

He's on a mission to build better helmets

by [LINDSAY PEYTON](#), CHRONICLE CORRESPONDENT | May 10, 2011 4:02 pm



JULIO CORTEZ: CHRONICLE NEW HELMET: Bob Meaders started Operation Helmet, a nonprofit that has donated more than 54,000 helmet upgrade kits free of charge to troops serving in Iraq and Afghanistan. - Julio Cortez

Dr. Robert H. Meaders is a man on a mission – protecting the heads and brains of U.S. troops. Meaders founded the nonprofit Operation Helmet in 2003, after his grandson **Justin** requested safer helmets for his Marine Corps unit.

The organization has now provided more than 54,000 free helmet upgrade kits to troops serving in Iraq and Afghanistan. The kits provide shock-absorbing pads that can help prevent traumatic brain injury.

Meaders recently told his project's story as part of the Lone Star College-Montgomery Lyceum Speaker Series.

Donna Smith Burns, who introduced Meaders for the lecture, has been supporting his cause since she met him in 2003. She grew up in a military family, and her husband is a retired Navy pilot.

"We know what it is like to be serving abroad, and we know how important it is to let the troops know we remember them," Burns said. "This whole project started with a conversation between a grandfather and his grandson. A conversation can actually turn into action."

Wearing old helmets

Meaders, a Vietnam veteran who lives in the Bentwater community on Lake Conroe, was surprised to learn that helmets had not changed a lot since his service in the war. His grandson Lance Cpl. **Justin Meaders** of the U.S. Marines was training as a combat engineer and reported to his grandfather that they were wearing old helmets.

The only thing between the metal shell and a soldier's head were thin nylon straps. "An old piece of junk was protecting your brain," Meaders said.

Eventually, Meaders was able to take a Vietnam-era helmet, add pads and chin straps and create a more protective product. He outfitted his grandson's military group with the updated helmets. With the new padding, the chances of brain injury were greatly reduced. Where before impact would have been critical and survival unlikely, soldiers would now be able to walk away with only a minor headache.

"You'd have a lot better chance of coming back and being able to remember your name," Meaders said.

When Meaders brought his research and his new helmet before the Marine Corps, they were willing to authorize — but not fund — the upgrade.

One afternoon, Meaders was sitting on the porch with his wife and the phone rang. Cher called, offering to donate money to the cause. She also agreed to appear with Meaders at his Congressional hearing.

"They tell me it was the best attended hearing in Washington," Meaders said.

Traumatic brain injury

Meaders explained that helmets not only shield the head from actual ballistic sources, like bullets and fragments, but also protect the brain from other hazards.

He is most concerned about trauma caused by blast waves, which can create varying pressures around the skull.

"It's been shown that blast waves ripple your helmet and skull. When the two get together, your brain gets beaten up," he said. "The skull looks like it's absolutely plastic."

A hollow helmet will actually amplify the pressure of blast waves. Filling it with the proper foam pads can protect the brain, but filling it with rigid pads can increase the risk of brain injury, he said.

Saving lives

Meaders said that between 2006 and 2009, 18 percent of all troops, even those not diagnosed, have at least minimum traumatic brain injury. He added that 1.5 percent have such serious trauma, they are unfit to return to combat duty.

He estimates that it costs \$2.7 million for the lifetime care for one brain injured soldier, just to cover medical expenses.

While businesses and celebrities have been supportive, Meaders said donations come in on an irregular basis. They currently have a backlog of more than 800 soldiers waiting for upgrades. He encourages people to call their Congressional representatives. "Get in front of Congress and kick down some doors. Stand up and be heard," he said.

In the meantime, Meaders said he has a lot of work left to do.

"I see no time in the immediate future where we can fold our hands and go play golf. We will have to keep working on this," he said.