

CRREL Hosts Ice-Based Radar Detection Visitor's Day

By Marie Darling, ERDC PAO

According to a leading consultant to industry on oil spills, "There is a worldwide need to develop a practical remote sensing system to detect and map oil in ice."

Last year, Cold Regions Research and Engineering Laboratory (CRREL) researchers with partnering researchers evaluated new and innovative equipment and technologies for the challenging task of remote sensing and detection of oil in and under ice. The tests were found to be a significant breakthrough when viewed against decades of previous work that had limited success in developing practical solutions to detect oil in and under ice.

During the month of November, CRREL and partners have been researching the efficacy of a chemical "herding" agent to thicken oil slicks on water among broken ice. Oil herders are chemical surface-active agents dispensed to clear and contain oil slicks on an open water surface.

Recently, CRREL hosted a successful Visitor's Day event. This event was coordinated by Leonard Zabilansky, a research civil engineer with CRREL's Ice Engineering Research Technical Support Team.

The day's events were attended by a local congressional staffer, a University of New Hampshire Coastal Response Research Center professor, a Dartmouth assistant professor, and research partners from S.L. Ross Environmental Research Ltd., the Mineral Management Service of the U.S. Department of the Interior, and the Oil and Hazardous Materials Simulated Environmental Test Tank (OHMSETT).



In above image, from left are Joseph Mullin and Sharon Buffington, U.S. Department of the Interior's Minerals Management Service; Dr. Kim Newman, University of New Hampshire's Coastal Response Research Center; Jim Wuebben, CRREL director; Rich Lougee, Congressional staffer with N.H. Senator Gregg's office; Dartmouth Assistant Professor Laura Ray; and Bill Schmidt, Oil and Hazardous Materials Simulated Environmental Test Tank (OHMSETT) view the Herding of Oil under Ice Tests in CRREL's Environmental Basin. (Photo by Tom Tantillo, CRREL)

The event was held primarily to showcase the second phase of testing, Herding of Oil under Ice, a technique to mitigate oil spills in ice-covered waters and CRREL's newest environmental endeavor. The test's lead researcher Ian Buist, with S.L. Ross Environmental Research Ltd., provided an overview presentation prior to viewing the test in CRREL's Environmental Basin.

This program is a pooled study funded by S.L. Ross Environmental Research Ltd., ExxonMobil Upstream Research Company, Sakhalin Energy Investment Company, Agip Kashagan North Caspian Operating Company, Statoil ASA, the Mineral Management Service of the U.S. Department of the Interior, and OMSETT.