NCO's Howitzer Innovation Expected to Save Army Money, Lives

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Howitzer Innovation

Illinois Army National Guard Sgt. Wesley Todd has invented a device for light towed howitzers that improves Soldier safety and equipment longevity. It's also expected to save the Army hundreds of thousands of dollars.

The device is a tool that allows Soldiers to remove seized muzzle brakes more easily, without the sometimes damaging force previously required. His innovation saves the barrel, which can cost more than \$265,000, and preserves its rifling.

"Before, it was difficult to remove the muzzle brake that often can seize up in varying weather conditions," explained Chief Warrant Officer 2 Steve Murphy, armament supervisor. "To remove it, Soldiers would often take a sledgehammer to the muzzle brake."

Todd designed and fabricated the removal tool after watching Soldiers struggle with a seized-up muzzle brake. He describes his invention as basically a round steel plug with a notched end that attaches to the muzzle brake. The tool is used to turn it.

"Sgt. Todd has shown how a ... Soldier can improve a process for the entire Army, and his leadership has shown us a great example of how to listen to your Soldiers' ideas and help them implement positive changes," said Maj. Gen. Richard J. Hayes, adjutant general of the Illinois National Guard.





Sgt. Wesley Todd, of La Porte, Indiana, checks the measurements on the device he invented at the machine shop in the Combined Support Maintenance Shop in North Riverside, Illinois. The device, designed for the light towed howitzer, improves Soldier safety and equipment longevity. (Photo by Staff Sgt. Robert R. Adams / Illinois National Guard Public Affairs)

Todd is assigned to B Company, 935th Aviation Support Battalion at Chicago's Midway International Airport. He works as a machinist at the

Combined Support Maintenance Shop, where he repairs damaged parts and makes new parts for military vehicles and equipment.

His muzzle brake removal invention was the first piece of equipment that he has designed and fabricated himself, but he has also made modifications to automotive tools that allow for the replacement of certain parts and decrease the damage to the parts during repair.

"Various units throughout Illinois contact our department ... looking for possible changes to issued equipment that will meet their specific needs," he said. "And I endeavor to go above and beyond to make that happen for them."

Born in 1981 in Decatur, Illinois, Todd nevertheless considers La Porte, Indiana, his home. He graduated from Oak Hill High School, Oak Hill, Ohio, in 1999 and earned a bachelor's degree in the arts and graphic design in 2005 from Shawnee State University in Portsmouth, Ohio.

Following in the footsteps of his grandfathers who served in World War II and his three uncles who later served in the Army, Todd joined the Army in 2007.

His first assignment was with a combat engineer unit in Ashland, Kentucky. To date, his jobs in the Army have included combat engineer, military policeman, wheeled vehicle mechanic and allied trades machinist/welder.

Todd considers selfless service the most important Army Value.

"Each Soldier needs to be willing to put his own needs and wants last, without seeking recognition for what he does or sacrifices," he said.

He believes the key to being a good leader is knowing "the ins and outs" of his or her chosen field and having the ability to impart that knowledge. He advises anyone planning to join the Army to have a sound reason and purpose for doing so and "never lose sight of their purpose or desire."

Todd and his wife, Amy, were married in 2008 and have three girls: Izabella, Marisa, and Alexis. Todd said he admires his father for "setting an example for me to strive to be what I am today."

Todd hopes eventually to retire as a chief warrant officer and plans, as a civilian, to use his skills to improve and benefit the Army.

He said, "In the future, I would love to work in a position researching and developing various military equipment and systems."