"I always keep old stuff on the walls because I learn so much from it," said Rich Landry, individual designer in Load Carriage Systems, Product Manager Soldier Clothing and Individual Equipment, Natick Soldier Systems Center, Natick, Mass. (Photos by Martha C. Koester / NCO Journal)

Natick's 'Pack Man' Aims To Lighten NCOs' Load

By Martha C. Koester — NCO Journal

If they ask, he will make it. Chances are, if a noncommissioned officer pitches an idea for a new piece of Army load carriage to Rich Landry, the equipment designer is going to turn it into something tangible.

A former Pathfinder in the 82nd Airborne Division, Landry understands the struggle of NCOs on the battlefield who are often weighed down with body armor, weapons and other equipment. During a visit in late June to Fort Belvoir, Va., Army Vice Chief of Staff Gen. Daniel B. Allyn reiterated the Army's desire to lighten the Soldiers' load during a visit to Program Executive Office Soldier. "I appreciate what you are focused on … better kit and lighter weight," Allyn told PEO Soldier staff members.

It's a challenge Landry embraces.

"The beauty of what we're able to do here is a Soldier comes to us with an idea, and in a very short period of time, they have something in their hands," said Landry, individual designer in Load Carriage Systems, Product Manager Soldier Clothing and Individual Equipment, Natick Soldier Systems Center in Natick, Mass. "Soldiers leave here with at least a concept. It might be a 60 percent solution, and it might be a 90 percent solution if we're lucky. But typically the 60 percent solution we are happy with right out of the starting gate.

"And then we evaluate," Landry said. "We will have 50 of them built, and we let Soldiers tweak it. We do the tweaks to it very quickly once again, get something back in Soldiers' hands and they will look at it and say, 'That's good.' Then, we can go to test with it. We may have 100 of them built, either [at Natick] or by a small manufacturer. Then, a company-size evaluation [follows]."

The rows of backpacks on his office walls serve as inspiration to the former Pathfinder, who often goes to the field to survey Soldiers about the military gear in use. The walls display backpacks used over the years by the Army, including the ALICE, all-purpose lightweight individual carrying equipment, pack. The ALICE pack was adopted by the military in 1973. The MOLLE, modular lightweight load-carrying equipment, system was due to replace it in the early 2000s. However, some units still prefer this style over the modern MOLLE pack.

"I always keep old stuff on the wall because I learn so much from it," said Landry, dubbed "Pack Man" by

comedian Larry the Cable Guy who visited Natick's Soldier System Center in 2012 for his "Only in America" series. "You just never know. There might have been a time where they were using that effectively, and it's good to look at that."

How he works

Landry recently heard from the 82nd Airborne Division that Soldiers needed a pack that could carry essential equipment for airborne operations.

Out of that feedback came the MOLLE 4000, a 4,000-cubic-inch rucksack that uses a frame out of the U.S. Marine Corps inventory as a foundation. In fact, Landry had also worked on that pack for the Marines. The MOLLE 4000 is in the testing phase, and airborne units may receive the new pack in fiscal year 2017.

The MOLLE 4000 "is really similar to some of these older packs, but it does a good job of transferring the load," Landry said. "One of the things that's popular about this pack is it looks very similar to some of these old ones. A lot of Soldiers love the old stuff. You can't pry the ALICE pack out of many Soldiers' hands; they love it."

Speed and simplicity are key points for Soldiers.

"We can take all the good points of these [older Army backpacks], take the science that Natick is so good at, and put it all together," Landry said. "That's really what our focus has been for the past 15 years on backpack technology — it's transferring some load and getting it off the shoulders and onto the hips."

Contributions from NCOs

NCO feedback is extremely valuable to Landry and what he does.

"A lot of what we do is very, kind of, 'stubby pencil' — we listen to Soldiers, we write it down and look at what we think it needs to be and what we need to happen when we build it," Landry said.

NCO input comes in different forms for Landry, whether it comes through the U.S. Army Natick Soldier Research, Development and Engineering Center's Public Affairs Office, Operational Forces Interface Group outreach efforts in the field or by walking through Landry's door during a tour at Natick.

"We have an absolute open-door policy for anybody in uniform," Landry said. "You come in anytime, and we will listen."

Plenty of feedback also comes during temporary duty assignments to military installations.

"Whenever we travel to Fort Bragg, North Carolina, or Fort Benning, Georgia, etc., there's always this kind of exchange process," Landry said. "We will do it through surveys or get Soldiers in a room and say,

Rich Landry discusses the Airborne Tactical Assault Panel, which is an effort to design a fighting load chest rig compatible with the T-11 static line parachute harness. (Photos by Martha C. Koester / NCO Journal)

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Durability is a key piece in military equipment design for Rich Landry. Landry said silent closures to replace Velcro and snaps are being considered.

'What's wrong with this?' 'What kind of problems are you seeing with this backpack?' 'We've had this thing fielded for X amount of years, how can we fix it?' 'How can we improve on it?' Because that's my job every day — fix stuff, improve, improve, improve. Everything can be improved. Nothing is perfect until we try and try and try, and keep on trying."

Where it all started

Landry is extremely grateful for the sewing skills he picked up as a young infantryman. Those skills came in handy when he found himself modifying military equipment.

"I was that young Soldier who was changing stuff, who was reusing 550 parachute cord and 100 mph duct tape and showing [others] what I could do to change stuff," he said.

"I have the best job, and I tell that to everybody," Landry said. "You never know what you are going to be working on. I travel a lot. I have deployed to Iraq twice. I have deployed to Afghanistan. This is where you get all your good information. This is where you learn. That's what it's all about."

Inspiration often strikes on the spot. While on deployment, Landry often takes photographs of unique ways that Soldiers are carrying or using military equipment.

"We really have to get out as much as we can and see that stuff," he said. "Sometimes we're thrown a curve like, 'They're carrying what? They're carrying how? Wait a minute. We have got to get on top of that. We've got to figure out a way to do that.' Sometimes that's just how it works."

The MOLLE pack can be credited to Soldiers, Landry said. It "came from learning from Soldiers, because what Soldiers put things through you can't model in a laboratory," he said.

"What Soldiers put [their equipment] through is amazing — airborne operations, air assault operations, heavy vehicle use," Landry said. "Things get driven over. Things get ripped off the side of vehicles in the night when two vehicles pass — on a road sign, on a telephone pole."

That's why Army equipment has to be durable and be able to withstand the extreme conditions of Soldiers' missions.

"We [at Natick] make a difference, and that's the beauty of it," Landry said. "Every morning I turn on the news, and I see Soldiers deployed who are wearing stuff that I designed. So the job satisfaction is huge. Everything a Soldier wears is done here, and we all touch it. It's fun and meaningful."

NCO input

Do you have a great idea on military equipment to tell Rich Landry and Natick's Soldier, Research and Development Center? Please visit http://nsrdec.natick.army.mil/hotline/index.htm and submit your information. ■