

A QUICK LOOK ACROSS THE DOTMLPF DOMAINS

By Colonel James R. Rowan (Retired)

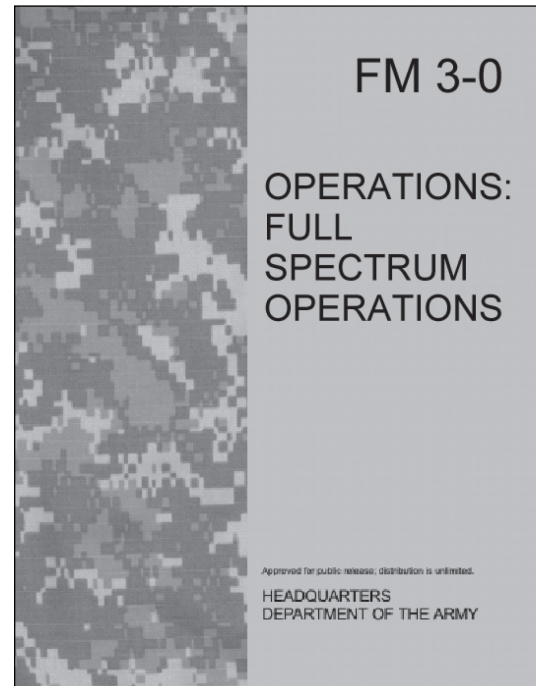
There are several actions ongoing at the United States Army Engineer School and the United States Army Maneuver Support Center (MANSCEN) directorates at Fort Leonard Wood, Missouri. Although there are too many to discuss in a single article, this one will identify one or two areas in each of the key domains—doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). If you haven't already done so, it's probably best to go back to the two "Clear the Way" articles at the front of this bulletin. Colonel Tipton's column highlights the strategic messages for the Regiment and Colonel Watson's column provides the commandant's vision and philosophy. Reading these two short articles first is necessary to put the DOTMLPF actions in the right perspective.

Doctrine

Our keystone field manual (FM) 3-34, *Engineer Operations*, has been approved and will be online shortly at the Reimer Digital Library. All engineer leaders should read the manual and understand how the Regiment is designed to operate within the modular force. FM 3-34.22, *Engineer Operations—Brigade Combat Team and Below*, can be accessed and downloaded in electronic format from the Reimer Digital Library at <http://www.adtdl.army.mil>. Also due out soon is our other new organizational manual, FM 3-34.23, *Engineer Operations—Echelons Above Brigade Combat Team*. Both of these manuals have had all the necessary reviews completed and have been staffed extensively and validated through a Fort Leavenworth-sponsored Combined Arms Assessment Team (CAAT) visit to Iraq this year. FM 3-34.230, *Topographic Operations*, is being replaced by FM 3-34.600, *Geospatial Engineering*, and the initial draft has been delivered to the Engineer School. We will be soliciting your comments on this draft manual. There are also two new MANSCEN doctrinal publications that you should become familiar with—FM 3-90.31, *Maneuver Enhancement Brigade (MEB) Operations*, and FM 3-10, *Protection*. The *MEB Operations* manual can be accessed and downloaded in electronic format from the Reimer Digital Library at <http://www.adtdl.army.mil>; the *Protection* manual is in draft form and can be obtained by contacting Lieutenant Colonel Hank Thomsen at leon.mdottddengdoc@conus.army.mil.

Organization

Getting the right engineer command and control (C2) into the structure is crucial and remains the top organizational priority. We work this every day and



Publication of our capstone manual, FM 3-34, is imminent and will align our doctrine with FM 3-0, *Full Spectrum Operations*.

know how important it is. We also know that we don't have it exactly right yet, but thanks to you, we have continued to provide excellent support to commanders with whatever structure is in place. While all C2 is important, we believe that our most critical nodes, given the current organizational structure, are the brigade combat team (BCT) engineer and the functional engineer brigade headquarters. Colonel Tipton has already discussed the challenges in the BCT. Above the BCT level, we must fully define the roles and responsibilities of the functional engineer brigade and deconflict those roles with the MEB. We are working on a study with the Office of the Chief of Engineers—Pentagon (OCE-P) and the United States Army Training and Doctrine Command (TRADOC) Analysis Center (TRAC)—Leavenworth to formally document the roles and responsibilities of the engineer brigade.

The modular engineer force and the force pool are quickly coming on line. We went to a modular force on purpose. Since there aren't enough engineer units to embed all the required engineer structure into 76 BCTs across the Army, we must have our units in a force pool so they can be task-organized when required. We worked hard to make most of our modular

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE APR 2009		2. REPORT TYPE		3. DATES COVERED 00-00-2009 to 00-00-2009	
4. TITLE AND SUBTITLE A Quick Look Across the DOTMLPF Domains				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer School,14010 MSCoE Loop BLDG 3201, Suite 2661,Fort Leonard Wood ,MO,65473-8702				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 5	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Smith Hall, home of the Counter Explosive Hazards Center

forces very focused in their mission. We've heard comments from the field that people want more multifunctional modules. We are studying this, but would ask for the time being that we let the modular force get fielded first, and that we don't make radical changes until we've had the chance to fully understand and assess the force across the full spectrum of operations—not just stability operations—that we have designed.

The Army has worked very hard to field the clearance companies. The challenge has been that almost all the clearance equipment has gone directly into the combat theaters to support operational needs statements. While this has delayed standing up the organizations, it has provided a needed capability in-theater, and we have learned a lot of valuable lessons with regard to route and area clearance. Based on our experience and comments from the field, we will adjust the clearance company structure in the near future.

We are standing up forward engineer support team—advanced (FEST—A) and forward engineer support team—main (FEST—M) organizations across the Regiment. These are critical links to the United States Army Corps of Engineers (USACE) Field Force Engineer program and provide a tremendous technical capability to our formations. These teams have been outstanding in both War on Terrorism and civil support missions, and it's a great accomplishment that they will now be formally recognized as part of our engineer structure and resourced with personnel and equipment.

We have recently gained support from TRADOC to have a geospatial warrant officer (215D) added to the heavy brigade combat team (HBCT) and the infantry brigade combat team (IBCT), as well as the armored cavalry regiment (ACR). Previously, this only existed in the Stryker brigades, but due to the outstanding performance of these terrain experts, the Army has realized that we need this capability across the force. If this is approved by the Army, it will take a couple of years for us to grow enough 215Ds to fill all of these positions, but this is a big win for the Army.

Although it isn't final yet, we are optimistic that we will see engineers added into the future combat systems (FCS) brigade formation. Many of the traditional engineering problems were assumed away in hope of breakthrough technologies, but the reality of the FCS capabilities will require engineers to be organic to the future brigade combat team (FBCT). We have proposed a structure similar to the engineer formations in the HBCT, but with the addition of a gap-crossing capability that the HBCT does not have. Again, this is predecisional, but we

are fully engaged in this effort and the engineering requirements are being addressed at the highest levels of the Army. (POC: Lieutenant Colonel Steve Danner at <Stephen.Danner@us.army.mil>)

Training

Under the new TRADOC Center of Excellence model, the Engineer School is postured to focus on training and leader development. We have processes to continually review all of our institutional courses to ensure that they are relevant and current. Based on FM 3.0 and feedback from the field, there are numerous topics we'd like to add to courses. The constraint is that TRADOC has mandated zero growth in course lengths while simultaneously adding more Army-directed training. We have been successful in gaining approval to run some pilot topics that will add 3 to 5 days to officer, warrant officer, and noncommissioned officer (NCO) courses. Key topics that have been or will be added to courses include contracting officer's representative (COR), more in-depth project management, and joint engineer operations. Recent efforts to move toward less classroom lecture and more hands-on instruction include increased use of tactical exercises without troops (TEWTs) and introduction of interactive simulations, such as DARWARS Ambush! (route clearance simulation); Think Like a Commander and Gator 6 (leadership simulations); and planned trial use of virtual training to include the "Virtual Route Clearance Trainer" and improvised explosive device defeat (IEDD) training via Dismounted Soldier. Additionally, more integrated training among captain and lieutenant courses and lieutenant and NCO courses is occurring. Slowly, the Engineer School is offering the ability of students to "test out" of selected training within courses in exchange for additional training and education in other pertinent subjects or deeper training and education within the validated curriculum.

The Engineer School's Directorate of Training and Leader Development continues to struggle in proper military manning



MANSCEN will recommend to the VCSA that all military working dog handlers be placed in a single MOS.

of instructor and training developer positions. We do need help from our brigade commanders and command sergeants major to identify the best candidates to serve as our small-group leaders to teach and develop our leaders of tomorrow. The commandant is reviewing officer record briefs (ORBs) of potential small-group instructors for assignment to the Engineer School for spring/summer 2010. If you have a strong company commander with downrange experience projected to come out of command next spring/summer, please talk to that person and send me his or her name. These officers will be personally managed by the commandant and will be well taken care of. More important, this small group of officers will have a profound effect on the quality of our future Regiment. TRADOC is currently considering some major changes to the Captains Career Course. One of the goals is to increase and enhance the common training that all captains receive. Our concern is obviously that we cannot afford to reduce the branch-specific training and the technical engineering aspects of the curriculum as we implement the *Building Great Engineers* (BGE) Campaign Plan. (POC: Colonel Jerry Meyer at <Jerry.Meyer@us.army.mil>)

Probably our most relevant and cutting-edge ongoing training is at the Counter Explosive Hazards Center (CEHC). So far, we've trained more than 2,000 U.S. Soldiers, Marines, and coalition forces this year in the following courses: Route Reconnaissance and Clearance Operations—Operator, Leader, Sapper, and Maintainer; Counter Explosive Hazards—Planner; Intermediate Search Operations; Area Clearance; and Improvised Explosive Device Defeat—Train the Trainer. The outstanding job the CEHC team is doing was validated during the CAAT visit to Iraq in September and by the number of Soldiers who provided positive comments on the training and the equipment. CEHC continuously adapts the training it provides, and the training programs now focus on training teams rather than individual training. We are incorporating

many search techniques into the training as well. Engineers across the Regiment should take great pride in the work they are doing to defeat improvised explosive devices (IEDs) and the work CEHC is doing to advance this effort. Over the past year, the international community has recognized that our U.S. engineers and the CEHC comprise the single most qualified organization to train Soldiers and leaders on route clearance operations. International military engineers are eager to receive this highly coveted training. Within the past few months, we trained engineers from Canada, Turkey, and Korea, as well as having an exchange with the Ukraine. Over the next few months, we will be training engineers from France, the United Kingdom, and Germany and will hold an exchange with the Dutch and Israelis. The CEHC has truly become a center with unique expertise found nowhere else in the world right now. We are currently updating the CEHC concept plan to institutionalize this training in TRADOC. (POC: Colonel Dave Theisen at <David-Theisen@us.army.mil>)

Materiel

Our materiel acquisitions and fieldings are getting the right equipment to our next deploying units and to the units in-theater to meet mission requirements. We continue to have challenges to field continental United States (CONUS) units the equipment and training assets they need prior to deployments. The acquisition community is working hard to meet these needs. The training base has acquired mini construction equipment to augment the fleet of hydraulic excavators (HYEX) and dozers, because the full-size equipment is needed for missions elsewhere. The first suite of 30 HYEX computer simulators has been installed at Fort Leonard Wood, with dozers, motor graders, scrapers, and loaders to follow.

Our materiel team is tracking more than 100 systems, and the current commandant's top 10 priority systems are as

follows: Joint Assault Bridge (JAB), High-Mobility Engineer Excavator (HMEE), Medium Mine-Protected Vehicle (MMPV), Mine-Protected Clearance Vehicle (MPCV), Vehicle-Mounted Mine Detector (VMMD), Digital Topographic Support System (DTSS), 2.5 cubic yard Loader, Special Construction Equipment, 4-5 cubic yard Loader, and the Ribbon Bridge Transporter. The review cycle for updating our “1 to n” lists will take place later this spring. (POC: Lieutenant Colonel Steven Wall at <Steven.Wall@us.army.mil>).

Leadership and Education

Our highest priority in the leadership area remains improving the tactical and technical skills of our officers, warrant officers, and NCOs. We’ve worked this hard for the past year and have made real progress on the *Building Great Engineers* Campaign Plan. I’m really pleased at the way we have been able to partner with the field and with the Society of American Military Engineers (SAME) to advance this critical program. Progress toward *Building Great Engineers* includes advancements in the following working group areas: Future Roles, Missions, and Methods of Delivery; Accessions; Training and Education; Employment; Retention; and Strategic Communications. Thanks to all the people in the field and thanks to SAME for leading and participating in these work groups.

Be watching for changes in both officer and NCO education in the very near future. TRADOC is looking at a Captains Career Course redesign and really focusing on the common core tasks that all captains need to be trained on. Our challenge will be to ensure that we maintain or improve the amount of branch-specific technical training that our captains receive. The Noncommissioned Officer Education System (NCOES) will also transform. NCOs will attend an Advanced Leader’s Course and a Senior Leader’s Course. These courses will basically cover the topics that are now taught in the Basic Noncommissioned Officers Course (BNCOC), the Advanced Noncommissioned Officers Course (ANCOC), and the First Sergeant’s Course. (POC: Colonel Jerry Meyer at <Jerry.Meyer@us.army.mil>)

Personnel

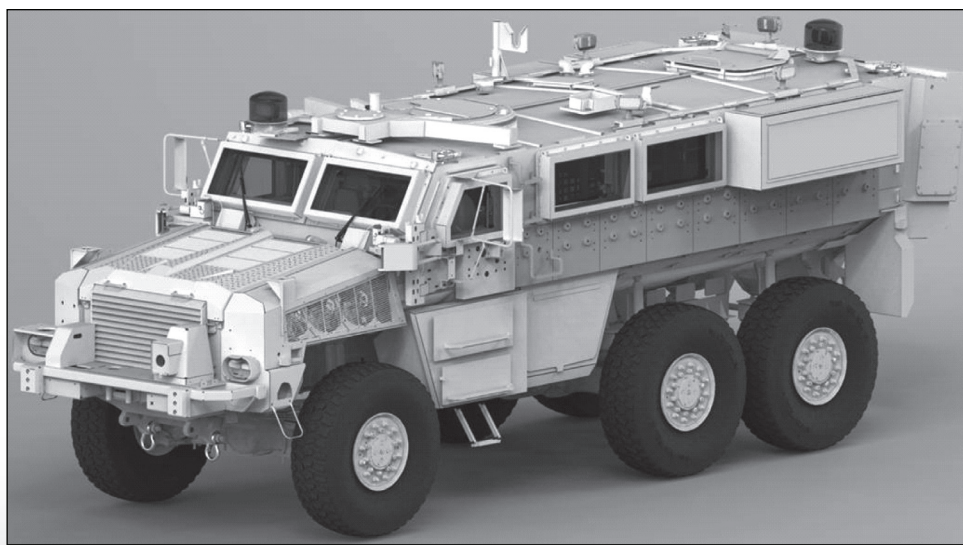
As most of you know, we have consolidated the military occupational specialties (MOSs) 21J, 21F, and 21E into MOS 21E (commonly known as “Super Echo”). Training for this MOS is underway and going very well.

We are also working on an overarching strategy for our military working dog handlers. We

are working with MANSCEN, the United States Army Military Police School, and the United States Air Force (the executive agent for military working dogs) and have proposed a comprehensive solution to consolidate all dog handlers into a single MOS called 31K. This recommendation is just one of several that were the result of a Vice Chief of Staff of the Army (VCSA)-directed review of military working dogs. With a dedicated MOS, Soldiers will be able to serve as dog handlers throughout their career (rather than just for an assignment) and in a career in which they will handle several different types of military working dogs. New organizations and new equipment are also part of the study recommendations. There are many advantages to this, but some of our Soldiers are concerned that they might have to become military police if they want to continue to work with dogs. It’s too soon to know all the answers, but the plan is that engineers would not be moved out of an engineer MOS unless they requested to do so. Also, any solution will not change the relationship of engineers to mine dogs or special search dogs; these capabilities will remain available to the Regiment. Once we have an Army-approved decision, we will share the full details of this with the field.

The Engineer Personnel Propensity Office (EPPO) has been working with the geospatial, Department of the Army, and intelligence communities to have all 21Y (geospatial engineer) positions coded for Top Secret clearance. If you have 21Ys in your units, go ahead and submit them for Top Secret clearances now.

We just recently staffed the update of Department of the Army Pamphlet 600-3, *Commissioned Officer Professional Development and Career Management*, and the redefining of critical jobs for our engineer leaders. The old term of *branch qualification* has been replaced by the terms *key* and *key development jobs*. The new pamphlet also introduces the new term of *developmental or broadening assignments*, which will carry added emphasis and importance to our officer and



Medium Mine-Protected Vehicle (MMPV)

warrant officer career tracks. The Regiment is now at a cross-roads, and we need to decide whether to manage officers with a single career track as we do now or go back to some kind of multiple tracking system like the 21A, B, and D series we had several years ago. We will develop courses of action at the Engineer School and rely on feedback from the field in order to get this important decision right. (POCs: Lieutenant Colonel Keith Dupont at <keith.dupont@us.army.mil> and Colonel Joe Cepeda at <Jose.Cepeda@us.army.mil>)

Facilities

We are working a number of local issues here at the Engineer School (such as the Prime Power School move to Fort Leonard Wood and new facilities for training the JAB and the assault breacher vehicle (ABV), but most of these will be invisible to the field. The real emphasis here over the next few years will be getting our units aligned for training. The United States Army Forces Command (FORSCOM) engineers are managing this for the Army, but the ultimate goal is to get our units colocated with maneuver units whenever the opportunity exists. Also, in May-June of this year, the Engineer School headquarters will move into improved office space on the first floor and will have a dedicated Engineer School entrance.

Another aspect of facilities that I will highlight is the Base-camp Integrated Capabilities Development Team (ICDT) that is being conducted at the MANSCEN level. While we have a lot of experience and expertise on basecamps, there is still no overarching doctrine that covers construction, operation, and closing of basecamps. MANSCEN is working to gain this proponentcy and the resources required to execute this mission for the Army. (POC: Mr. Steve Orth at <Steven.Orth@us.army.mil>)

Summary

As you can see from these highlights, this is an exciting time for the Regiment, and we have numerous actions underway that will shape the branch for many years to come. Feedback from the field is always appreciated. Please feel free to contact me or any of the points of contact previously listed if you are interested in knowing more details on these actions or if you have ideas to submit. Thanks in advance for your comments and thanks to the entire Regiment for the outstanding jobs that are being executed every day across the full spectrum of operations. 

Colonel Rowan (Retired) is the Deputy Assistant Commandant, United States Army Engineer School. Previously, he served as the Assistant Technical Director for Military Engineering at the United States Army Engineer Research and Development Center (ERDC), Vicksburg, Mississippi. Other key duty positions include Commander, ERDC; Commander, 1st Engineer Brigade; Commander, 54th Engineer Battalion; and Commander, 16th Engineer Battalion. He has served in Operation Iraqi Freedom both as a military officer and a civilian.