



AROUND THE REGION IN HOMELAND SECURITY

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 center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest.

UPCOMING EVENTS

- March 23, 2016 - [Next Generation First Responder Facebook Town Hall](#), virtual
- April 19-21, 2016 – [2016 Partners in Emergency Preparedness Conference](#), Tacoma, WA
- May 11, 2016 – [Checkpoint 16](#), National Information Sharing Consortium (virtual)
- June 7-8, 2016 – [World Conference on Disaster Management 2016](#), Toronto, Canada
- June 7-10, 2016 – [Cascadia Rising 2016 Exercise](#), Seattle, WA

CONTACT

- Want to know more? Visit us on the web at <http://nwrtec.pnnl.gov>
- Contact the NWRTC with questions and comments at nwrtec@pnnl.gov.

CYBER SUMMIT ADDRESSES GRID SECURITY, CYBER RESPONSE AND RECOVERY

On Feb. 29, the Snohomish Public Utility District (SNOPUD) joined PNNL in co-hosting the third annual Washington State Cybersecurity Summit, which brought together industry leaders and policy makers to discuss a comprehensive approach to grid security.



The goal of the summit was to broaden Washington State's perspective by hearing from public and private experts on cybersecurity and examining the newest cyber technologies and the need to create more resilient systems.

The event, held at the University of Washington in Seattle, WA, featured guest speakers Scott Charney, Corporate Vice President for Trustworthy Computer at the Microsoft Corporation, and Patricia Hoffman, Assistant Secretary at the Department of Energy Office of Electricity Delivery and Energy Reliability.

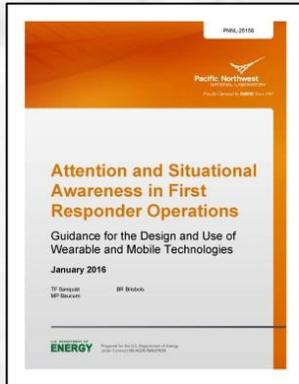
Participants, who spanned the private and public sector, discussed opportunities and challenges in building a better defense network,

combating cyberattacks, and training next-generation cyber professionals to strengthen and protect the state's critical infrastructure systems.



A report from the event will be available soon. Previous years' reports and presentations are available on the [SNOPUD website](#).

REPORT HIGHLIGHTS WEARABLES, SITUATIONAL AWARENESS



A recent report published by PNNL researchers on the Department of Homeland Security (DHS) Responder Technology Alliance reviews research in the areas of attention and situational awareness as they pertain to first responders' safety and performance.

“As more wearable technology comes to market, we have to examine the extent to which first responders can make use of the additional information while performing their primary tasks effectively. How much data can be presented and in what forms while still focusing attention on critical aspects of the emergency situation?” said PNNL Behavioral Scientist Dr. Tom Sanquist.

The report provides a series of recommendations to address attention-sensitive technologies for first responders, including:

- Research the interaction between design attributes, human factors, and effective performance.
- Catalog critical information needs for specific first responder tasks that may be ideal for wearable and mobile technologies.
- Develop realistic design concepts that incorporate near-term connectivity infrastructure for field-testable prototype devices.
- Determine threshold values for visual clutter in displays and design approaches to attention management such as de-cluttering.
- Research the impact of high emergency workload on first responders' attentional focus.
- Establish settings to study first responder situational awareness in a real-world context.

The report, “Attention and Situational Awareness in First Responder Operations: Guidance for the Design and Use of Wearable and Mobile Technologies,” by Dr. Sanquist, Matthew Baucum, and Brooke Brisbois, is available on the [NWRTC website](#).

PNNL PLAYING KEY ROLE IN MODERNIZING ELECTRIC GRID

The Department of Energy (DOE) announced that PNNL and 13 other national laboratories will deliver new grid concepts, tools, and technologies in a concerted manner. The [awards](#), totaling up to \$220 million, launch an integrated multi-year research effort that will guide the transformation of the nation's aging power grid into one that is clean, efficient, reliable, and resilient.



The projects were proposed by [DOE's Grid Modernization Laboratory Consortium \(GMLC\)](#), which is co-led by PNNL. The consortium of 14 national laboratories developed an integrated approach for identifying, planning, and executing the top priorities for grid modernization.

The proposals included 95 external partners representing large and small utilities, vendors, state regulators, and other key grid stakeholders from across the country. As part of the initiative, DOE also funded 10 pioneering regional partnerships with states, utilities, or other entities on the front lines of key emerging grid modernization and resiliency challenges.

To learn more, read the [press release available online](#).

FORUM FOCUSES ON FIRST RESPONDER TECHNOLOGY

On March 9, DHS hosted the 37th New York Area Science & Technology Forum. The event is the second installment of a three-part series focused on the Next Generation First Responder topic “Protected: Defending Against Life-Threatening Hazards.” Presenters discussed technologies and tools being developed to protect first responders including enhanced duty uniforms, personal protective equipment, and physiological sensors. [Click here for more information](#).

For more information about NWRTC, contact Director Ann Lesperance at ann.lesperance@pnnl.gov or 206-528-3223, Deputy Director Ryan Eddy at ryan.eddy@pnnl.gov or 509-372-6622, Technical Advisor Steve Stein at steve.stein@pnnl.gov or 206-528-3340, or visit us online at <http://nwrtp.pnnl.gov>.

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