

- *Work.* Civilian employment responsibilities (enable us to maintain a standard of living).
- *Family.* Family responsibilities (why we are here).
- *Army Reserve.* Army Reserve responsibilities (why we serve).
- *Fitness* (using a healthy lifestyle to maintain our bodies). This is in itself a challenge because most civilian employers do not put “PT” on the work schedules.
- *Beliefs* (how we hold all of the other dimensions together). When speaking of beliefs, we are also talking our value system, and the Army Values are at the forefront. I am also speaking of the values inculcated in each pentathlete through a family support network. Lastly, our beliefs—be they spiritual, metaphysical, or otherwise—are a strong driving force in keeping the entire pentathlete triad in balance.

Using the basic pentathlete triad, I then thought of the basic competencies that successful staff officers and leaders I observed throughout my career required in order to be successful, and how those competencies were applied in the “perfect storm” environment at the 412th ENCOM. The majority of the G3 staff had deployed at least once, either prior to or during my tenure as the Deputy G3, creating a core of staff officers and noncommissioned officers who became a division G3 staff overnight, despite being manned at a level between a battalion or brigade S3 staff.

Bosses

Bosses were even more crucial in this analysis. Running concurrent operations on three separate continents, while also maintaining enduring (and growing) command and control missions, did not leave much room for intense supervision. The one key, more than any other, for the G3, as well as for the chiefs of subordinate sections, was the establishment of a right and left limit. The challenge in establishing that right and left limit, as done primarily in initial face-to-face counseling, is also ensuring that sometimes connectivity between sections within the G3, as well as between staff sections, may portend “going out of their lane.” The key point, especially for younger field grade officers on their first echelon-above-brigade staff assignment, is to know the difference between coordinating activities and directing activities. Explaining this difference is the key to managing expectations and will ensure success as the new staff officer embarks on the route of developing advocates and enabling connectivity.

Engineer Staff Pentathletes

Looking at the breadth of knowledge required for a staff officer on an echelon-above-brigade staff, especially in the G3, it was pretty easy to say that what we need are officers who have had company command, are Command and General Staff Officer Course/Intermediate-Level Education (CGSOC/ILE) Program graduates, and possess the very nebulous term “operators.” I have broken down the



Figure 2. Engineer Staff Pentathlete Triad

competencies (either brought to the table or developed during their tenure) that have been critical in their personal success, as well as the joint success of the G3 section as a whole (see Figure 2).

Breaking down the triad into individual parts, there are many facets to the success at the echelon-above-brigade staff level. Whereas each member of the staff may not have had all competencies fully matured, this model has served as a goal to strive for during the duration of assignment within the G3.

Warfighting Skills

Each team member was part of the 412th ENCOM, which serves as an operational command under the ARC2 construct. This meant that we were not a continental United States (CONUS)-based table of distribution and allowances (TDA) organization, but rather had responsibilities supporting major contingency operations in both the European Command (EUCOM) and Pacific Command (PACOM) areas of responsibility.

Warfighting Mission. A major segment of the 412th ENCOM mission was to support United States Forces Korea in the defense of the Korean peninsula. Members of the G3 staff routinely deployed to the Republic of Korea to support either of two exercises: *Ulchi Focus Lens* or *Reception, Staging, Onward Movement & Integration (RSOI)*. This ensured that all team members initiated their fluency with the language of war at the operational level, not only from an engineer perspective but also on how the engineer is capable of setting conditions for success for operational logistics through assured mobility as well as operational protection.

Development and Maintenance of Battle Rhythm. The development and maintenance of a battle rhythm in itself formed the “heartbeat” of the ENCOM. Situational awareness and synchronizations of battle rhythms at higher levels, as well as subordinate units and internal to the command, were an ongoing process to ensure that the 1/3 - 2/3 rule was enforced and that there was a timely response to all coordinating agencies.

Troop to Task. Assisted by the ARFORGEN Model, understanding of unit capabilities in a modular world (clearance, vertical, horizontal, equipment support company, etc.) and then applying those capabilities along lines of time, as well as combat power, enabled greater battlefield visualization for the G3 as to how far the force can go without reinforcement.

Technical and Analytical Competence

This forms the basis of how engineers (irrespective of baccalaureate degree discipline) think, using logic, and are able to take the abstract, make it concrete, and turn it into reality.

Rise Over Run. Whereas the 412th is an ENCOM, it cannot always depend on a degreed engineer with a professional engineering license to develop a design directive in either a training or deployed environment. Engineer staff pentathletes have to be able to satisfy the requirement using available means (including Theater Construction Management System [TCMS] software and the Engineering Infrastructure and Intelligence Reachback Center [EI2RC] through USACE) to provide subordinate units the rough order of magnitude required from both a scope-of-work and a bill-of-materials perspective in order to accomplish what is basically required, rather than proscribe the exact 11 over 14 rise-over-run solution.

Force Structure. Engineer transformation to modularity became a major driving factor in all operations. Engineer staff pentathletes needed to not only understand the new structures and standard requirement codes (SRCs), but they also needed to understand the basis of activation, conversion, and inactivation, as well as how a new unit is manned, trained, equipped, stationed, and resourced. It is much more than just being able to read a modified table of organization and equipment (MTOE).

Doctrine Development. The 412th ENCOM, in conjunction with USACE and the Engineer School, has been collaborating on the revision of many doctrinal publications, to include the new FM 3-34, *Engineer Operations*. Engineer staff pentathletes should bring with them a breadth of experience that will not only affect the operations of today but also have the foresight to reflect on past experience to shape the battlespace of tomorrow.

Technology Savvy. Engineer staff pentathletes must be able to master the many complexities of the standard Army computer software suite (PowerPoint® Rangers included). But they also must be able to harness the technology in order to share vast amounts of information. They can do this by performing the role of “webmaster” for a knowledge center on Army Knowledge Online (AKO) or by developing a SharePoint® site that allows access to the Army Reserve network for many of the troop program unit members of the Army Reserve who do not have dedicated access. Engineer staff pentathletes should also know the basics of some of the teleconferencing suites available, to include the USACE

TeleEngineering Tool Kit. To stay connected is to stay relevant.

Time and Resource Management

Much of what is performed at the ENCOM level is management of resources. Engineer staff pentathletes have to know the basics of managing those resources (as well as being able to ask for more, or worse, to say no).

Training Readiness Oversight. For engineer staff pentathletes to know, based on the ARFORGEN Model, what level of resourcing a particular unit receives is one part of the puzzle. At the major subordinate command (MACOM) level, ensuring that units have the basics of transportation, ammunition, lodging, and observer-controllers involves setting conditions for the management of those programs. Having an understanding of contracting, as well as dealing with commodity managers, helps ensure that these resources are forecasted and eventually executed.

Meetings. Having more and more constituencies to become involved with—in order to attain staff synchronization, meetings (including face-to-face, teleconferences, video teleconferences, and full-blown conferences)—became a way of life for the G3 section. Aside from the mandatory agenda and objectives that guided almost every engagement, the most important was a Monday morning meeting referred to as *Festivus* (as in Festivus for the Restivus). The purpose of this meeting was to provide a sounding board for development and refinement of commander’s guidance. The key to the event was that everyone had an input, and the absolute best development and mentoring came from those sessions and created a better product and process with buy-in from all.

Funds Management. Engineer staff pentathletes frequently become the program managers for major exercises or conferences. Therefore, all officers need to attain a basic level of financial management skills. Knowledge in the development of field budget estimates, unresourced requirements, and of course monitoring of funds execution became daily staples for the engineer staff pentathlete. Only later in the game were we able to rely on dedicated finance personnel to assist in these processes, thus already preparing those engineer staff pentathletes for the lean staff of the contingency operations (CONOPs) environment.

Competitive Sales and Interpersonal Skills

The single greatest task for any engineer staff pentathlete was the ability to sell oneself and one’s own ideas. As engineers, we become complacent in knowing that the answer is 11 over 14, as stated earlier. We lost the bubble on how to sell that though, especially to diverse groups that may not know (or appreciate) what rise over run is. Pentathletes found themselves engaging in intense networking at every opportunity, not only to be known but also to get on the radar screen of those who were decision makers. With this also came relationship management and knowing how well that

alliance would blossom. The most important part of “selling” we learned during this period was how to communicate to senior-level commanders, in terms of risk, if “A” did not happen, what would be the second- and third-order effects of that action.

Leadership and Work Ethic

The key element to staff synchronization was the leadership required to make it happen. It transcended “walking the walk” but also meant going outside of the G3 “lane” to understand the battle rhythms of other sections (and subordinate units) so as not to be too intrusive and break the golden 1/3 - 2/3 rule. Additionally, engineer staff pentathletes had to know the guidance, intent, and battle rhythm of the command group to ensure that subordinate execution met the commander’s expectations. Engineer staff pentathletes also needed to be able to provide counseling to other team members (in writing), reward those who excelled and, most importantly, look out for their development.

Summary

To be sure, this was the most rewarding assignment of my career—in a career that continues to amaze me that each new challenge tops the previous one. The complexities that we as engineers find ourselves in, either while deployed or preparing for the next deployment, require a great deal of depth, transcending original models of technical and tactical competence. The staff officer of today has to speak and understand the *lingua franca* of the entire staff, make on-the-spot assessments, and sell it in terms of “what’s in it for me,” as well as in terms of risk to commanders at all levels. I hope that through this article, the hard work of the 412th ENCOM G3 section may serve as a guide for some future (or current) engineer staff pentathlete and provide refuge in the next “perfect storm.”



Lieutenant Colonel Roth was the Deputy G3 of the 412th Engineer Command at the time this article was written. He has deployed to Iraq as the executive officer of the 458th Engineer Battalion and has commanded a combat heavy engineer company. A graduate of the Command and General Staff College, he holds a master’s in mechanical engineering from Boston University. He now commands the 844th Engineer Battalion in Knoxville, Tennessee.

Editor’s Note: Per the Chief of Staff of the Army, the term “pentathlete” and “multiskilled” are no longer the preferred way to describe the broad capabilities the Army needs. The preferred way to describe the type of leaders the Army needs is “leaders skilled in their core warfighting and leader competencies who also have a variety of broadening experiences.” However, this does not detract from the essence of Lieutenant Colonel Roth’s article, because he clearly articulates the need for engineers to be skilled in engineer competencies, while highlighting the importance of having a broad experience base.