

# Global Support to the Joint Warfighter

*The Right Supplies to the Right Place at the Right Time*

**Gen. Benjamin S. Griffin, USA**

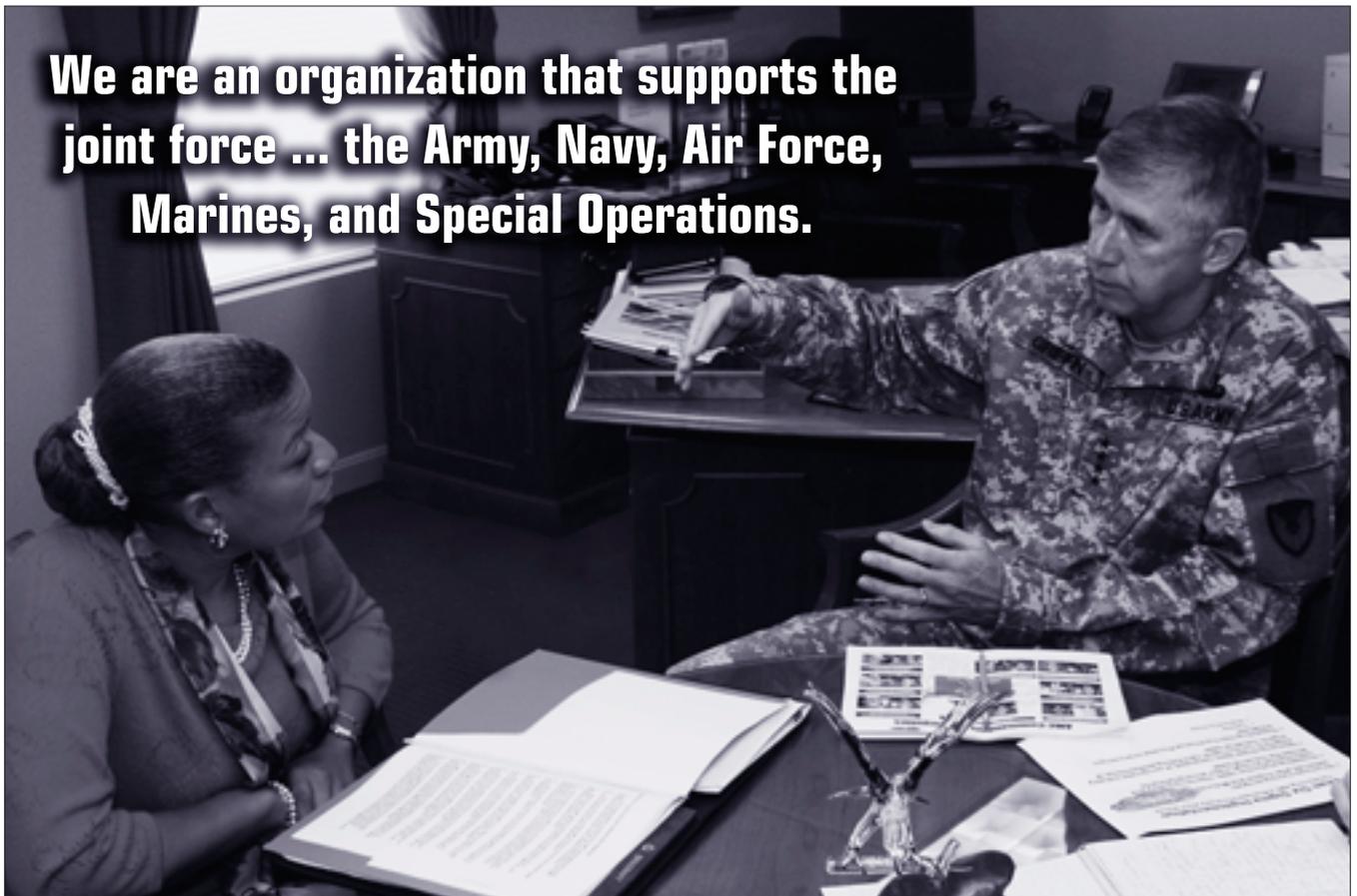
**Commanding General, U.S. Army Materiel Command**

**G**en. Benjamin S. Griffin assumed the duties of commanding general, U.S. Army Materiel Command, on Nov. 5, 2004. If a soldier shoots it, drives it, flies it, wears it, or eats it, AMC provides it. Every year, AMC overhauls and upgrades thousands of pieces of Army equipment, produces and provides bombs and ammunition for all the military services, maintains the Army's pre-positioned stocks on land and at sea, supports the acquisition of billions of dollars' worth of end items and parts for more than 1,000 weapon systems, demilitarizes chemical munitions, and provides logistics assistance officers and representatives to combat units across the Army.

DAU Professor Marcia Richard spoke with Griffin at AMC headquarters, Fort Belvoir, Va., in July on his priorities for supporting the warfighter and how he is implementing methods to create a lean organization that cuts through bureaucracy and focuses on the customer.

**Q** *Your organization is proud of the AMC technologies that support soldiers and save their lives. Can you describe some of the AMC programs that have proven most valuable to the warfighter?*

**We are an organization that supports the  
joint force ... the Army, Navy, Air Force,  
Marines, and Special Operations.**



## A

The number one priority for AMC is support to the joint warfighter. This year is the second year of what we call the Top Ten Greatest Inventions Program, which recognizes the 10 best inventions within the Army. This year, eight of those were from AMC and two came out of the medical community. All were tied to research and development activity and the strong link that RDECOM [*Research, Development & Engineering Command*] has with TRADOC [*Training & Doctrine Command*] and our AMC life cycle management commands. We are especially proud that the Top Ten were voted on by units in the field. Their selections were [*bullets added for clarity*]:

- Armor survivability kit for the HMMWV [*high mobility multipurpose wheeled vehicle or humvee*]
- Chitosan hemostatic dressing medical bandages that are designed to stop bleeding
- New Army combat uniform
- Improvised explosive device countermeasure protection equipment [Measurement & Signal Intelligence]
- Unattended transient acoustic MASINT sensor;
- M107 Cal .50 long-range sniper rifle;
- Lightweight handheld mortar ballistic computer;
- Upgraded Aviation Force Battle Command Brigade and Below/Blue Force Tracking;
- Lightweight counter mortar RADAR
- Electronic information carrier.

These innovations reflect our understanding of the needs of the warfighters in the units and our ability to rapidly find materiel solutions to meet those needs. That's what we are most focused on: being able to meet warfighting needs as quickly as we can and cutting down the time it takes to get something fixed, and/or fielded, and in the hands of our customer, the warfighter. We want to get a technological or materiel fix in place as quickly as possible.

We're also addressing new requirements, and we are finding that many of the things we're putting in place today also have application to the Future Combat Systems. We are an organization that supports the joint force, not just the Army; we provide support to the Army, Navy, Air Force, Marines, and Special Operations. Technology crosses all Service boundaries and requires a lot of close coordination with the other Services.

## Q

*You mentioned the new Army combat uniform—the ACU—was one of the top 10 selections. Do you like the new uniform? Why?*

## A

I do. It is a practical uniform, designed by the NCO corps. They led the effort in design. It's comfortable, and it's wash and wear. Soldiers can put these things in the washing machine, hang them up to dry, and wear them the

next day. The boots are clean-off-and-wear. It's a benefit to the soldiers who can least afford to pay to have patches sewn on uniforms and maintain the uniforms because they put the patches on with Velcro®. It's got pockets in the right places, based on the needs of the soldier in the field. It also replaces the woodland battle dress uniform and the desert camouflage uniform, so now we have one uniform.

At present, we've started fielding the ACU to units as they deploy. We get feedback, especially from our NCO corps, and can make any modifications—stitching, reinforcement in certain places—and fix any problems very quickly, get it back to the life cycle manager (TACOM), and they can get it into the production cycle.

## Q

*Would you comment on what AMC is doing to develop and maintain good communications and relationships with industry?*

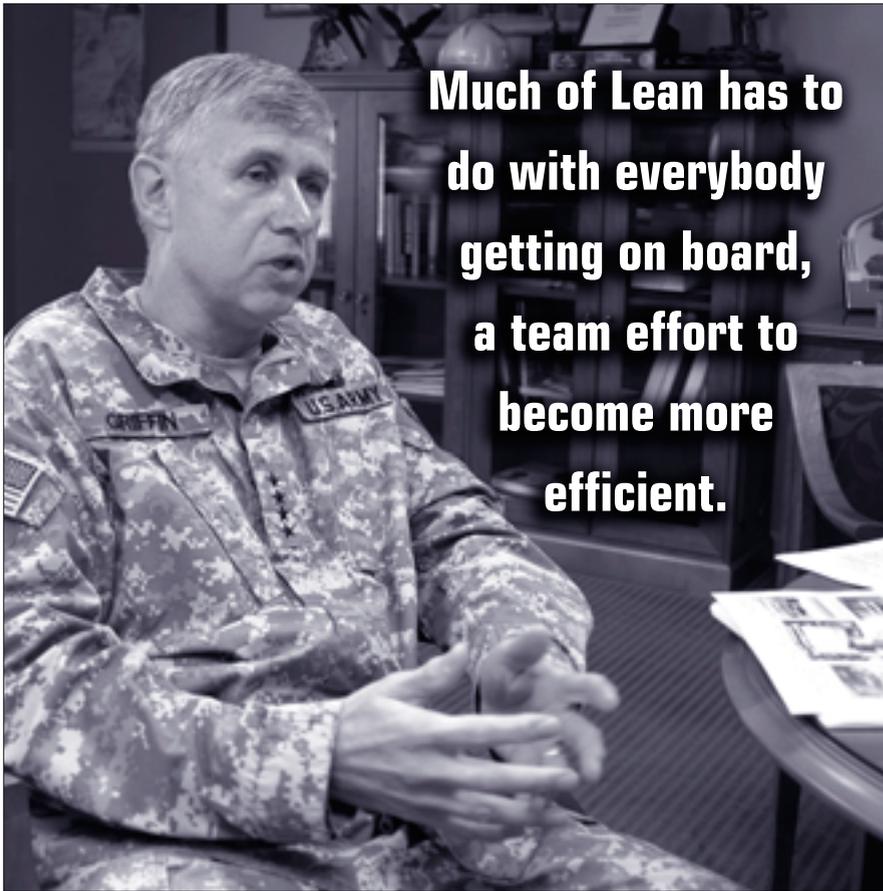
## A

AMC has a program where we meet with a group of senior executives from private industry. We've had three of these meetings here at AMC headquarters. We spend a day talking about AMC and what we are trying to do, and getting their feedback on how we can improve communications and interoperability with the private sector. We have been able to make significant progress with these sessions—progress that helps AMC better support the warfighting units.

Our staff and each of the major supporting commands also reach out to the private sector and visit extensively to share ideas and get feedback. Each of our major subordinate commands (two-star commands) conducts routine sessions with private industry; this has been particularly worthwhile in solving issues like parts shortages.

One of the biggest challenges we have is to get “the right part, to the right place, at the right time,” so we have begun sessions with the private sector to sit down at TACOM [*Tank-automotive and Armaments Command*], CECOM [*Communications-Electronics Command*], and AMCOM [*Aviation and Missile Command*] to share ideas, exchange views on our problem areas and theirs, and discuss how we can mutually support each other. It's been a lesson in improving communications; and the results are starting to show in improved parts flow.

We have started a program in which, as soldiers come back from deployment, we send them out to visit the private sector as well as depots and ammo plants, and provide firsthand feedback. Folks are very receptive to getting feedback on their products and learning—what's working and what isn't.



**Much of Lean has to do with everybody getting on board, a team effort to become more efficient.**

We've also created seven field support brigades; they're not exactly resourced like normal brigades, but they do have a Department of the Army centrally selected brigade commander, a small staff, and battalion commanders. These commanders are forward-deployed with our units in Iraq, Afghanistan, and Kuwait; they're also at Ft. Bragg, N.C. (covering the eastern part of the United States); Ft. Hood, Texas (covering the western part of the United States); and Ft. Lewis, Wash. (covering the Pacific region). We also have brigades in Korea and Germany. One of the things they do is get feedback directly from the field, and this feedback goes directly to the major subordinate commands and to the private sector where applicable. So our communications link with the private sector has greatly improved, and if we have problems today with a new or old system, we can more quickly fix them and get the system back to a unit.

The other thing we've created is life cycle management commands. They are responsible for equipment from cradle to grave and bring together the sustainment support with the PEOs/PMs [*program executive officers/program managers*] and the research and development laboratories. In many cases, these laboratories are collocated with TACOM, CECOM, and AMCOM, plus we have other laboratory support around the country. This synergy—the integration of acquisition, sustainment, and RDE—has enabled us to better speak with one voice to private industry. It also allows industry a point of entry and a pic-

ture that is a little bit clearer with respect to what our needs are, what's working and not working, and what our strategy and plans are for the future. Whether it's in tactical wheeled vehicles, tracked vehicles, or aviation, these life cycle management commands really promote close links to the private sector. There remains much work to be done, of course, but there's a tremendous sense of innovation, and it is working.



*How many commands do you have?*



We have seven: TACOM, AMCOM, CECOM, Chemical Materials Agency (CMA), Army Field Support Command (AFSC), U.S. Army Security Assistance Command (USASAC), and RDECOM.

TACOM, CECOM, and AMCOM are our three primary life cycle management commands. The CMA really operates like a life cycle management command. And in the near future, I

intend to create a joint munitions-life cycle management command.

USASAC is involved with foreign military sales and operates the Program Manager, Saudi Arabia National Guard support; it's not a life cycle management command like the others, but it has many of the same tenets and attributes. And then there is RDECOM which supports all the other life cycle management commands. From a research and development standpoint, they are linked; they are collocated with TACOM, CECOM, and AMCOM; in fact, the R&D headquarters is collocated with the CMA.

The laboratories we have around the country and the work that RDECOM does with the university systems is pretty extensive, feeding into the R&D effort and the technical advances in science and technology. There is a lot—there *has* to be a lot—of synergy in exchange of ideas. For example, even though CECOM is headquartered at Ft. Monmouth, N.J., it's got to work hand in hand with ground systems at TACOM and aviation systems at AMCOM. You have to have this synergy from combining the power generation, antennas, and command and control systems, along with the Central Texas Support Facility at Ft. Hood, which does much of our systems integration for CONUS [*the continental United States*], as well as deployed units. They also work extensively with the National Training Center and in the future will work with the Joint Readiness Training Center. We have reps now

full time at NTC, and that contributes greatly to our knowledge and lessons learned. We also have a very close relationship with the Futures Center at TRADOC as well as with the battle labs at the different school houses.

**Q** *You talk a lot about lessons learned. What type of repository do you maintain to keep and manage all those data?*

**A** We use the Center for Army Lessons Learned (CALL) at Ft. Leavenworth, Kan., and we have a repository of invaluable lessons learned inside our operations center and RDECOM. In the field, we have our logistics systems reps and logistics assistance officers. Each of our divisions has anywhere from 30 to 40 logistics systems reps. They provide ground and air expertise; they are forward-deployed and serve as a network for providing information and support lessons learned as well as information dissemination. Many of the immediate fixes we can provide from a maintenance and logistics standpoint have been very rapidly published in *PS Magazine*, the Preventive Maintenance Monthly, which is published by our Logistics Support Activity at Redstone Arsenal, Ala.

From an R&D standpoint, it's important not only to take those lessons learned and work the materiel fixes today, but also to institutionalize how we integrate them into our future systems.

**Q** *What else is AMC doing to strengthen its relationships with its partners—field Army, PEOs, other Services, and government agencies—and to streamline the logistics process?*

**A** The Defense Logistics Agency is a critical part of what we do. We have moved to strengthen our relationship and interoperability and communications with DLA. We run an operations update weekly. We work two major sessions: One is an operations update with direct feedback via video teleconferencing from the field commanders in theater, in CONUS, or wherever they may be. They list their significant issues, problem areas, parts issues, maintenance issues, and readiness drivers. DLA is sitting right there with us, so as we identify problems, they are tracking them with us as well. They have folks collocated with us, forward-deployed,

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### Commanding General, U.S. Army Materiel Command

**G**eneral Benjamin S. Griffin assumed the duties of commanding general, U.S. Army Materiel Command, on Nov. 5, 2004, before which, he served as the Department of the Army Deputy Chief of Staff, G-8.



Griffin was commissioned as an infantry officer in July 1970 following graduation from Officer Candidate School, Fort Benning, Ga. He served two tours at Fort Bragg, N.C., in the 82nd Airborne Division: in the 1st Battalion (Airborne), 508th Infantry as a rifle platoon leader and company executive officer, and in the 3rd Battalion (Airborne), 325th Infantry as a commander of Company C and an S-3 Air (Operations) officer. Griffin also worked as a G3 operations officer, Headquarters, 82nd Airborne Division.

Griffin's overseas assignments included a tour in Korea as a company commander and brigade S-2 in the 2nd Infantry Division. He served two tours in Germany in the 8th Infantry Division as secretary of the general staff and Mechanized Infantry Battalion executive officer in the 2nd Battalion (Mechanized), 87th Infantry. He was also commander of the 3rd Battalion, 8th Infantry Regiment.

Griffin's later assignments included special assistant to the chief of staff of the Army in Washington, D.C., and commander of the 2nd Brigade, 6th Infantry Division (Light) in Alaska. In August 1994, he served as executive officer to the commanding general, U.S. Army Forces Command, Fort McPherson, Ga. Following that assignment, he took command of Joint Task Force 6, Fort Bliss, Texas. He then served as the assistant division commander (support), 1st Cavalry Division in Fort Hood, Texas. In July 1997, Griffin became the director of force programs, Office of the Deputy Chief of Staff for Operations and Plans in Washington, D.C. He returned to Fort Hood from June 1999 to October 2001 to command the 4th Infantry Division.

Griffin's awards and decorations include the Distinguished Service Medal, the Defense Superior Service Medal, the Legion of Merit (with three Oak Leaf Clusters), the Meritorious Service Medal (with four Oak Leaf Clusters), the Army Commendation Medal (with one Oak Leaf Cluster), the Army Achievement Medal (with one Oak Leaf Cluster), the Joint Meritorious Unit Award, the Master Parachutist Badge, the Expert Infantry Badge, and the Army General Staff Badge.

Griffin received a bachelor's degree in business management from Old Dominion University, Va., and a master's degree in business administration from Mercer University, Ga. His military education includes the Infantry Officer Advanced Course, Command and General Staff College, and the Industrial College of the Armed Forces at the National Defense University.

so they're in many of the same places we are. We try to get out and visit as many DLA sites as possible, and the relationship is something we will continue working to strengthen. Of course, DLA is only one of our parts suppliers. Each of our life cycle management commands manages and/or provides parts as well, primarily through the original equipment manufacturer. We have gained some significant efficiencies here in recent months, and I see a very bright future, especially in the area of performance-based logistics, where we can achieve efficiency—get the part faster and save dollars at the same time. The other session is a weekly production review, with our industrial activities. Again, DLA is right there with us.

We've also spent time with TRANSCOM and Air Force Materiel Command. We get great ideas from the Special Operations Force, the Navy, the Air Force, and the Marine Corps. We work with the Office of the Secretary of Defense on the Joint Logistics Board, and we do a lot of other work with the AT&L community. I like to think we are a strong and growing partner in the Joint and OSD communities.

**Q** *I went to Naval War College, graduating in 2003, and I've had the pleasure of working with all of these Services. That was one of the areas they really focused on: joint operability. Listening to you speak it seems that communication is really progressing.*

**A** When you look at what we do in chemical demilitarization, tank-automotive, our support forward through the field support brigades, aviation and missiles, R&D, communications and electronics, and security assistance, we are truly providing support to all the Services, and we get support from all the Services as well. Just in the area of ammunition, we have full-time reps on the staff from the Navy and the Air Force. If you go to McAlester Army Ammunition Plant in Oklahoma, you'll see bombs being produced for the Air Force, the Navy, and the Marine Corps, as well as munitions for the Army. If you go up to Lettorkenny Army Depot, Pa., or Redstone Arsenal, you'll see we're doing missiles as a "joint" program. In communications and electronics, the workload of Tobyhanna Army Depot, Pa., is just about half Army and half other Services. We've done tremendous work with the Marine Corps and Air Force with Blue Force Tracking and FBCB2 [*Force XXI Battle Command, Brigade and Below*] and command and control systems, and of course with the other Services as well. At Anniston Army Depot, Ala., and at Lima Army Tank Plant, Ohio, we work Army and Marine Corps tanks and ground systems alongside one another.

There's always been a very close relationship between the Army and the Air Force, having tactical air control

parties inside of Army units. And you don't go to a National Training Center or Joint Training Center rotation without your Air Force team with you. In theater, one can look today at the jointness between the Army and the Marine Corps on the ground and the Navy and Air Force and the Army in the air and other areas—for example UAVs [*unmanned aerial vehicles*]. There is much sharing of ideas and information. Other areas as well: protective masks, small arms, weapons, and uniforms for example.

**Q** *Can you describe how the field support brigades are working to unify AT&L in the field, in direct support of the warfighter?*

**A** I think the best example is to look at how the field support brigades are operating in Iraq today. They are AMC's representatives forward in theater. If you look at the synchronization with acquisition, logistics, and maintenance support and the R&D piece, having these brigades forward deployed with tremendous reach-back capability allows us to go as far forward as we can to install add-on armor, perform maintenance, and prepare logistics support. We are trying our best to meet the needs of the combatant commanders, the Division and MEF [*Marine Expeditionary Force*] commanders, the brigade commanders, the battalion commanders, and the soldiers in the field, using the rapid equipping/fielding initiatives, the rapid fielding initiatives, and task forces that look at specific problems like communications. And we're trying to counter IEDs, improve interoperability, and provide a single face to the warfighter for AT&L.

We've attempted to repair and maintain everything we can as far forward in theater as possible; this cuts down on the ground transportation requirements and turnaround time. Every day, we're learning how to improve the synergy in the process. The challenge is to provide support with a very quick turnaround, and the field support brigades are really the driving force to do this. They're the folks that really pull this together.

Today in theater, you need to look at what work is being done as far forward as possible—from repair to installing add-on armor, fixing weapons, fixing radios, fixing as much as is technically feasible—the field support brigades have done a tremendous job, and they're getting better every day.

We are doing work today in forward locations that a year ago had to be done someplace else. The expertise, the leadership, and the drive that the field support brigades have brought to the fight is intensified by being forward-deployed, passing information from one brigade command to the next, and communicating with the warfighters.



**[AMC has] a responsibility to reset the force ... to have a plan, to figure out how to resource it, and to be able to go back to the commander, the Army Staff, and DoD, and say, "From a resource standpoint, here's what we need to do."**



*And having contractors right there in theater must also contribute.*



Right, the contractors are doing a tremendous support job. Our industry partners have allowed us to focus soldiers on the tasks that they are trained for. In addition, we get help from the other Services as well. Last time I was in theater, I walked through a facility where we are installing add-on armor, and the Air Force and Navy were there. Airmen were helping to put on the armor, and welders from a CONUS Navy shipyard were working on vehicles for us.



*An often-expressed motto at AMC is "Need to be faster, more agile, less bureaucratic. Need to fight this every day." Can you explain how your organization is carrying this out?*



I got the words from one of my friends who's a senior joint commander in the field, fighting the war. I think it's being carried out in our organization extremely well. Folks have adopted it as a direct response to support the

warfighter. I could've used the same quote in my old job in the Pentagon in the G8 before I came here. I think in any large organization, it's something you can use as a good method to try to remember who the customer is—in our case the units, soldiers, special forces, sailors, airmen, or Marines we are supporting. We must always focus on getting support to the warfighter faster. It's a daily challenge, and we have to keep improving.

When I talk about the bureaucracy, I mean finding out where we need to improve and then being able to rapidly eliminate unnecessary bottlenecks or roadblocks in the system. There are examples where, especially with the Lean application, we have been able to really speed up the process. It also goes back to having folks positioned forward so we can turn things around faster.

There are examples across the board of decreasing the bureaucracy to improve the process: On the T700, a helicopter engine that we produce in Corpus Christi, Texas, the overall cycle time has been reduced from 261-plus days to 82 days. The recap production capability on the UH-60 [*Black Hawk utility tactical transport helicopter*] increased from 13 aircraft in 2004 to 26 in 2005. At Aniston Army Depot, we've increased production of 50-caliber machine guns from 50 to nearly 1,000 weapons a month. At Red River, Texas, the HMMWV recap repair

cycle time has been reduced 50 percent; the throughput has increased from six vehicles a day to 21 vehicles a day; we've doubled the first-pass inspection rate, and reduced costs by one-third.



*And you use the best business practice Lean/Six Sigma often in your processes?*



Yes. All of our arsenals, chemical demil sites, and depots are applying the tenets of lean manufacturing ... some more effectively than others. Letterkenny, for example, is one of the leaders from the depot standpoint in what we've been able to do. Lake City ammo plant in Missouri is a leader in munitions production. Our depots at Tobyhanna, Corpus Christi, Anniston, and Red River have captured many of these good ideas. We're spending a lot of time and effort to look at how the private sector does business, and we've had them come in and do some assessments for us at our depots, looking specifically at how we can improve production. We've done assessments now at three of our depots, looking at supply management and parts management. As you "lean out" your process, you put even greater demands on the supply chain, so we've also looked at second- and third-order effects on our suppliers, mapping our suppliers and getting our depot commanders out to look at best practices. We've also been much more focused on metrics, to include quality control. The "right part, right place, right time" is as big a factor here as it is in our warfighting units.



*Don't you centralize processes that are repetitive as well?*

Yes; where production line operations exist, it is easy to "lean." When you get into an administrative area, such as a headquarters, it is much more difficult, but you can do it. Folks have bought into it, which is key: The process works when the workforce, from top to bottom, have really grabbed the ideas and applied them. Much of Lean has to do with everybody getting on board, a team effort to become more efficient. The goals of our activity are real. We're at war, and we're resetting the force, active guard, and reserve. There is a tremendous incentive to perform inside our facilities because people know where the stuff is going, and they know its criticality. Every weapon, every piece of equipment is being prepared to go back to units that are deployed or are getting ready to deploy.



*How do you foster a sense of connectedness and immediacy with those soldiers currently deployed? What does your organization do to encourage the focus on the warfighter?*



First, we have our people forward-deployed in theater and second, we try to get over and visit as often as we can. The key is getting the leadership out to get the first-hand feedback. The other piece is having AMC reps that provide the communications link with folks in the field. I've asked our new command sergeant major to increase feedback from the NCO corps through his visits and his networks and then share this with the commanders of our depots and ammo plants. I feel very strongly this is an area we must improve ... and quickly.

The other thing is getting the weekly operational updates and bringing folks with recent experience in the theater into our organization at every level. We are doing that in the depots as well. We also send folks over on assessment teams as often as we can both to assist the commander and to provide feedback to us. We have a very good network today for getting information back—but we can always improve.

The key, in fact, is capturing all the information we get, and that goes back to being faster, more agile, less bureaucratic—being able to get something, turn it around, and get it back into the hands of users as quickly as we can. It really takes a team effort.

Last, and certainly critical, is to establish a program where we can get those with recent experiences to visit and provide feedback to our depots, arsenals, product managers, scientists, laboratory workers, and so on. This "education process" is key for us. There is no substitute for feedback from our customer. It will remain critical to our success.



*It sounds like it; everything you describe involves many different people making it happen.*



It is a challenge and a hurdle, and you have to go after it every day. You can never sit back and say, "OK, we've got it!" My biggest challenge is always getting the right part, to the right place, at the right time. That involves production: making sure it can be produced or procured, being able to ship it out of this country, and then getting it that last mile to reach the warfighter. At the same time, we are continually trying to document lessons learned so that if we find something wrong, we can fix it quickly and apply a fix to like systems. And yes, there are many people focused on making this happen—government, civilian, contractors, and military. Our common challenge is to improve our customer service.



*AMC is working to provide a common logistics operating picture by connecting people and information. Establishing detailed reset plans with returning units and provid-*

ing a single point of contact (the Army field support brigade commander) to assist with execution is one example. Can you elaborate on what AMC is doing?

**A**

We have a responsibility to reset the force, whether it is active, guard, or reserve. When units come out of the war—whether we do the work at the depots, at the directorates of logistics at the unit if it is organizational work, or we contract with commercial organizations—it is my responsibility to have a plan, to figure out how to resource it, and to be able to go back to the commander, the Army Staff, and DoD, and say, “From a resource standpoint, here’s what we need to do.”

To know how well we do that in a coordinated effort—not only for Army units, but for other Services as well—we have to look at the overall package so that we know what the standards are. The other piece is modularity. The Army continues to implement modularity, and we must be prepared to totally support this plan. In the reorganization of the Army, AMC is the CONUS theater sustainment command. This is the responsibility of AMC CONUS-based units. For overseas units, we provide the support in the theater, wherever that is, and we provide support with the idea that the priorities are coming from the combatant commander, and we are supporting the combatant commander.

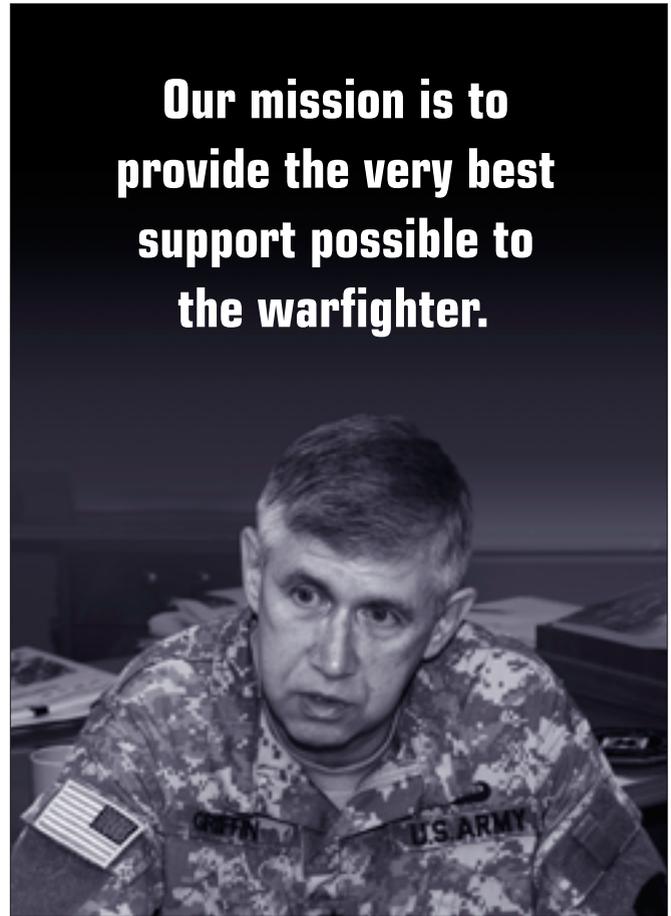
In the R&D area and in making sure we have captured the lessons learned, we are looking to both the current fight and the future. We are applying technology, science, and R&D to ensure we do stay one step ahead. We must work closely with many other federal agencies—for example, the Department of Homeland Security and the Department of Energy—and with our counterparts in the medical community.

**Q**

*How can Defense Acquisition University improve its support to AMC?*

**A**

With the volume of contracts we have in the acquisition area, we’re looking at how we can better use DAU to train the future force, especially as we look at the lessons learned coming out of present conflicts. I think that can be done through expanding the number of classes, using online classes, and then looking at how we train the workforce as we bring additional folks into contracting and acquisition to ensure that they can do the job we ask them to do. We also need DAU to help us to get the word out to the AT&L community by incorporating our doctrine of support and how folks can leverage the capabilities of our joint-capable Army field support brigades. In addition, we need help in developing cross-functional leaders with a background in acquisition, logistics, and technology.



Our leaders of the future need it, and our customer—the warfighter—demands it.

DAU is doing a tremendous job. It’s just that we are finding the magnitude of what we are doing today and applying the lessons learned to the future are increasing our need to have that inherent capability. We need experienced and trained contingency contracting personnel, people we can turn to when we rapidly deploy forces. This is a specific area we’ve looked at recently. I’ve challenged some folks to put a team together to see how we can better meet what we call contingency requirements. We know now, based on lessons learned in Iraq and Afghanistan and other parts of the world, that we have got to have that capability and in significant numbers. As time goes on, and the longer the war, the bigger the challenge will be to keep contingency contracting folks in the pipeline. But this is a specific area where we’ve learned a great deal, and now the challenge is to institutionalize this process for the future so we can be more responsive to the needs of our unit commanders.

**Q**

*I know that Frank Anderson, DAU president, is looking into contingency contracting and personally working that initiative with the different Services. DAU is ready to contribute to the ongoing success of your organization. Gen. Griffin, thank you very much for your time.*