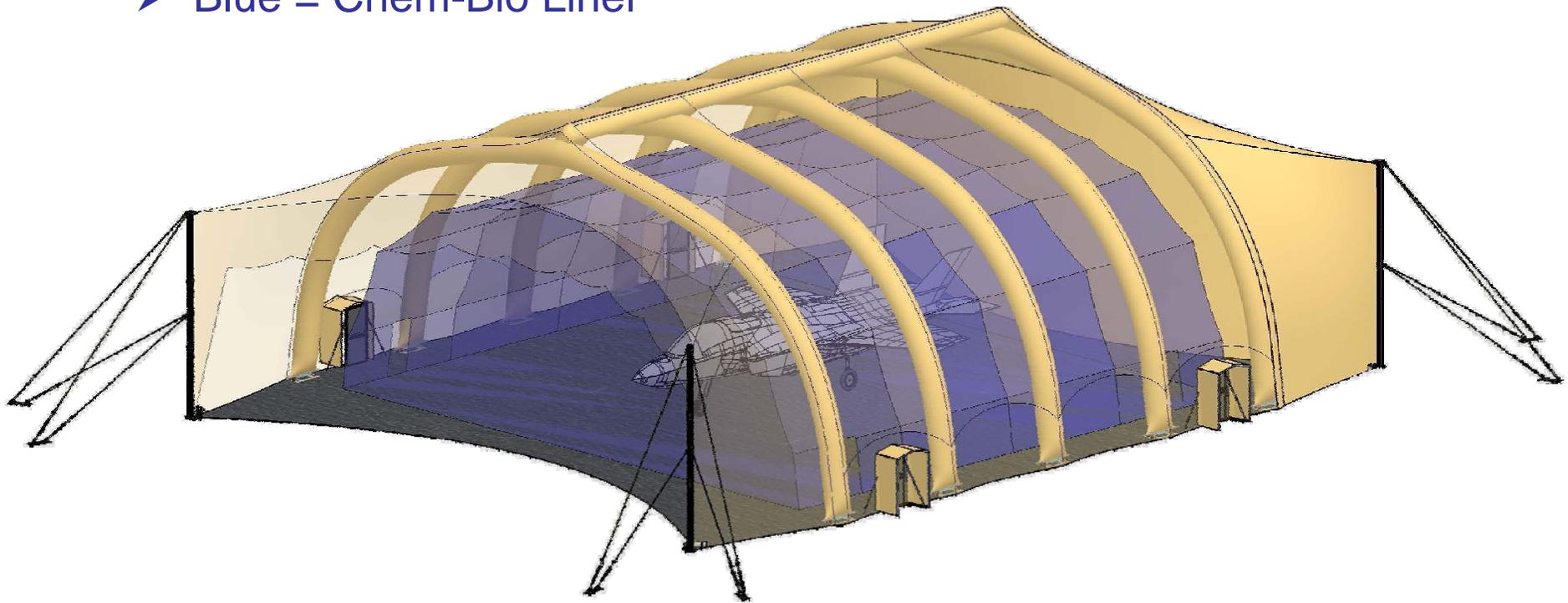


UNCLASSIFIED



AIMS-2G JSF Decontamination Shelter

- Conceptual adaptation of baseline AIMS 2G to JSF Decon Shelter
 - Tan = Outer Cover
 - Blue = Chem-Bio Liner





JSF Decon Shelter Team

- JPM-Decon
- JPM-ColPro
- JPM-Platform Survivability Integration
- NSRDEC
- ECBC
- Vertigo
- Production Products
- Hunter Defense Engineering Services
- STERIS



Questions?