Monday, October 24

3:00 PM-5:00 PM   Registration

Tuesday, October 25

7:30AM -8:30AM   Late Registration and Continental Breakfast

8:30AM-8:45AM   Welcome and Introduction

8:45AM-9:15AM   *Keynote* – **BG Stephen V. Reeves, USA**
Joint Program Executive Officer for Chemical Biological Defense

9:15AM-9:45AM   *Keynote* – **Dr. Charles R. Gallaway**
Director Chem Bio Defense
Science and Technology Directorate
Defense Threat Reduction Agency

9:45AM-10:15AM   *Keynote* – **COL Don Bailey, USA**
Deputy Director, Joint Requirements Office for
Chemical Biological, Radiological and Nuclear Defense

10:15AM-10:45AM   **Break**

10:45AM-11:10AM   Technology Transitioning Overview

11:10AM-11:35AM   Joint Project Manager Information Systems Program Overview

11:35AM-1:00PM   **Lunch**

1:00PM-1:30PM   Joint Effects Model Program Overview

1:30PM-2:00PM   Joint Operational Effects Federation Program Overview

2:00PM-2:30PM   Joint Warning and Reporting Network Program Overview

2:30PM-3:00PM   Joint Project Manager Information Systems Integration Overview

3:00PM-3:30PM   **Break** *& Joint Project Manager Information Systems Demonstration*

3:30PM-4:00PM   Joint Science and Technology Office Program Overview

4:00PM-4:30PM   Environmental Hazard Prediction Thrust Area Overview

4:30PM-5:00PM   Operations Effects Thrust Area Overview

5:00PM-5:30PM   Battlespace Management Thrust Area Overview

5:30PM   Adjourn for the day

5:30PM-6:30PM   **Reception** *& Joint Project Manager Information Systems Demonstration*

Wednesday, October 26

8:00AM-8:30AM	Registration and Continental Breakfast
8:30AM-8:35AM	Admin Remarks
8:35AM-9:10AM	Agent Fate Program Overview
9:10AM-9:30AM	Decision Support Program Overview
9:30AM-9:50AM	Research Development and Engineering Command (RDECOM) Overview
9:50AM-10:20AM	**Break** & *Joint Project Manager Information Systems Demonstration*

10:20AM-12:00PM   Breakout Session A

Working Group I - Dispersion Modeling and Sensor Data Fusion
Session Chair: John Pace

10:20 AM – 10:50 AM	John Pace	Overview of Hazard Prediction Modeling Program
10:55 AM – 11:25 AM	Paul Thomas	Source Term Estimation Module (STEM)
11:30 AM – 12:00 PM	Ian Griffiths	STEM demo

Working Group II – Chemical Agent Persistence and Prediction Modeling
Session Chair: Mark Fagan

10:20 AM – 10:50 AM	Dr. Arianus R. Hin	Agent Fate Predictive Model Methodology
10:55 AM – 11:25 AM	Dr. Homayun	Agent Fate 1st Principles Modeling
11:30 AM – 12:00 PM	Dr. Evans	Quantum Chem Theoretical Modeling

Working Group III - Battlespace Management
Session Chair: Bill Ginley

10:20 AM – 10:50 AM	Mr. Bill Ginley	Shared COP
10:55 AM – 11:25 AM	Mr. James Reilly	Next Generation CB Battle Management System
11:30 AM – 12:00 PM	Mr. James Reilly	Next Generation CB Battle Management System

Working Group IV - Decision Making and Support
Session Chair: Scott Cahoon

10:20 AM – 10:50 AM	Dr. Jeffrey Grotte	Decision Support Analytical Framework
10:55 AM – 11:25 AM	Mr. Michael Kierzewski, Mr. King	Virtual Prototyping Feasibility/Benefit and CB Common Knowledge Base
11:30 AM – 12:00 PM	Dr. Frank Gilfeather	Chemical and Biological Defense Multivariate Decision Support Tool

Working Group V - Special Topics: Test and Evaluation
Session Chair: Eric Lowenstein

10:20 AM – 10:50 AM	Dr. William Brence	A Quantitative Tool for the Identification, Correlation, and Selection of Chemical Agent Simulants for OT&E; Implications for and Applications to Current and Future Programs
10:55 AM – 11:25 AM	Avidan	MNS/CBRN System Integration

11:30 AM – 12:00 PM	TBD	TBD

12:00PM-1:00PM   **Lunch** (On Own)
1:00PM-3:30/5:00PM   Breakout Session B

Working Group I - Dispersion Modeling and Sensor Data Fusion
Session Chair: John Pace

1:00 PM – 1:30 PM	Dr. Deborah Fish	Fusion of CB Data and Model Output
1:30 PM – 2:00 PM	Mr. Rick Fry	Chemical/Biological Source Characterization
2:00 PM – 2:30 PM	Mr. Keith Gardner	Optimizing Sensor Placement for CB Defense
2:30 PM – 3:00 PM	Mr. Mike Smith	Sensor Location Optimization Tool Set
3:00 PM – 3:30 PM	Jason Nachamkin	Hazard Prediction with Nowcasting

Working Group II – Special Topics I
Session Chair: Mark Fagan

1:00 PM – 1:30 PM	Mr. Doug Hardy	The Need for CBRN and Medical COI Interoperability and the Proposed Way Forward
1:30 PM – 2:00 PM	Mr. Mark Neff	Providing Capabilities-Based Analysis in Dynamic Operational Environments: Leveraging Integrated Architecture and Use Cases to Define and Deliver Rapid Capabilities
2:00 PM – 2:30 PM	Mr. David Gregory	Chemical and Biological Warfare Modeling Library (CBWLIB)
2:30 PM – 3:00 PM	Mr. Donald McFarlane	Contamination Avoidance at Seaports of Debarkation (CASPOD) ACTD: A Study in the Importance of Early User Involvement During User Interface and System Capabilities Development
3:00 PM – 3:30 PM	Dr. James L. Regens	Advances in Biotechnology and the Biosciences for Warfighter Performance and Protection

Working Group III - Battlespace Management
Session Chair: Bill Ginley

1:00 PM – 1:30 PM	Mr. Patrick Berry	A Bayesian Approach for Assessing Confidence in a Biological Warfare (BW) Detection Event
1:30 PM – 2:00 PM	Mr. Thomas Sanderson	Hyperspectral Mid-Range Toxic Gas Detection System
2:00 PM – 2:30 PM	Dr. Juergen Leonhardt	A New BIO IMS for Simultaneous Detection of CWA Material
2:30 PM – 3:00 PM	Mr. Thomas Sanderson	Multi-Sensor Battlespace Management Architecture
3:30 PM – 4:00 PM	Mr. Steven Streetman	Chem-Bio Protection Without Chem-Bio Sensors: Low Cost, Dual Use Alternative Sensor and Information Architectures

Working Group IV - Decision Making and Support
Session Chair: Scott Cahoon

Time	Speaker	Title
1:00 PM – 1:30 PM	Mr. Donald McGonigle	The Chemical and Biological Defense Information Analysis Center (CBIAC), a Knowledge Management Source for Authoritative Information
1:30 PM – 2:00 PM	Dr. Rafael Alonso	A Chem-Bio Information System for Rapid Knowledge Acquisition to Support Bio-weapons Countermeasures
2:00 PM – 2:30 PM	Caudell	Flatland Virtual Data Decision Support Tool
2:30 PM – 3:00 PM	Dr. Steve Helmreich	Coordinating CB engagement scenarios with the CBRN
3:00 PM – 3:30 PM	**BREAK**	
3:30 PM – 4:00 PM	Prasad	Data Model Machine Intelligence in Decision-making (MInD) Automated Generation of *CB* Attack Engagement Scenario Variants
4:00 PM – 4:30 PM	Dr. Bill Ogden	Methods for Understanding Human Interface Requirements for Decision Support Tools
4:30 PM – 5:00 PM	Dr. Hung Nguyen	Allocations of Resources in CB Defense: Optimization and Ranking

Working Group V - Special Topics: Test and Evaluation
Session Chair: Eric Lowenstein

Time	Speaker	Title
1:00 PM – 1:30 PM	Dr. Timothy Shelly	A Distributed Processing Sensor Network for Detect-To-Warn Capability
1:30 PM – 2:00 PM	Dr. Jonathan Davis	Development of Plague Outbreak Decision Tool
2:00 PM – 2:30 PM	Dr. Myron Hohil	Reliable Discrimination of High Explosive and Chemical/Biological Artillery Using Acoustic Sensors
2:30 PM – 3:00 PM	TBD	TBD
3:00 PM – 3:30 PM	**BREAK**	
3:30 PM – 4:00 PM	Dr. Peter Mantica	Infrared Scene Simulation for Chemical Standoff Detection System Evaluation
4:00 PM – 4:30 PM	Dr. Juergen Leonhardt	Neutro Test – A Neutron Based Non-Destructive Device for Finding Hidden Explosives
3:30 PM – 4:00 PM	Dr. Peter Mantica	Infrared Scene Simulation for Chemical Standoff Detection System Evaluation

5:00 PM	Adjourn for the day	
5:30 PM	Social Hour	
6:30 PM-8:00 PM	CBIS Annual Banquet	
	Guest Speaker Gary Yamamoto "Restore the Passion: For Work and For Life!"	

Thursday, October 27

8:00AM-8:30AM   **Continental Breakfast**

8:30AM-8:35AM   Admin Remarks

8:35AM-10:00AM   Breakout Session C

Working Group I - Dispersion Modeling and Sensor Data Fusion
Session Chair: John Pace

8:35 AM – 9:00 AM	Dr. Douglas Burns	An Atmospheric Chemistry Module for Modeling Toxic Industrial Chemicals
9:00 AM – 9:30 AM	Mr. Mike Armistead	Chemical and Biological Hazard Environmental Prediction
9:30 AM – 10:00 PM	Ms. Teri Robertson	Development of a Model for Predicting the Aerosolization of Agents in a Stack

Working Group II – Current Ops Effect S & T Projects
Session Chair: Mark Fagan

8:35 AM – 9:00 AM	Dr. Tom Stark	JOEF Prototype Development
9:00 AM – 9:30 AM	Maj William Greer	Next Generation model Development
9:30 AM – 10:00 PM	Darrell Lochtefeld	Impact Assessment Tool

Working Group III - Battlespace Management
Session Chair: Bill Ginley

8:35 AM – 9:00 AM	Mr. Javad Sedehi	Battlespace Management Field Trip
9:00 AM – 9:30 AM	Mr. Jack Berndt	Engineering NBC-RPM
9:30 AM – 10:00 PM	Mr. David Godso	Net-Ready CBRN Sensors -- The Way Ahead

Working Group IV - Decision Making and Support
Session Chair: Scott Cahoon

8:35 AM – 9:00 AM	Mr. Gregory Chavez	Monotone Measure Theory as a Method for Combining Evidence in Threat Engagements
9:00 AM – 9:30 AM	Dr. Panaiotis	Algorithmically Generated Music Enhances VR Decision Support Tool
9:30 AM – 10:00 PM	Dr. Roshan Rammohan	Exploring Optimization Methodologies for Systematic Identification of Optimal Defense Measures For Mitigating *CB* Attacks

Working Group V - Special Topics: Test and Evaluation
Session Chair: Eric Lowenstein

8:35 AM – 9:00 AM	Mr. Peter Mantica	Active Standoff Chemical Detection Model for System Studies
9:00 AM – 9:30 AM	Mr. William Snee	Phased Data Model Implementation Approach
9:30 AM – 10:00 PM	Dr. George Thompson	Chemical Homeland Security System (C-HoSS)

10:00AM-10:30AM   **Break** *& Joint Project Manager Information Systems Demonstration (Last Chance to view Demo)*

10:30AM-12:00PM   Breakout Session C Continued

Working Group I - Dispersion Modeling and Sensor Data Fusion
Session Chair: John Pace

10:30 AM – 11:00 AM	Julie Pullen	Coupled Air-Sea Modeling for Improved Coastal Urban Dispersion Prediction
11:00 AM – 11:30 AM	Rob Marshall	Measurement of Coastal & Littoral Toxic Material Tracer Dispersion
11:30 AM – 12:00 PM	John Hannan	Intercomparison of Four Rockle-Based Urban Dispersion Models

Working Group II – Special Topics II
Session Chair: Mark Fagan

10:30 AM – 11:00 AM	Maj Greer	CHEMRAT and AFMAN 10-2602 Persistence Modeling
11:00 AM – 11:30 AM	Tim Gaughan	CB System Military Worth Assessment Toolkit
11:30 AM – 12:00 PM	Dr. Gene McClellan	Predictive Models for Chem-Bio Human Response, Casualty Estimation and Patient Loads

Working Group III - Battlespace Management
Session Chair: Bill Ginley

10:30 AM – 11:00 AM	Mr. Joshua Pressnell	Wirelessly Enabling Legacy Sensor Systems for Rapid Deployment and Monitoring
11:00 AM – 11:30 AM	Mr. Thomas Sanderson	Performance Quality Monitoring Architecture for Sensor Networks
11:30 AM – 12:00 PM	TBD	

Working Group IV - Decision Making and Support
Session Chair: Scott Cahoon

10:30 AM – 12:00 PM	Dr. Frank Gilfeather	Multivariate Decision Support Tool Set-up

Working Group V - Special Topics: Test and Evaluation
Session Chair: Eric Lowenstein

10:30 AM – 11:00 AM		Program Decision Issues
11:00 AM – 11:30 AM		Program Decision Issues
11:30 AM – 12:00 PM		Program Decision Issues

12:00PM-1:30PM   **Lunch (On your own)**

1:30PM-3:30PM   Breakout Session D (and concurrent Executive Session)

Working Group I - Dispersion Modeling and Sensor Data Fusion
Session Chair: John Pace

1:30 PM – 2:00 PM	Theo Theofanous	Release and Atmospheric Dispersal of Liquid Agents
2:00 PM – 2:30 PM	Dr. Jeffrey Peterson	Modeling and Simulation to Support Virtual Chemical Hazard Environments
2:30 PM – 3:00 PM	Dr. Steve Warner	Translation of JEM Accuracy Requirement into a Measurable Acceptability Criterion

Working Group II - Operations Effects Modeling
Session Chair: Mark Fagan

1:30 PM – 2:00 PM	Mr. Keith Gardner	Combined Defense Model
2:00 PM – 2:30 PM	Dr. Shanna Collie	Health Effects Decision Support Tool for Civilian CB Air and Water Attack Squadron
2:30 PM – 3:00 PM	Mr. Scott Milburn	Employing Military Virtual Reality Simulation Technology to Train for Prevention, Deterrence, Response, and Recovery for Chem Bio Events

Working Group III - Battlespace Management
Session Chair: Bill Ginley

1:30 PM – 2:00 PM		Program Decision Issues
2:00 PM – 2:30 PM		Program Decision Issues
2:30 PM – 3:00 PM		Program Decision Issues

Working Group IV - Decision Making and Support
Session Chair: Scott Cahoon

1:30 PM – 3:30 PM	Cahoon, Gilfeather	Presentation of Chemical and Biological Defense Multivariate Decision Support Tool to Dr. Charles Gallaway

Working Group V - Special Topics: Program Decision Issues
Session Chair: Eric Lowenstein

1:30 PM – 3:30 PM		Program Decision Issues
2:00 PM – 2:30 PM		Program Decision Issues
2:30 PM – 3:00 PM		Program Decision Issues

3:30PM   **Conference Adjourns**

***********Following for JPM IS personnel, JSTO personnel and Session Chairs******************

4:00PM-5:00PM   Hotwash and Summary from Working Group Chairs

5:00PM   Adjourn for the day

Friday, October 28
8:00AM-8:30AM   **Continental Breakfast**

8:30AM-10:00AM   Executive Session

10:00AM   Conference Adjourns