

**Department of Defense Chemical, Biological, Radiological, Nuclear
Consequence Management Conference**

July 28-30, 2009

Conference Summary

Executive Summary

The fifth annual Department of Defense (DOD) Chemical, Biological, Radiological, Nuclear (CBRN) Consequence Management (CM) Conference was held from 28 through 30 July 2009 at the Heritage Conference Center in Chantilly, VA. Approximately 150 participants and presenters were in attendance. The Conference was hosted by the Defense Threat Reduction Agency (DTRA).

Based on the theme “Integrating the Force”, the conference provided both military and interagency CM professionals an opportunity to discuss CM issues, policies, and experiences within the field. This year's conference focused on both Foreign CM and Domestic CM issues, especially as they relate to the Combatant Commands.

The key note speaker, Major General Daniel Long Jr., Commander of the Joint Task Force- Civil Support (JTF-CS), provided an overview of the JTF-CS mission with regard to CM activities. Other highlights included: a briefing by Brigadier General James Cook, Commander of the 415th Chemical Brigade, on RED DRAGON '09 including a CBRN Initial Response Force (CIRF) update; an update by NORTHCOM on the CBRNE CM Response Force (CCMRF); a briefing by the Office of the Secretary of Defense (OSD) on DOD's Strategic Combating Weapons of Mass Destruction (WMD) priorities; an update on CM-related issues from each of the COCOMs; and a briefing by Mr. Lowe on the role of the Department of State (DOS) in Foreign CM.

Objectives for this year's conference were to:

- Provide a forum for CBRN CM decision makers and planners to develop deeper understanding of capabilities, limitations and challenges
- Discuss how DOD supporting organizations can provide better integrated skill set to Domestic (DHS) and Foreign (DOS) LFA during CBRN CM events
- Identify/solve challenges faced at the COCOM level in support of CBRN CM missions
- Provide a venue to promote achievements and share lessons learned from successes

Sincere appreciation is extended to all conference presenters for the quality and content of their presentations. Sincere thanks are also extended to those who provided the special displays. Finally, thanks to all attendees for your active participation, discussion, questions, and suggestions.

Anyone wishing to comment or offer suggestions regarding the attached conference summary – especially the presenters – are invited to submit comments to brian.freiburger@dtra.mil, who may also be reached at 703-767-4511.

Copies of the slides can be downloaded from the SIRPNET at <http://22.15.150.102/dtra/cmconf09>. Information regarding future DOD CBRN CM conferences will also be posted at www.cmconferences.org.

DAY 1

Opening Remarks

Given By: Ms. Catherine Montie, DTRA

Ms. Montie opened the 2009 CBRN Consequence Management (CM) Conference by explaining how vital the DTRA mission is to combating WMD terrorism. She emphasized initiatives throughout the DoD that aim to “integrate the force” and develop whole-of-government solutions to WMD terrorism threats. She encouraged everyone to pay close attention to their specific area of responsibility and how it might fit into the overall solution. She also noted that recent exercises reflect the need for understanding of integration between various departments and agencies.

ARNORTH/JTF-CS Role in CM

Presenter: MG Daniel “Chip” Long, Jr., JTF-CS

MG Long provided an overview of the Joint Task Force – Civil Support (JTF-CS) mission with regard to consequence management activities, noting that much progress has been made in training and sourcing the task force, but there is still work to be done. The JTF-CS coordinates and controls DoD assets that are requested to help during an incident. JTF-CS is able to provide resources associated with incident site response, medical and aviation support, and even search and rescue capabilities. The field training exercise (FTX), Sudden Response '09, provided an opportunity for the JTF-CS to work directly with State and local responders to coordinate consequence management activities following multiple catastrophic domestic events. MG Long emphasized that the assets that DoD provides in these types of situations must be requested by the State and local authorities. The JTF-CS operates in a support capacity rather than as a controlling unit. The task force is there to assist State and local responders with whatever capabilities or resources they might need. He also noted that in many cases, states are already well-equipped to respond to an array of incidents, including Civilian Support Teams (CSTs) and the National Guard, which will be utilized during these events.

Key Issues / Takeaways:

- JTF-CS can provide an array of resources and capabilities to assist State and local responders
- Sudden Response '09 was a consequence management exercise that allowed JTF-CS to train with other responders
- JTF-CS is a supporting entity to State and local authorities

NORTHCOM – CCMRF Update

Presenter: Mr. Richard Hasbrouck, NORTHCOM J-35

Briefing was classified SECRET.

Joint Lessons Learned Information System

Presenter: Mr. Kurt Heinz, DTRA

Mr. Heinz provided an update on the ongoing development of the Joint Lessons Learned Information System (JLLIS). Mr. Heinz explained that over the course of several years, the Government Accountability Office (GAO) had documented several instances of lessons learned that were not collected, analyzed, or made available. Subsequently, those lessons were not applied in later operations. After the attacks of 9/11, the Secretary of Defense inquired as to what lessons were being identified in the Global War on Terror (GWOT). When this request was not met sufficiently, COCOM commanders began to seek opportunities to improve interoperability and sharing of lessons learned to assist in future operations. The objectives of JLLIS are to provide COCOMS with the ability to collect, distribute, and share data and formulate corrective actions from lessons learned. It provides for observation collection, lesson analysis, knowledge dissemination, and joint collaboration. The current program aims to have JLLIS at full operational capability, complete with joint search implementation and usability improvement by 2011.

Key Issues / Takeaways:

- In the past, lessons learned were not sufficiently collected, documented, or analyzed. This led to mistakes being repeated over the course of many years.
- After 9/11, opportunities for interoperability and information sharing were sought.
- The JLLIS is the result of previous efforts (JCLL, JCOA, etc) to improve data collection and information dissemination following military operations.

RED DRAGON '09 Overview, CIRF Update

Presenter: BG James Cook, 415th Chemical Brigade Commander

BG Cook, Commander of the 415th Chemical Brigade delivered a summary briefing on the recent Red Dragon '09 Field Training Exercise (FTX), conducted 13-27 June, 2009 at Fort McCoy, Wisconsin. The goal of the FTX was to drill Army Consequence Management (CM) resources in an "intense but safe CBRN" environment. As a part of the exercise, military resources were integrated with local, state, and federal first responders, in order to fully operationalize Defense Support to Civil Authorities (DSCA) responsibilities. In total, the exercise involved 3,000 reservists, 1,000 civilians, 16 hospitals, and 4 major cities. The FTX simulated six separate CBRN events, including a large-scale biological agent release, a radiological dispersal device (RDD), a large-scale chemical agent release, the release of a Toxic Industrial Chemical (TIC), the collapse of a structure involving HAZMAT, and the detonation of an improvised nuclear device (IND).

Key Issues / Takeaways:

- Red Dragon is a 2-week, multi-disciplinary exercise to test CBRN response among local, state, federal and military personnel
- Summary:
 - o 3,000 reservists; 1,000 civilians; 16 hospitals;
 - o Unprecedented scale
 - o Scenarios: bio, rad, chem, IND, HAZMAT collapse
- Forced responders to use creativity in solving problems and integrate among response levels

National Guard's Role in Homeland Defense / State Partnership Program

Presenter: Maj Clay McGuyer, NGB

Maj McGuyer of the National Guard Bureau provided a summary overview of the National Guard's role in Homeland Defense and Civil Support. This support ranges from Law Enforcement and Local & State Crisis Management at the exclusively civil end, to conducting military operations in overseas conflicts and the expressly military end. This range is a testament to the Guard's versatility as a force multiplier for local, state, and federal resources. While ultimately a supporting agency, the Guard is dedicated to saving lives, maintaining civil order, maintaining communications, and continuity of operations. One of the primary ways in which the Guard performs these functions is through Military CSTs, which are dedicated to detecting and identifying CBRNE agents and substances, assessing the effects, and advising local and state authorities on managing the effects of the attack. Another way in which the Guard supports the consequence management mission is through CBRNE Enhanced Response Force Package (CERFP) units. These units work during incidents to locate and extract victims from a contaminated environment, perform medical triage and treatment, and perform mass patient/casualty decontamination. Another important program area is the National Guard State Partnership Program, whereby states partner with a foreign country to spur civil-military relations. Maj McGuyer also detailed a number of areas where the Guard continues to work to improve, namely integration with state and local resources, continual training, and funding resources.

Key Issues / Takeaways:

- Types of forces: Title 10, Title 32, State Active Duty
- "Event ascendancy": all events are local – only elevated if necessary
- Readiness Mandates
 - o Saving Lives
 - o Civil Order
 - o Communications
 - o Continuity
- WMD Civil Support Team (CST)
 - o Provides rapid response WMD response to states and localities
- CBRNE Enhanced Response Force Package (CERFP)
 - o Responds to CBRNE events to provide patient decon, emergency medical services, and casualty search and extrication
- NG State partnership programs

- States partner with foreign governments to spur civil-military relationships.

Consequence Management of Bioterrorism Incidents

Presenter: Dr. Dana Perkins, HHS & USAR CM Unit

Dr. Perkins of the USAR Consequence Management Unit provided a summary of the bioterrorism threat, as well as the military's response to a potential bioterrorism incident, whether accidental or intentional. Biological weapons, she stated, are relatively easy to produce, not requiring an extensive infrastructure or any excessively technical knowledge. Moreover, the threat comes not just from international terrorists, but also domestic terrorists who have the tools available. With more than 1200 known biological agents, it becomes difficult to prioritize the threats that we face, and counter proliferation is almost impossible because the pathogens can be self-perpetuating. Fortunately, due to the nature of biological weapons, there are a number of non-DoD resources that can aid in an effective public health response.

Key Issues / Takeaways:

- The production of biological weapons is becoming easier and easier
 - Numerous types, numerous dissemination methods
- Foreign as well as domestic terrorist threat
- Over 1,200 possible agents – we must prioritize our resources
- DoD, as well as non-DoD resources must work together to respond

Joint Capabilities Development for CBRN CM

Presenter: Mr. Daniel Laurelli, JRO

Mr. Daniel Laurelli of the Joint Requirement Office for CBRN Defense provided an overview of his office's structure and activities. The mission of his office is to act as the CJCS focal point and chief advocate for all CBRN Defense activities. To do this, the Office is divided into five branches: (1) Mission Integration (MAI); (2) Concepts, Studies & Analysis (CSA); (3) Capabilities Integration (CIB); (4) Medical; and (5) Consequence Management (CM), which is a cross-cutting branch that integrates the subject matter expertise within the other four branches to ensure a comprehensive, cohesive approach to CBRN Defense advocacy. Mr. Laurelli also covered the Joint Documents pertinent to CBRN Defense activities. These include JP 3-40: Joint Doctrine for Combating WMD and JP 3-41: CBRNE Consequence Management, just to name two. The Office is also dedicated to overseeing policy and applicable Joint Publications for Domestic CM operations, Foreign CM Operations; and DoD-Led CM operations. The Office is also responsible for organizing Joint CM Capability Development plans and procedures. To do this, the office has a CM Integrated Concept Team (ICT) which initially wrote a WMD CM Capabilities Based Assessment, which is an overview of the threats and possible requirements that the services will face. This is now developing into a CBRN CM Initial Capabilities Document, which outlines the requirement to resolve CBRN CM capabilities gaps based on aforementioned Capabilities Based Assessment. From this document, several material and non-material Capabilities Standardization Initiatives will

be initiated to include Field Analytics, CBRN Survey Capabilities, Mass Casualty Decontamination, and Installation Protection operations. Additional office CM efforts include JRO Exercise and Training Support to the services.

Key Issues / Takeaways:

- The Joint Requirement Office for CBRN Defense is charged with acting as the CJCS focal point and chief advocate for all CBRN Defense activities
- The JRO is divided into Five Branches
 - o Mission Integration (MAI)
 - o Concepts, Studies & Analysis (CSA)
 - o Capabilities Integration (CIB)
 - o Medical
 - o Consequence Management (CM)
- The JRO is responsible for Joint Publications related to Domestic CM operations, Foreign CM Operations, and DoD-Led CM Operations
- The JRO is also responsible for organizing Joint CM Capability Development plans and procedures
 - o CM Integrated Concept Team (ICT), which develops the
 - o CBRN CM Initial Capabilities Document, which will lead to
 - o Several material and non-material Capabilities Standardization Initiatives
- The JRO is also dedicated to Exercise and Training Support for CM activities

Consequence Assessment Tool Set (CATS) and Incident Command Tool for Drinking Water Protection (ICWater) Update

Presenter: Dr. William Samuels, SAIC

Dr. Sameuls described the efforts to re-engineer CATS and ICWater to meet DTRA requirements. The enhancements to the software offer improved interoperability with CJMTK, JEM, JWARN, HSIP Gold/Freedom, LandScan and HHS requirements. It will also enable the effective transition of these technologies to joint acquisition programs. In particular, warfighters and combatant commanders will benefit from advanced hazard assessment models and optimized data fusion methods to improve decision-making and operational effectiveness.

Key Issues / Takeaways:

- Team is currently working to re-engineer CATS
 - o Replacing GIS software
 - o Adding additional layers
- ICWater is also undergoing revision to further develop this important capability for bioterrorism response.

DAY 2

DOD's Strategic CWMD Priorities and FCM

Presenter: Mr. Richard Chavez, OSD

Mr. Chavez began his presentation with a discussion of the principles of prevent, protect, respond, and recover. According to Mr. Chavez, respond and recover are stable priorities of every administration. Prevent and protect, however, are much more fluid. As a result, this new administration's focus is on countering WMD (CWMD) and cyber security. It is important to note that the new administration immediately associates nuclear with WMD. Mr. Chavez then discussed four WMD security challenges facing the United States to provide context for the rest of his presentation. Mr. Chavez then discussed in detail DOD's four strategic CWMD priorities. The four priorities are to increase the barriers to WMD proliferation and use; to improve the United States ability to identify and mitigate emergent WMD threats; to develop a layered, integrated WMD defense; and to manage the WMD threats emanating from the failing, fragile states/ungoverned territories.

Mr. Chavez made two important points related to the barriers to WMD proliferation that should be noted. First, the U.S. is currently reducing the availability of nuclear materials by buying the used fissile material from reactors and storing it in the Nevada. The important questions that arise from this are do we want to continue this practice and more importantly can we, given the financial costs and other negative effects. Second, to inhibit/reduce/reverse proliferation and break proliferation networks, the new administration is considering all means available to them but is focusing more on the non-military tools such as economic and political means. It is also important to remember that the nuclear weapons these countries possess are not war winners; they are viewed as a means of protection. As far as improving our ability to identify and mitigate threat emergency WMD threats, the important thing to note from Mr. Chavez's discussion is that we have relied too much on technical detection solutions, which are not infallible. The new administration is working hard to increase the U.S. human intelligence capabilities. Mr. Chavez also made two important points related to developing a layered, integrated WMD defense. First, the new administration is focusing on convincing allies to provide the layers of defense. Second, the intelligence community has low confidence in its assessments of other countries WMD capabilities. Therefore, it will be difficult for the U.S. to detect and intercept threats before they reach the homeland.

Mr. Chavez concluded his presentation by discussing OSD's initiatives and guidance related to foreign consequence management (FCM). He noted that the new focus of FCM efforts is to enable other countries to conduct CM operations on their own rather than relying on the U.S. Similarly, there is some consideration being given to whether DOD should program and budget for a FCM capability in each Geographic Combatant Command or the U.S. should move towards developing a global response capability. In addition, FCM will become a new priority in the current Quadrennial Defense Review (QDR).

Key Issues / Takeaways:

- The new administration's focus is on CWMD and cyber security.
- DOD's four CWMD priorities are to increase the barriers to WMD proliferation and use; to improve the United States ability to identify and mitigate emergent WMD threats; to develop a layered, integrated WMD defense; and to manage the WMD threats emanating from the failing, fragile states/ungoverned territories.

- There is some consideration being given to whether DOD should program and budget for a FCM capability in each Geographic Combatant Command or the U.S. should move towards developing a global response capability.
- FCM will be a new priority in the current QDR.
- All of OSD's work is a "work in progress"

CM Terminology Workshop COA/Ideas-Joint Doctrine Perspective on CM

Presenter: Mr. Robert Brodel, JFCOM

Mr. Brodel began his presentation by discussing the origins of the CM terminology review. It was evident in the most recent Joint Doctrine Planning Conference, the JP 3-40 Combating WMD Working Group, and the requests for feedback for JP 3-41: CBRNE CM that there is considerable confusion in the community about where CM fits and significant disparities between JP 3-40, 3-11, and 3-41. To address this outcry, JFCOM encouraged others to step out of the doctrinal process to gain a fresh perspective on the issue and formed an ad-hoc working group. Early in the review, it became clear that the confusion and disparities arose in 1997 when DOD significantly expanded the narrow CM definition put forth in the U.S. Policy on Counterterrorism. The expanded definition of CM forced the components to carve out and define their own mission, authorities, and requirements.

Mr. Brodel then discussed the three key observations of the ad-hoc working group, which included:

- There is an emerging trend away from using the term CM at the national level.
- DOD's use of CM terminology has extensively populated the term into DOD policy, guidance, and joint doctrine.
- DOD, with good intentions, has stepped into an unnecessary position of leadership with respect to CM.

Mr. Brodel then discussed the findings of the ad-hoc working group. One of the most important findings of the ad-hoc working group was that DOD should provide a perception and discussion of CM rather than definition. A definition unnecessarily forces people into a box. The ad-hoc working group recommended that the new DOD perception/discussion of CM be the U.S. Government's capability to prepare for, respond to, and recover from CBRN effects as a result of natural or manmade events at home or aboard. Mr. Brodel then discussed the Domestic, Foreign, Military and Installation CBRN response descriptions. He also presented the new descriptions for a CBRN event, incident, and response. Another important finding was that CBRNE CM should be transformed to CBRN Response in joint doctrine. The ad-hoc working group defined CBRNE Response as actions to mitigate the effects of a CBRNE event or incident. Mr. Brodel concluded his presentation by noting the revision of JP 3-41 will be the perfect avenue to initiate these changes in joint doctrine.

Key Issues / Takeaways:

- The three key observations of the ad-hoc working group were: (1) There is an emerging trend away from using the term CM at the national level; (2) DOD's use

- of CM terminology has extensively populated the term into DOD policy, guidance, and joint doctrine; and (3) DOD, with good intentions, has stepped into an unnecessary position of leadership with respect to CM.
- One of the key findings of the ad-hoc working group was that DOD should provide a perception and discussion of CM rather than a definition.
 - The ad-hoc working group recommended the new DOD perception/discussion of CM should be the U.S. Government's capability to prepare for, respond to, and recover from CBRN effects as a result of natural or manmade events at home or aboard.
 - Another key finding was of the ad-hoc working group was that CBRNE CM should be transformed to CBRN Response in joint doctrine.

Army CBRN School

Presenter: Dr. Paula Mihalcik, USA

Dr. Mihacik began her presentation by discussing the mission and vision of Chemical Corps. The mission of the Chemical Corps is to enable its students to simultaneously perform both their war-time and homeland missions. Dr. Mihacik then discussed how the CBRN School supports CM programs. The CBRN School provides support through three avenues, which include training, doctrine support, and equipment. The CBRN School provides joint/multi-service training and has a wide variety of courses that fall within three categories, which include Professional Military Education, WMD Civil Support Teams, and CERFP and the CCMRF. The Professional Military Education courses provide IFSAC certifications in HAZMAT technicians, confined space, and incident command and emphasis skills needed for both tactical and domestic operations. The WMD Civil Support Teams course offerings include a Civil Support Skill Course, a CST Operations Course, Analytic Laboratory System, a Unified Command Suite Course, and Pre-Command Course. Through these courses, the CBRN School has trained over 3300 CST personnel since 1999.

The CERFP and the CCMRF course are designed to support reserve component 14 day active training cycles. The course offerings include a CBRN Responder Course, a Dismounted Recon Course, and Mass Casualty Decontamination Course. To ensure these courses are as effective as possible, the CBRN School Staff visits the Vigilant Guard and Red Dragon exercises to observe how these courses are being put into practice and provide refresher training to exercise participants. The CBRN School also offers the Joint Senior Leader's course. This course is targeted at the O-4 and above level and provides an operational and strategic focus on DOD's Combating WMD efforts. This course has had a wide array of participants, including members of the interagency and coalition partners.

Dr. Mihacik then discussed the CBRN School's role in doctrine. The CBRN School published three key products in FY08, which included FM 3-11.21: MTTP for CBRN CM; FM 3-11.22: WMD-CST Operations; and 3-11.34: MTTP for Installation CBRN Defense. In FY09, the CBRN School plans to conduct a CCMRF DOTMLPF assessment and revise FM 3-28 and FM 3-11.22: WMD-CST Operations. Dr. Mihacik then discussed

the CBRN School's equipment program. The goal of the program is to field "synchronized" equipment that links to training, doctrine, UCS, CATS/MTP tasks, ISO 17025, and all sections of the CST. To date, the ALS Increment 1 fielding has been completed and the ALS 1 Sustainment is in progress. Dr. Mihacik concluded her presentation by discussing the Chemical Knowledge Network. The Chemical Knowledge Network provides students with limited chemical, biological, and radiological knowledge access to basic chemistry and biology online courses to better prepare themselves for attending courses at the CBRN School.

Key Issues / Takeaways:

- The CBRN School supports CM programs through training, equipment, and doctrine support.
- The CBRN School provides joint/multi-service training and has a wide variety of courses that fall within three categories, which include Professional Military Education, WMD Civil Support Teams, and CERFP and the CCMRF.
- The goal of the equipment program is to field "synchronized" equipment that links to training, doctrine, UCS, CATS/MTP tasks, ISO 17025, and all sections of the CST.
- The CBRN School published three key products in FY08, which included FM 3-11.21: MTTP for CBRN CM; FM 3-11.22: WMD-CST Operations; and 3-11.34: MTTP for Installation CBRN Defense.

DNWS-CM Education and Training Opportunities

Presenter: Mr. Steve Harper, DNWS

Mr. Harper began his presentation by discussing DNWS's unique missions and assets. DNWS's mission is to develop WMD operators through providing training focused on the big R and N of CBRN. DNWS is uniquely equipped to accomplish this mission because it has DOD's only nuclear weapons display area and radiological field training sites and an extensive nuclear effects collection, which includes Dr. Teller's original notes. Dr. Harper then discussed some of the other attributes of DNWS that enable it to accomplish its mission, including a core nuclear weapons expertise; partnerships with U.S. Joint Force Command, Department of Energy, Sandia National Labs, and civilian education and training establishment; and a diverse pool of expertise.

Mr. Harper then discussed DNWS's facilities and instructional modes. DNWS delivers its training through four instructional modes, which include in-residence classes, mobile training teams, distance learning, and modules that can be tailored to individual subjects. Most of the classes, however, have been delivered in-residence. One special feature of some of the in-residence classes is they include hands-on training in the field (i.e. five thorium seeded fields) and classroom (i.e. Simulated Accident Response). Mr. Harper then discussed DNWS's course offerings in four relevant areas, which included nuclear and radiological weapons; incident response; incident command and control; and CBRN modeling. Some of the sample course offerings for Incident Response are the Applied Radiological Response Techniques and Joint Nuclear Explosive Ordnance Disposal Course. Some sample course offerings for Incident Command and Control are the

Commander and Staff Nuclear Accident Response Workshop; WMD Command, Control, and Coordination; and Nuclear Radiological Incident Response Practicum.

Mr. Harper concluded his presentation by highlighting the features of DTRIAC. DTRIAC is in essence a search engine that enables scientific and technical knowledge acquisition and distribution. One of its key features is information analysis and preservation. DTRIAC has over 300,000 text file titles, 20,000 films, including atmospheric nuclear weapons effects testing and 1,000,000 still photos from 1944 to the present. The information in DTRIAC is transmitted to its users through online access, telephonic/email inquiries, tours, and visits. The key database involved in information preservation is STi Archival and Retrieval System (STARS). STARS provides secure web-based access to DTRA's scientific and technical knowledge housed in classified and unclassified digital library systems. STARS contains 3.5 million pages, 46,000 data sets, and 3,000 photos.

Key Issues / Takeaways:

- DNWS has DOD's only nuclear weapons display area and radiological field training sites and an extensive nuclear effects collection.
- DNWS delivers its training through in-residence classes, mobile training teams, distance learning, and modules that can be tailored to individual subjects.
- DNWS provides training courses in nuclear and radiological weapons; incident response; incident command and control; and CBRN modeling.
- DTRIAC is in essence a search engine that enables scientific and technical knowledge acquisition and distribution. The information in DTRIAC can be transmitted to its users through online access, telephonic/email inquiries, tours, and visits.

Consequence Management Decision Support Tool

Presenters: CDR Richard Gustafson, DTRA & Ms. Jessica Iannotti, DTRA Support

CDR Gustafson along with Ms. Iannotti provided a briefing on EUCOM's Decision Support Tool (DST). The EUCOM DST stems directly from the success of a related effort for US Pacific Command (PACOM) where an automated "playbook" was developed for the PACOM staff to assist them with the exercise Top Officials (TOPOFF) IV in the summer of 2007. The effort to support EUCOM came at the request of EUCOM's J-3, who requested DTRA support in building a DST to help his staff prepare for and execute the foreign consequence management (FCM) mission. The EUCOM DST was designed in PowerPoint and features a series of flowcharts (process diagrams) that depict the FCM response process. It features multiple links that allow the user to immediately access additional information such as reference documents, links on the EUCOM web portal, and DoD doctrine. This product also features a comprehensive electronic library of important response references.

Key Issues / Takeaways:

- The EUCOM DST is an all-electronic product that depicts the FCM response process and hyperlinks to supporting information including a reference library.
- The tool is available in both a classified and unclassified format.

- Other COCOMs have begun to develop offshoots of the DST.

PACOM – Update/GCC Issues

Presenter: COL John Riley, PACOM

COL Riley provided an overview of PACOM Consequence Management activities. He pointed out that PACOM has a “huge AOR” with all different types of languages, cultures, and climates, not to mention 7 of the world’s 10 biggest armies. Due to this, their two biggest problems are time and distance, so they are forced to come up with innovative solutions to complete their mission. They are also hindered by being a supported command, and are therefore reliant upon the other COCOMs for personnel. One of the innovative solutions that they have spearheaded is the Active Response CBRN (ARC) team. Created in the aftermath of 9/11, this team is charged with responding to CBRN incidents in the PACOM AOR. In between events, they train with local, state, and federal responders to improve whole of government response to incidents. To staff this team, and other more standard response organizations, PACOM co-opts soldiers in chemical companies assigned to PACOM. They are also working to enhance capability for decontamination, search and rescue, and mass triage, just to name a few. Among the future challenges that the presenter listed were the increasing footprint of the Republic of Korea in the region, dealing with Title 10 vs. Title 32 deployments, and theater security cooperation operations.

Key Issues / Takeaways:

- PACOM has a huge AOR – the problem of time and distance
 - o Every climate, hundreds of languages, wide development capabilities
- Maritime focus
- Wide threat environment
 - o CM is one of many possible responsibilities
- Personnel issues: the primary FCM force for the COCOM is currently deployed
- PACOM has developed an Active Response CBRN (ARC) team
 - o Co-opted soldiers in chemical brigades
 - o Written contracts
 - o Train with local, state, and federal responders to encourage a whole of government approach
- Future challenges and opportunities
 - o Korean peninsula
 - o Title 10 vs. 32 deployments
 - o Theater security cooperation
 - o Joint capacity with state and locals

EUCOM – Update/GCC Issues

Presenter: Lt Col Wendy Klein, EUCOM

The EUCOM COCOM is very active in consequence management activities, including survey and assessment, humanitarian assistance, embassy response, technical support, in addition to other important missions. To perform these activities, they have a number of

resources, including four Combat Support Teams, and EMAT and a CMAT. This allows for a flexible response to any number of CBRN activities.

Key Issues/Takeaways:

- Current initiatives
 - o Survey and assessment; humanitarian assistance; embassy response; technical support
- Resources
 - o 4 CSTs, EMAT, CMAT
- Focused on flexible response

TRANSCOM – Update/GCC Issues

Presenter: Mr. Timothy Quinn, TRANSCOM

Mr. Quinn provided an overview of TRANSCOM consequence management perspectives. CBRN environments present unique issues for logistics. Although “critical” warfighter support will continue regardless of the CBRN threat condition, it will not be business as usual and a number of constraints may be in place. This will be most noticeable for aeromedical evacuation and contaminated remains. Air mobility, for instance, while quick, is exceedingly costly and may be slowed drastically in a CBRN environment. The Air Mobility Command has developed a Counter-CBRN CONOPS that addresses a number of these issues. Another possible issue area is Civilian Airlift resources, which are usually used to transit large numbers of military personnel into and out of a region. In the event of a CBRN attack or release, these aircraft may not be allowed into the area immediately around the release site. TRANSCOM has identified three ways to deal with CBRN environments, in an ascending order of favorability: avoidance, protection, and decontamination. The big “elephant in the room”, however, is that 100% decontamination of resources may be impossible, or at least economically unfeasible. First of all, no one has really outlined what exactly the definition of “clean” is, and “formerly contaminated” vessels may be denied overflight, landing, or port clearances indefinitely. We have to figure out a way around these logistical challenges in a post-CBRN event environment.

Key Issues / Takeaways:

- CM Perspectives
 - o “critical” support will continue but there will be constraints
 - e.g., aeromedical evacuation, contaminated remains, etc
 - o No clear guidelines for equipment decontamination standards will disrupt or delay TPFDD support to COCOMs
- Operations in CBRN environments
 - o Avoidance
 - o Protect
 - o Decontamination
- DoD-wide advocacy required to ensure timely deployment, sustainment, and redeployment operations in contaminated environments

DAY 3

Department of State FCM Working Group Briefing

Presenter: Mr. Tom Lowe, DOS

Mr. Lowe began his presentation by defining FCM. The three major characteristics of a FCM event are that it involves a contaminant, is an international event, and requires a host nation (HN) request and U.S. Government (USG) approval for support. Mr. Lowe then discussed the U.S.' FCM mission pre-and post-event. Pre-event, one of the U.S. most important tasks is to strengthen our regional and coalition partnerships. Rather than highlighting our own capabilities, the U.S. should accomplish this task by illuminating other nations' capabilities that a HN could utilize during an FCM event. Post event, the U.S. role is mostly an information gathering one. The U.S. should inquire how the HN is doing with its own resources, if the HN has requested and/or is receiving support from its neighbors, and if the HN has requested resources from the EU, NATO, or other coalition partners. As a result, bringing U.S. assets to bear on a FCM event should be viewed by a HN as a last resort. When U.S. support is requested by a HN, the Department of State (DOS) works very hard to narrow down the request. This refining process often accomplished the goal of making U.S. resources a last resort because it is frustrating for the requesting HN. Mr. Lowe then pointed out that it is also very important for interagency members to understand the Embassy's post event priorities. The first priority of the embassy will be the safety and security of the U.S. citizens in country. The second priority of the embassy is to keep the relationship between the HN and U.S. alive (i.e. prevent the HN from succumbing to economic turmoil).

Mr. Lowe then discussed FCM policy guidance. According to Mr. Lowe, FCM policy guidance is all over the place and sprinkled. Strategic guidance can be found in a few sentences in NSPD 17, 28, 33, 46, and the National Response Framework. The most noteworthy guidance is NSPD 17. A new FCM annex was drafted to enable effective coordination of the U.S. response to an overseas CBRN incident. The annex was vetted with all Departments and Agencies with equities in FCM and is currently waiting for the Deputies signatures. One of the key features of this new annex is that it formalized an FCM Working Group. Pre-event, the FCM Working Group is responsible for developing regional and country FCM goals to be accomplished by the interagency in the next 36 months; reviewing Department and Agency engagement activities to determine when they become an FCM activity; and creating a high-side database of engagement activities being conducting by the interagency in country. The FCM Working Group is also working on developing several products, which include USG FCM Response Playbook, FCM Conditions for Success, and FCM Engagement Catalog. The FCM Working Group has moved forward with its meetings and product development even though the annex had not been formally approved.

Mr. Lowe then briefly outlined the U.S. Embassy emergency organization and a typical FCM response. Mr. Lowe concluded his presentation by discussing the Foreign Emergency Support Team (FEST). The FEST is an interagency team lead by DOS that is

tailored to the situation. In CBRN events, the FEST will include a FCM coordinator and tailored interagency experts from DOE, HHS, DOD, and FBI.

Key Issues / Takeaways:

- Post event, the U.S. role is mostly an information gathering one. The U.S. should inquire how the HN is doing with its own resources, if the HN has requested and/or is receiving support from its neighbors, and if the HN has requested resources from the EU, NATO, or other coalition partners.
- Bringing U.S. assets to bear on a FCM event should be viewed by a HN as a last resort.
- One of the key features of the new NSPD-17 FCM annex is that it formalized an FCM Working Group. The FCM Working group has three major pre-event tasks, which are developing regional and country FCM goals to be accomplished by the interagency in the next 36 months; reviewing Department and Agency engagement activities to determine when they become an FCM activity; and creating a high-side database of engagement activities being conducting by the interagency in country.

FCM Operational Concept/Vice Chairman of the Joint Chiefs of Staff (VCJCS)

Tasker

Presenter: LTC Hall/MAJ Thomas, SCC-WMD

LTC Hall began his presentation by discussing the origins of VCJCS tasker. The tasker was born when the VCJCS asked what his flyaway assets were for a FCM event after a trip to the PACOM area of responsibility. As a result, STRATCOM was tasked to provide an operational concept for the use of DOD Continental U.S. (CONUS)-based forces for FCM. LTC Hall then discussed the scope and assumptions of STRATCOM's study. LTC Hall emphasized three key assumptions, which were the inherent risk with deploying CONUS-based CM assets is acceptable; the force structure must be properly sized and resourced; and priority airlift will be available to transport FCM forces. LTC Hall then discussed the capabilities that each of the potential forces were evaluated against. Overall, there were three desired capabilities that STRATCOM sought, which included a team that was organized, equipped, and trained to perform all key FCM tasks (search and rescue, health and service support, and decontamination); a team that was sized (200-300 personnel) and postured to deploy and begin operations in time to mitigate human casualties (24-48 hours); and a team that was trained and equipped to operate in a non-domestic environment. LTC Hall ended his portion of the presentation by discussing the conclusions of the study. The most important conclusion was that USMC Chem-Bio Incident Response Force (CBIRF) is the most capable unit to provide FCM support in a timely manner. Another important conclusion was that experimentation is required to inform a follow on CONOPS and also to assist in developing adequate policy and guidance. During the question and answer portion, Mr. Lowe objected to a time period for mitigating human casualties and decontamination being considered critical. According to Mr. Lowe, U.S. assets would never be on the ground in 24-48 hours and therefore would not be involved in decontamination.

LTC Hall then turned his presentation over to MAJ Thomas to discuss the way ahead. The plan for the way ahead is to conduct a 4 ½ day tabletop exercises (TTX) hosted by the National Defense University that will facilitate the Combatant Commands (COCOM) to apply existing CM plans and capabilities. Below are the tentative scenarios for the TTXs:

- CENTCOM-Chemical weapons against non-partner nation
- EUCOM-Dirty Bomb against partner nation
- NORTHCOM- Biological attack against CONUS
- PACOM- Nuclear attack against partner nation

MAJ Thomas concluded his presentation by discussing the benefits STRATCOM believed the COCOMs would derive from these exercises.

Key Issues / Takeaways:

- The most important conclusion of STRATCOM's study was that USMC Chem-Bio Incident Response Force is the most capable unit to provide FCM support in a timely manner.
- The plan for the way ahead is to conduct a 4 ½ day tabletop exercises hosted by the National Defense University that will facilitate the COCOMs to apply existing CM plans and capabilities.

Theater Security Cooperation

Presenter: Mr. Mark Melanson, DTRA

Mr. Melanson began his presentation with an overview of the organizational structure of the OSAP Branch. Mr. Melanson then discussed DTRA's new area desks and the OSAP Branch's mission and key tasks. The major key task of OSAP is the Regional Combating WMD Strategy (RCS) and Activities Plan. Within the four basic implementation guidelines in the RCS, which are conduct proactive coordination; expand geographically and functionally; leverage and support international initiatives; and build capacity and foster collaboration, OSAP has four other key tasks. Mr. Melanson then examined each of the four implementation guidelines more closely.

Within conduct proactive coordination, OSAP has two key tasks, which include theater security cooperation management information systems (TSCMIS) entries and DTRA security cooperation mission essential task reporting. OSAP has no key tasks that fall under the guideline to expand geographically and functionally, but they still participate in activities in this area, including illicit trafficking, infrastructure protection, CM, CTR-BTRP, and small arms and light weapons. Also, it is important to note that activities related to this guideline are focused on regions rather than COCOMs.

Within the leverage and support international initiatives, OSAP has one key task, which is the Global Initiative to Combat Nuclear Terrorism Information Portal. OSAP focuses on using existing organization and resources to accomplish its activities related to this guideline. OSAP has found it is much easier to get tasks accomplished when you have a familiar face on your side. Building capacity and fostering collaboration is the meat of

what OSAP does. OSAP's key task in this area is the Regional Combating WMD Program (RCP). The RCP seeks to build regional collaborative and sustainable capabilities. Mr. Melanson then discusses RCP in detail. During this discussion, he emphasized five key characteristics. First, the goal of the RCP is regional effects. Second, the target audience for the RCP is ministry mandarins who have the ears of influential leaders. Third, most of the work related to the RCP takes place in functional area working groups. Fourth, RCP seeks to complement rather than replace existing efforts. OSAP is more than willing to achieve its goal through back door means. Finally, RCP tries to minimize the U.S. face by emphasizing partner nation ownership. Mr. Melanson concluded his presentation by providing an overview of the CM line effort OSAP is undertaking. OSAP is conducting 3-4 CM workshops in the Black Sea Region countries. In addition to the Black Sea countries, OSAP expects DTRA, NATO, EUCOM, OSD, USACE, FEMA, UN, and partner nations to participate.

Key Issues / Takeaways:

- OSAP's five key tasks are RCP; TSCMIS entries; DTRA security cooperation mission essential task reporting; the Global Initiative to Combat Nuclear Terrorism Information Portal; and RCS and Activities Plan.
- OSAP's activities fall under the four basic implementation guidelines set forth by the RCS, which include conduct proactive coordination; expand geographically and functionally; leverage and support international initiatives; and build capacity and foster collaboration.

Building Consequence Management Capability and Expertise in Bahrain

Presenter: Dr. Dana Perkins, HHS & USAR CM Unit

Dr. Dana Perkins, of the USAR Consequence Management Unit provided an overview of a Cooperative Defense Program dedicated to developing CBRN Passive Defense capability in foreign counties, in this case, the Kingdom of Bahrain. She began by providing a demographic overview of the country. She also noted that, while an active participant in CWMD and CT initiatives, Bahrain has also had a rather tumultuous relationship with Iran. CENTCOM's Cooperative Defense Program works to enhance TIC/TIM/WMD capabilities in the region. The group provided almost two weeks of training earlier this year. During this time they covered standard CBRN response activities; ran four different TTXs, involving smallpox, IND, RDD, and a nerve agent; and ran an FTX that proposed a chemical attack. Of the many lessons learned, the Bahraini students learned about coordination and inter-agency cooperation; elucidated a knowledge and capabilities gap regarding tactical requirements of the first responders to a CBRN incident; found that there was no publicly posted information on bioterrorism consequence management; and expressed some concern about working in a contaminated environment. Ultimately, the participants felt that the course enhanced their awareness of CBRN threats and related CM operations.

Key Issues / Takeaways:

- 12 day course ran by CENTCOM Consequence Management operations staff
 - o Included classroom, TTX, and FTX

- Contributed to enhanced awareness of Bahraini Defense Force and Ministry of the Interior participants on CBRN threats and related CM operations.
- Highlighted the need for a continuous process to help allies such as Bahrain to build and sustain consequence management competencies in both the military and civilian first responders' communities in support of national contingency plans, via formal education and training exercises.
- Provided opportunities for the instructors to act as "cultural diplomats," which may constitute a vital foundation of all CENTCOM's military activities in the region.

S&T Approach to Addressing NTA Operational Challenges

Presenter: Ms. Laura Sears, DTRA

Ms. Laura Sears, of the Defense Threat Reduction Agency provided an overview and analysis of the operational problem and the approaches needed to mitigate new technology agents. In the event of a chemical or biological attack using a heretofore unknown agent, warfighters must be able to sense, shield, sustain, and shape throughout the operation. To do this, we have to re-engineer the existing technology, but this is a moving target. Not only do we need to detect new-found chemicals, we must also develop the technology to characterize the agent, so as to develop appropriate countermeasures. We must also attempt to figure out what other threats might exist, and we must attempt to predict the behavior of the agent under operational conditions. These challenges require new approaches to CBW response operations, and will require new approaches to the changing threat environments.

Key Issues / Takeaways:

- The technology is great, but proper testing procedures must be in place before that technology can be operationalized
- To detect NTA, we have to re-engineer the existing technology, but this is a moving target
 - o This might also have to occur in civilian environments
- We must enable the warfighter to sense, shield, sustain, and shape the operational environment to ensure their safety

Interagency Biological Restoration Demonstration

Presenter: Mr. Ryan Madden, DTRA

Mr. Madden began by delineating the mission, vision, and organizational structure of the Physical S&T Division, which is responsible for the Interagency Biological Restoration Demonstration (IBRD). Mr. Madden then provided a brief overview of automated detailed equipment decontamination for land vehicles. Mr. Madden then discussed the IBRD in-depth. The IBRD program is a DOD-DHS co-funded and run program. The goal is to reduce the time and resources necessary to recover and restore wide urban areas, military installations, and critical infrastructure following a biological incident. The key focus areas of the program are DOD's ability to reconstitute mission critical functions;

compliance with federal regulations/standards; and community resilience and defense support of civil authorities.

Mr. Madden then discussed the first IBRD, which used the national planning scenario #2 and tailored it to the Pacific Northwest region. It examined decontamination, characterization, and clearance activities. The interagency participation was fairly robust and included EPA, CDC, NOISH , FEMA, DTRA, FBI, DOT, DNI, DOC, several military installations, NORTHCOM, USAF, USA, NGB, Washington State, and the private sector. Mr. Madden then discussed the key results of the first IBRD. First, current national capabilities and methods for recovery set an initial timeline for wide-area restoration of 10 years. Since standard property leases allow for tenants to walk away after 6 months of unavailable access, the U.S. needs game changer technologies to bring the timeline below 6 months. Second, remediation activities need to be flexible to allow for multiple approaches. Third, risk-based approaches for characterization, decontamination, and clearance are required to compress the timeline. Finally, IBRD projects are underway to provide game changers for wide area restoration. Mr. Madden concluded his presentation by discussing the next steps. Of note, the finale event will be conducted in September 2010. Also, there will be two follow-on events. The first will be conducted in a second urban area in FY10 and lead by DHS. The other will be conducted in the EUCOM AOR in FY 11 and led by DOD.

Key Issues / Takeaways:

- The goal of the IBRD is to reduce the time and resources necessary to recover and restore wide urban areas, military installations, and critical infrastructure following a biological incident.
- The key finding of the first IBRD was current national capabilities and methods for recovery set an initial timeline for wide-area restoration of 10 years. Since standard property leases allow for tenants to walk away after 6 months of unavailable access, the U.S. needs game changer technologies to bring the timeline below 6 months.

Open Forum

Facilitator: Mr. Harvey Hubbard, Joint Staff

The first issue discussed during the open forum was “the depth of the bench.” The participant was concerned that exercises and planning never seem to look beyond the first 24 hours of a catastrophic incident. Specifically, exercises never seem to address what happens when all of the equipment is unusable from 1-hour operations in the hot zone. He asserted that he believes we need to stress the people at the tactical levels more during exercises. One participant responded that these concerns were being addressed in Ardent Sentry 6. Another participant indicated that NORTHCOM’s J-4 was working on its plans for re-supply.

The other issue discussed during the open forum was two common misnomers about CM and DOD. The first misnomer is that NBC people automatically know how to do CM. This is a false assumption because most NBC people can not perform search and rescue.

The other misnomer is that we seem to think we can do it in support of ourselves. In other words, the approach has been to grow units rather than adapt the capabilities we have. The truth is we could do ourselves a far better service by enhancing the capabilities we have.