



ENGINES OF THE AGILE PROCESS

It takes an Army of support staff—engineers, technicians, planners, operations experts, and others of all stripes—working full-time and often overtime alongside Soldiers to make the Network Integration Evaluations (NIEs) happen and follow through to apply lessons learned, so that Soldiers ultimately will have the network tools they need to prevail in battle. (Photo by Katie Cain, System of Systems Integration Directorate Public Affairs.)



The 'new' ACQUISITION WORKFORCE

Behind the Agile Process, individuals commit to getting dirty and making it work

by COL Gail Washington

When you think of Army acquisition, you might picture PowerPoint briefings, memos for signature, strategy sessions in the Pentagon, or testimony on Capitol Hill. You probably don't think of innovation in the desert.

But during the past year, a team of military, civilian, and contractor personnel from across the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASAALT) community has expanded what it means to work in acquisition.

As the Army executes Network Integration Evaluations (NIEs) as a key component of the Agile Process, these individuals—engineers, technicians, planners, operations experts, and other staffers of all stripes—are working constantly behind the scenes to ensure a successful transformative process.

The NIE environment—encompassing Fort Bliss, TX, White Sands Missile Range, NM, Aberdeen Proving Ground, MD, and other sites across the country—poses unique challenges. The sheer

number of Army organizations, industry partners, and Soldiers involved makes coordination a monumental task. The pace of the events is brisk, with one NIE executed every six months and others simultaneously in various stages of planning, risk reduction, and follow-up. Add to that the personal sacrifices that our employees make in support of the NIE mission, and it's clear that this job is not for everyone.

Here's what it means to be part of the agile acquisition workforce: Put aside your organizational allegiances for the sake of a better-integrated solution for the Soldier; stay flexible and accept that the process will continue to evolve with each NIE cycle; be willing to learn not just in a classroom or from a policy manual, but from those around you and through your own hands-on experience; and even when the work is mundane or complex, keep in mind the big picture—because in the big picture, the stakes couldn't be higher.

The goal of the Agile Process and NIEs is to field integrated capability sets that deliver unprecedented network connectivity to Soldiers for a decisive

operational advantage. Starting this fall, the first of these capability sets will be fielded to brigade combat teams bound for Afghanistan. Our work to build, integrate, and validate these capability sets through the NIEs will pay huge dividends when Soldiers downrange receive game-changing gear that has been tested and is ready for the fight. As the NIE and Agile Process have matured from a new concept

to the Army's official way of doing business, we are standardizing and refining the supporting policies and procedures. These improvements include additional upfront integration before each NIE, a well-trained and multidisciplinary NIE "trail boss" team, and better-defined roles for each member of the NIE triad: the Brigade Modernization Command, U.S. Army Test and Evaluation Command

(ATEC), and System of Systems Integration (SoSI) Directorate.

The NIE process still isn't perfect. Like any major change, it is taking time to realize the Army's ultimate vision. But we are making progress, thanks in large part to the individuals of the "new" acquisition workforce. These are some of their stories.



SARIKA RANA

Role and organization: DA civilian, Program Executive Office Command, Control, and Communications – Tactical (PEO C3T)

NIEs participated in: 3

From Sarika Rana's point of view, the NIE is forcing the Army to do two things that are easier said than done: communicate and make decisions.

As an engineer for PEO C3T's Technical Management Division, which builds the network architecture for the NIEs, Rana has seen project managers (PMs) improve their communication dramatically across and within PEO boundaries. She said the NIEs have made it clear just how interdependent different communication systems are, leading to partnerships such as the cooperation among three different PEO C3T PMs to create mission command on-the-move applications for Warfighter Information Network – Tactical Increment 2 in time for NIE 12.1, which took place in fall 2011.

"You would not have had that happen if you didn't have an event like this pushing the groups together and forcing them to communicate," Rana said. "They've been talking before, but arguably NIE drove them to talk better."

The output of NIE and the Agile Process—the synchronized fielding of Capability Set 13—has also added a sense of urgency. With actual deadlines attached to fielding, training, and deployment schedules, the Army is adjusting its network baseline for certain units to ensure that urgent needs are met. If that means sacrificing the 100 percent solution for the moment, Rana said, then so be it.

"It's not as neat as we would like it to be, but it's breaking into manageable chunks, because you can't do all of it," she said. "At least you can start focusing on the things that will be coming up first."

Before working as a DA civilian, Rana worked for MITRE Corp., supporting the Communications-Electronics Research, Development, and Engineering Center and then PEO C3T. She participated in other tests of network equipment, a career path she calls "an interesting circle," but those did not force the community to come together in the same way NIE has, she said. Rana called the NIE environment more challenging—requiring personnel to master the arts of multitasking and patience—but in a way that ultimately will be good for the Army.

"We're now being forced to work together in a greater capacity," Rana said. "That's been really great, because you start seeing a lot of new things that you wouldn't have before."

“IT’S ABOUT THE SOLDIER WHO’S GOING TO GET OUR EQUIPMENT. AND IF WE DON’T DO IT RIGHT, THEY’RE THE ONES WHO ARE SACRIFICING THEIR LIVES.”

MARK FRYE

Role and organization: Contractor for Augustine Consulting Inc., supporting the Nett Warrior program under PEO Soldier

NIEs participated in: 3

Mark Frye operates on a simple principle: Give the Soldier what the Soldier asks for.

The Nett Warrior story is by now familiar: Following Soldier feedback at NIE 11.2 in summer 2011, Army leadership quickly restructured the program to take advantage of the latest commercial technology. The new lighter, cheaper version is a smartphone-like mission command system that connects with a tactical radio to provide dismounted leaders with increased situational awareness and mission-related applications.

But even before Nett Warrior became a prime example of NIE success, Frye was applying the same principle. In the development of Land Warrior, Nett Warrior’s predecessor, “what the Soldier said mattered,” he said. “If a Soldier gave me a piece of information, saying, ‘I want this thing called a chem light (app),’ the first person I load software on is you because it was your idea anyway,” Frye said. “By their own actions, by helping us, they have taken ownership of the process.”

In the NIE environment, that concept extends to the Army’s entire tactical network. While it’s more difficult to complete the feedback loop on such a large scale, Frye said, “it’s a consistent learning process” that has improved with each NIE and is now “getting more focused on the ultimate outcome” of fielding Capability Set 13.

“We’re going to field a lot of brigades this equipment, so this gives us the opportunity to get it right,” he said—“to talk to the Soldiers and say, ‘What can we do better for you?’ ”

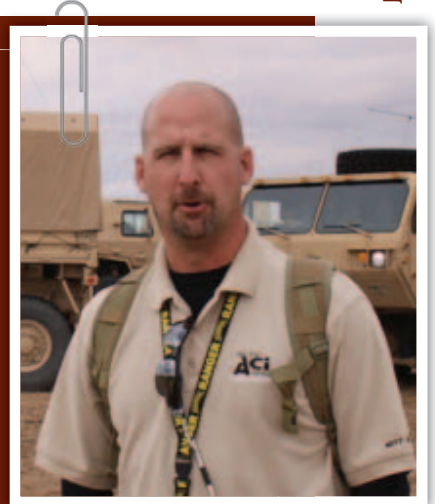
As a former Army first sergeant who retired after 22 years on active duty, Frye has been with the Nett Warrior program for more than four years. He is familiar with the fog of war that can descend on the lowest echelons closest to the tactical edge.

“The scariest thing on the battlespace is the unknown,” he said. “At team leader and above, a specialty skill is getting all the information they need to alleviate as much of that fog as physically possible.”

Nett Warrior does that by eliminating the time delay and human error associated with radio communications, instead giving Soldiers networked handheld devices to exchange messages and digitally track one another’s locations. For a young team leader faced with a tough decision in battle, Frye said, that information could make the difference between life and death.

Keeping that outcome in mind helps NIE personnel stay committed despite the long hours in the desert and frustrations of learning a new process, he said.

“You have to want to be able to quickly adapt to people you’ve never met before, for the sole purpose of integration—to get it right,” Frye said. “Because it’s not about you or me. It’s about the Soldier who’s going to get our equipment. And if we don’t do it right, they’re the ones who are sacrificing their lives.”





RICH DAUZ

Role and organization: DA civilian, SoSI

NIEs participated in: 3

Rich Dauz can see the finish line.

Dauz, Senior Integration Engineer for Project Manager Capability Package Integration within SoSI, has been working on integration since Future Combat Systems (FCS), the Army's ambitious effort aimed at fielding entire brigades with an array of interconnected, networked systems including manned ground vehicles, sensors, and unmanned air and ground systems. He joined the program in 2006 while he was still on active duty and stayed with it after he retired from the Army as a master sergeant in 2007.

After FCS was canceled in 2009, Dauz continued to work on the surviving elements for PEO Integration, which later became SoSI. He's seen a lot of "great ideas" from industry that succeeded in the lab but fizzled in the field.

Gradually, however, the NIEs have provided a place to force communication systems to function together in a realistic operational environment—"the network the way it should be working," he said.

"The reality of that network and the threads, how everything's connected—it's getting my trust a lot more than it used to," Dauz said.

Dauz and his team have a lot to do with that. In mentoring many of the young engineers who configure, install, and troubleshoot network systems in SoSI's Integration Motor Pool at Fort Bliss, Dauz encourages them to bring an open mind and to realize that the challenges and joys of their work will be like nothing they've seen in a classroom or a lab.

"If you open your mind up and let everything flow in that you see out here, you gain tenfold from just being here," he said. "The biggest thing, as I've talked to the young engineers who are coming on board, is to say, 'Tell me something that fascinates you.'"

The work of those engineers to integrate network gear onto various vehicle platforms for NIE 12.2 this spring is helping produce standard configurations and lay the groundwork for the synchronized fielding of Capability Set 13. Now that the Army is finally on the verge of fielding an integrated package of network equipment, Dauz is seeing many years of effort pay off.

"We're actually seeing it come to life," he said.



"IF YOU OPEN YOUR MIND UP AND LET EVERYTHING FLOW IN THAT YOU SEE OUT HERE, YOU GAIN TENFOLD FROM JUST BEING HERE."

**DOUGLAS PATTILLO**

Role and organization: DA civilian, SoSI

NIEs participated in: 3, the first as a contractor supporting ATEC

If you're looking for the trenches of NIE, find Doug Pattillo's desk.

That's the origin of the Warning Orders, Operation Orders, Fragmentary Orders, and other documents that make the machinery of NIE hum. And the more the NIE grows, the more coordination is needed across the spectrum of government and industry organizations with a stake in the exercise.

But even as Pattillo sweats every small detail, he doesn't lose sight of the big picture.

"You do get lost in the day to day," he said. "But I try to put my shoes back in the mid-'90s when I was a Signaleer, and what these guys are getting nowadays is like, wow, it's amazing."

Pattillo, who retired from the active Army as a master sergeant, deployed to Bosnia and Iraq. He used legacy radios, grease pencils, and paper maps.

"When I went in the Army, [which] was 1989, is like a millennium ago," he said.

Today's Army "is like Star Wars, it's so much more advanced."

That poses a challenge for the next generation of Signal Soldiers who will have to master a stable of advanced digital systems, but it's a challenge that can be overcome through intense training and the leadership of warrant officers and senior enlisted personnel, he said. What also helps is young Soldiers' familiarity with the digital world.

"They're smart, and they're getting it," Pattillo said. "My son joins the Army in June, and he's coming in as a 25-B (Information Systems Operator-Analyst). I keep talking to him about what we're doing now to try to make sure he's ready."

As the Army uses the NIEs to dissolve the stovepipes that have long plagued digital systems in favor of common waveforms and an integrated network baseline, Pattillo sees great potential for his Signal successors to thrive. That's why he keeps up with the constant churn of systems and personnel to try to lay down NIE processes that will endure.

"We're discovery learning on some things, but we're leaps and bounds ahead of where we were last time, and we've already started getting ready for [NIE] 13.1 and 13.2," he said. "It's coming together, and I think what we're doing here is definitely worthwhile."

"YOU DO GET LOST IN THE DAY TO DAY. BUT I TRY TO PUT MY SHOES BACK IN THE MID-'90S WHEN I WAS A SIGNALEER, AND WHAT THESE GUYS ARE GETTING NOWADAYS IS LIKE, WOW, IT'S AMAZING."

COL GAIL WASHINGTON is Project Manager Current for ASAALT's System of Systems Integration Directorate. She holds a B.S.B.A. with a concentration in marketing from East Carolina University and an M.S. in information and resource management from Webster University. Washington is Level III certified in program management.

