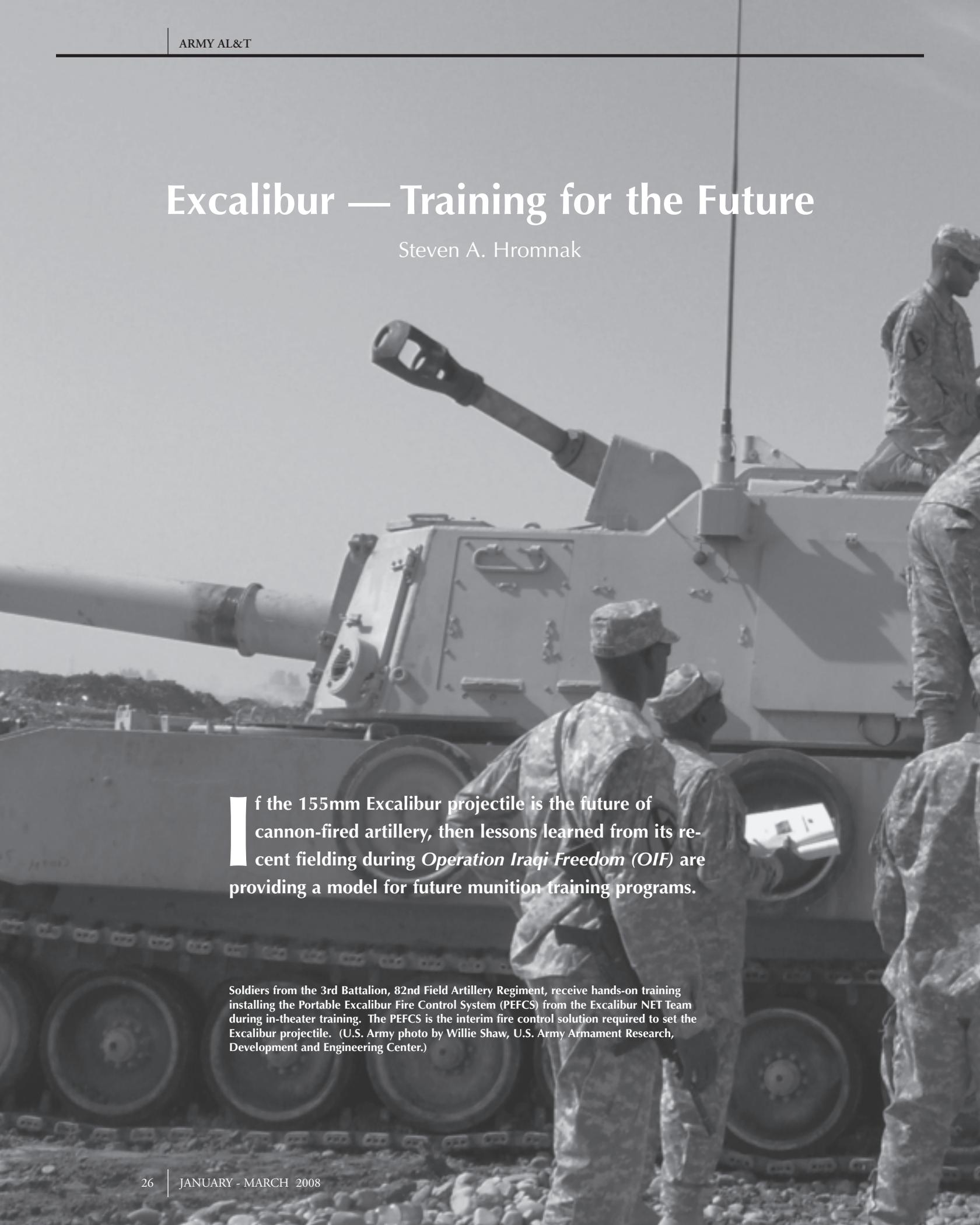


# Excalibur — Training for the Future

Steven A. Hromnak



**I**f the 155mm Excalibur projectile is the future of cannon-fired artillery, then lessons learned from its recent fielding during *Operation Iraqi Freedom (OIF)* are providing a model for future munition training programs.

Soldiers from the 3rd Battalion, 82nd Field Artillery Regiment, receive hands-on training installing the Portable Excalibur Fire Control System (PEFCS) from the Excalibur NET Team during in-theater training. The PEFCS is the interim fire control solution required to set the Excalibur projectile. (U.S. Army photo by Willie Shaw, U.S. Army Armament Research, Development and Engineering Center.)

Why does Excalibur require a different approach to training? The answer lies in the way missions have changed. War and insurgency have moved into urban environments, and destroying a city block is no longer an option. Precision engagements have become the new mission, and training is the key to getting advanced precision munitions like Excalibur selected as the choice munition by field commanders.

Since Excalibur relies on sophisticated targeting capability and new tactics exercised by fire direction elements, an integrated comprehensive training program is essential to realizing the system's full capabilities. To ensure that Excalibur training meets Soldier needs, Soldiers were integrated into the training program in the earliest stages of product development. Later, Soldiers helped write the training documents.

A New Equipment Training (NET) team was organized to cover the full mission from forward observation (FO), through fire direction center (FDC) operators, down to gun crews. Using a mix of classroom and extensive hands-on exercises, skills were honed and training units conducted test firings for critical program events with full digital connectivity from FO through the FDC to the gun crew.

When the team hit the sand during *OIF*, there was no question they would succeed. Each Forward Operating Base capped off the training with the unit firing a tactical mission. With each hit, Soldiers' confidence in the system grew. When the NET team left and missions came in, Soldiers were ready and Excalibur performed as expected.

As we move into the future, training plans must be fully developed. We owe it to our Soldiers to equip them



Artillerymen from 1st Battalion, 82nd Field Artillery Regiment, 1st "Iron Horse" Brigade, 1st Cavalry Division, prepare an XM982 Excalibur 155mm projectile for a fire mission, May 6, 2007. (U.S. Army photo courtesy of the Multi-National Division-Baghdad Public Affairs Office.)

with superior weapon systems and then to train them to succeed. In keeping with the philosophy of "train as you fight," the more hands-on experience we provide, the more effective our Soldiers will be in employing Excalibur and other future gun-fired precision munitions systems.



**STEVEN A. HROMNAK** is the Fielding and NET Manager for the Project Manager Excalibur. He has a B.S. in mechanical engineering from the New Jersey Institute of Technology and is an Army Acquisition Corps member with Level III certification in program management. He is also a certified Lean Six Sigma Green Belt.