



News Release

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U.S. and Canadian Militaries Join Forces to Test Canada's Tactical Armoured Patrol Vehicle

ABERDEEN PROVING GROUND, Md. – The United States military and its workforce pride themselves on protecting our country and our allies. To accomplish this goal, a collaborative effort often proves most effective. The U.S. Army Edgewood Chemical Biological Center (ECBC) Test Reliability & Evaluation Branch (TREB) recently completed risk mitigation testing for a Canadian armored patrol vehicle in support of the U.S. Army Aberdeen Test Center (ATC). Warfighter safety is a priority valued by many test personnel in the U.S. Army along with the desire to enhance technology in the developmental, test and research fields. This collective protection test effort not only reinforced the working relationship between two test facilities, but showcased collaboration and a shared common goal of protecting our allies and our Warfighters.

The Canadian Department of National Defense (DND) wanted to verify if the chemical sensor to be integrated in the Tactical Armoured Patrol Vehicle (TAPV) would function properly in the location proposed by the manufacturer, and if installation in this location would provide the interior crew with sufficient warning of a chemical agent attack. Understanding how different factors such as position and airflow affected the performance was critical. The Canadian DND reached out to ATC's Light Combat Systems, which later teamed with the ECBC Engineering Directorate's Engineering Test Division for aerosol and simulant vapor challenge tests for the use of the TREB's Static Challenge Chamber. The TREB has expertise in testing collective protection systems and has the capability to test large vehicles and shelters using methyl salicylate, a simulant for distilled mustard (HD).

Through discussions with TREB engineers, ATC and the Canadian DND, a test plan was developed using modified procedures with an aerosol challenge. This would provide data to determine the best configuration to allow for a single static challenge test. All tests mitigated possible risks for a vehicle in a contaminated environment. "The modified procedures combined different test methods that TREB engineers had previously performed. Through the attention to detail from Jennifer Mohr and the ingenuity of David King, the test went smoothly throughout execution," said Daniel O'Neill, project lead. While generating the test plan prior to testing, TREB personnel worked with Andy Cote from the ECBC Safety Office to determine if the modified procedures reduced the possible risks for the test operator. The TREB also worked with ECBC's International

Program Management Office to obtain clearance for the Canadian foreign nationals to witness testing.

ECBC and ATC test personnel provided recommendations that will ultimately enhance the performance capability of the vehicle and overall individual protection. The effective communication between all involved has led to the formation of a new working relationship. TREB looks forward to partnering with all the teams again to provide quality support for the Warfighter.

For more information about ECBC, visit <http://www.ecbc.army.mil/>.

ECBC is the Army's principal research and development center for chemical and biological defense technology, engineering and field operations. ECBC has achieved major technological advances for the warfighter and for our national defense, with a long and distinguished history of providing the Armed Forces with quality systems and outstanding customer service. ECBC is a U.S. Army Research, Development and Engineering Command laboratory located at the Edgewood Area of Aberdeen Proving Ground, Maryland. For more information about the Edgewood Chemical Biological Center, please visit our website at <http://www.ecbc.army.mil> or call (410) 436-7118.

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