

Session 21: AMS National Reachback Capability – New Tools for Helping Emergency Responders

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Abstract:

One of the U.S. Department of Energy's National Nuclear Security Administration (NNSA) emergency response assets is the Remote Sensing Laboratory (RSL) Aerial Measuring System (AMS). The AMS is used to detect, measure, and track radioactive material before and during emergencies to locate sealed sources or determine contamination levels. Since September 11, 2001, increasing numbers of local, state, and federal entities have been acquiring and operating aerial radiation detection systems. NNSA has recognized a need by these entities for an AMS Reachback Center that would provide training and assistance on all aspects of AMS. The Center will assist local, state, and federal agencies in establishing the skills, resources, and training needed for a successful AMS regional operation. Beginning in January 2008 and continuing through April 2008, a pilot program was created in collaboration between NNSA and the U. S. Department of Homeland Security's Domestic Nuclear Detection Office (DNDO). The purpose of this collaboration was to provide aerial radiological surveillance and equipment technique training to local law enforcement offices in four major U.S. cities: Chicago, Washington, DC, New York City, and Los Angeles. The Mobile Aerial Radiological Surveillance (MARS) training curriculum was developed by AMS personnel and approved by the NNSA and DNDO headquarters. A total of 44 students participated in the training events held during this period. The positive reaction to this program has led to the establishment of the RSL as the headquarters for the National Aerial Measuring System Reachback (NAMSR) Center. The NAMSR Center will provide an AMS Home Team stand-by duty team for local, state and federal agencies to discuss, plan, and analyze available data for aerial responses. An additional role of the Center will be to serve as the source of subject matter experts (SME) for the training of newly established aerial radiological monitoring assets. The purpose of this presentation is to review the history, success, and future plans of the National AMS Reachback Center.

Biographical Sketch of Piotr Wasiolek:

Dr Piotr Wasiolek has over 25 years in experience in radiation measurements working as a faculty member at universities (Clarkson University and New Mexico Tech), and as a technical staff member at the Los Alamos National Laboratory. For the past 9 years he has worked as Senior Scientist at the DOE Remote Sensing Laboratory in Las Vegas, NV, where he is involved in radiological emergency response planning and operations. His primary responsibility is as Task Leader of Aerial Measuring Systems On-Call Response, and is a flying Mission Scientist on the DOE emergency response aircraft.

Biographical Sketch of Craig Lyons:

Craig Lyons has over 20 years in experience in radiation measurements working as a Nevada Test Site contractor health physicist. He has supported numerous programs including radiological control, environmental restoration and waste management. For the past 6 years he has worked as Senior Scientist at the DOE Remote Sensing Laboratory in Las Vegas, NV, where he is involved in radiological emergency response planning and operations. His primary responsibility is as Task Leader of Aerial Measuring Systems Radiation Mapping Response, and is a flying Mission Scientist on the DOE emergency response aircraft.