

was to find out how I could assist the team of coalition partners during the planning process. An important outcome of the entire exercise was our ability to communicate the plan across a wide range of coalition partners using the universal language of English. My role now was to help the translation of the plan from French to U.S. doctrine. The outcome was a well-planned doctrinally sound combined arms rehearsal that was clearly communicated in English to the French Infantry commandant.

In the end, the trip to France gave me the ability to recognize the importance of understanding my role in the overall coalition mission. If I am the commander and have multinational partners as an enabler, then I need to understand not only their capabilities, but also the way they plan, their tactics, and even the way they think to optimize their capabilities. If I am not the commander but am there to augment my coalition partners, it is important to fully understand the operational environment to place myself in a way that facilitates their mission. Ultimately, I am there to ensure mission accomplishment, whether as the commander or as an enabler.

In light of the recent terrorist attacks in Paris, my trip has brought even more relevance to the ability to plan and operate alongside our coalition partners. As a captain and future company commander, I don't take lightly the responsibility to solve the complex problems of the future battlefield. The ability to establish relationships and communicate effectively with our allies is key to collectively solving the complex problems of the future operational environment. The capacity to lead multinational forces through a complex problem set and walk away with everyone having the confidence to execute the plan is the future of combined arms maneuver. On the fourth and final day in France, we had the opportunity to tour the Rhône American WW2 Cemetery. As we walked through the vast amounts of grave sites, I came to see the importance of what I was doing in France: continuing the legacy of those who had gone on before me. We have always fought alongside our allies, and we must continue to build upon that coalition through relationships and leadership.

(At the time this article was written, CPT Ben Hunter was attending the Maneuver Captains Career Course at Fort Benning, Ga. He is currently serving as commander of B Company, 2nd Battalion, 7th Infantry Regiment, Fort Stewart, Ga.)

NATICK INVESTIGATES SELF-HEALING PROTECTIVE CLOTHING

JANE BENSON

Army researcher Quoc Truong wants to fill in the gaps in Soldier protective clothing — literally.

Truong is a physical scientist at the U.S. Army Natick Soldier Research, Development and Engineering Center (NSRDEC). He is collaborating with other researchers at NSRDEC, the University of Massachusetts Lowell, and Triton Systems, Inc., on the technical development of self-healing coatings that contain micro-capsules of healing fluid, which will be used to mend chemical-biological, or CB, protective clothing.

“When Soldiers are wearing a chem-bio protective garment, they are basically isolating themselves from their environment and any harmful agents, such as nerve gases, viruses, and bacteria,” Truong said. “Soldiers are very active and can encounter thorny bushes or other things that could result in pin-hole-sized damage to their chem-bio garment while carrying out their missions. The damage may not be visible to the human eye, but it is there.”

The self-healing technologies will enable cuts, tears and punctures in fabrics to quickly repair themselves. This means that the protective qualities of the garments will be far less apt to become compromised by tears and punctures. The technology will be incorporated into both the Joint Service Lightweight Integrated Suit Technology (JSLIST) garment, and the Joint Protective Aircrew Ensemble, or JPACE, garment.

“The self-healing coatings can be a spray-on coating or a continuous coating — depending on the type of protective clothing they are applied on,” Truong said. “The idea is just like when a scratch breaks open the skin. Our body has the ability to heal and mend, make a scab and heal. The same idea applies to the self-mending fabric; when the fabric containing these self-healing materials gets cut, it comes back together and heals. It forms something very much like a scab on the skin except it is on the fabric.”

The technology combines innovative approaches to gap-closure with healing micro-capsules that are activated when torn to repair cuts and punctures. The self-healing layer contains reactive agents to deactivate dangerous threats, including deadly chemicals, and also acts to reform the physical barrier to bacteria and viruses.

Read more at www.army.mil/article/158769/On_the_mend_Natick_investigates_self_healing_protective_clothing.

(Jane Benson works for the NSRDEC Public Affairs Office.)

