The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by the Pacific Northwest National Laboratory (PNNL), to support regional preparedness, resiliency, response, and recovery. The NWRTC enables homeland security solutions for emergency responder communities; federal, state, and local agencies; and private sector stakeholders in the Northwest. This monthly newsletter summarizes activities related to homeland security in the region, and this issue highlights:

- Efforts to sustain radiation and nuclear detection capabilities in Puget Sound
- A first-of-a-kind experiment to test and evaluate new technologies in an emergency management context
- A free public health emergency preparedness conference.

Thanks to Port Security Grant, Rad/Nuc Detection Training Continues in Puget Sound

In late June, 120 personnel from 22 federal, state, county, and local law enforcement and first responder agencies participated in training to detect radiation and nuclear threats aboard small maritime vessels. PNNL staff teamed with the Washington State Department of Health and the U.S. Department of Energy’s Radiological Assistance Program (RAP) Team 8 to conduct the drills on the water at marinas in Sequim, Port Orchard, Everett, Bellingham, and Seattle, Washington.

Coast Guard Auxiliary boats and PNNL’s research vessel Strait Science served as the target vessels with hidden radiation sources. Agencies used their human-portable detection equipment to detect, locate, and identify the sources and adjudicate the situation in accordance with the Regional Concept of Operations and Standard Operating Procedure.

This type of training will extend over the next several years because of a Regional Port Security Grant to continue the small vessel preventative rad/nuc detection mission through the Puget Sound Area Maritime Security Committee. The grant will fund the continued maintenance of the $3M U.S. Department of Homeland Security investment in detection equipment in the region, new equipment for new agency participation, and training.

New Technologies Evaluated During Emergency Exercise

On June 21, international, federal, state, and local agencies collaborated on the Enterprise Resilience Experiment, a first-of-a-kind effort to test and evaluate new technologies in an emergency management exercise context. More than 30 emergency management professionals participated on the U.S.
Six technologies were put into action for this exercise, which was based on a massive earthquake in the Cascade Range that would disrupt the West Coast from Oregon through Vancouver, British Columbia. Agencies shared two technologies with British Columbia to identify damage (Situational Assessment Mapper) and enable information sharing among locations (Live Wall). The exercise demonstrated the ability to easily capture pictures of the damage, along with any notes, and geo-locate the damage through a map interface that allowed assessment information to be easily shared across the border.

Other technologies used during the exercise include the following:

- **Real Time Evacuation Planning Model**, which simulates vehicle evacuation routes
- **Scalable Reasoning System Social Networking Analysis**, which summarizes trends in social media information and enhances situational awareness
- **Mobile Alerting**, a research tool generally used for building evacuation planning but used in this case to support search and rescue
- **Mobile Epiphany**, a commercial capability quickly tailored for shelter induction and to support family re-unification after a disaster.

The emergency managers participating had significant input on the value and application of the technologies and indicated their interest in piloting several of the technologies in their operations. Additional Enterprise Resilience Experiments are in the planning stages for other portions of the country. Results from the first experiment will be used to tailor and refine the approach in the future.