A popular advertisement of Electronic Data Systems Corporation refers to the challenges of “building an airplane while it’s flying.” Standing up an engineer battalion from scratch, that is on a planning deployment document the day it activates, can be as difficult a challenge. What follows is one version of what faces a commander and his staff when starting a unit and building it from the ground up, as well as some suggestions on a plan of action and issues to be aware of. Department of the Army (DA), major commands, and installation staff officers may read this article and see where their actions can impact and influence future activations of the Engineer Regiment in a positive manner.

Standing Up the Battalion

So you’ve just gotten the telephone call and are a bit incredulous that a few individuals and a couple of borrowed computers setting on Defense Reutilization and Marketing Office furniture in a transient office building are all that exist of the proud battalion depicted in your modified table of organization and equipment (MTOE). What next? The following steps will help you get started in the right direction:

Assess Your Situation

As you activate, find out when and where you are to deploy. Old standards of having up to a year of protected C-5 reporting status on the unit status report (USR) are gone, and you will have to continually explain that fact to individuals in agencies you deal with. The following validated assumptions will help you assess the picture:

- The priority on personnel, equipment, and funding is directly proportional to the amount of time before deployment. And if you find yourself with 20 months available before deployment rather than less than a year, many of these concerns will still be valid.
- Know when DA and the United States Army Forces Command (FORSCOM) will be building your force structure for your deployment, and make sure you can convey the complete story when it is ready to be heard and acted upon.
- Personnel fill will be from the top and the bottom, which means you’ll have a couple of field grade officers and senior noncommissioned officers and a graduating class of advanced individual training (AIT) students.
- Equipment fill is a laborious process. Assess getting training sets from a variety of sources, and then accept that drawing equipment in theater is a likely consequence.
- The standard resourcing model is to give you your operations and maintenance allotment for the year. This is not enough to stand up the unit, but everything else will have to be treated like an unfinanced requirement (UFR) request.

Meet People

Identify all of the organizations you may have to deal with and who can make things happen for you. Depending on your command and control arrangement, your higher headquarters staff may suffice. In some cases it won’t, particularly if your command and control arrangement is based on geography and not mission and your unit and your higher headquarters have widely divergent missions. The garrison/installation staff will likely have a wide and compartmentalized staff. You will need to personally meet with them to impress the urgency of standing up the unit and to give them a face for who needs help.

Develop a Training Plan

After assessing where your unit stands, develop a training plan that takes into consideration your personnel gains and your equipment training set availability. Accept that the unit will not be able to do much training until you get the right mix of key personnel and about 20 to 25 percent strength on the ground. With less than a year to deploy, the 19th Engineer Battalion used a plan that focused first on establishing battalion systems, and then in the second quarter used a “warrior phase” that focused on the warrior tasks, medical training, individual schools, and squad situational training exercises. Only in the third quarter was the unit able to focus on engineer-specific and collective tasks above platoon level.

As you establish this plan, you will continually have to assess your training plan against the personnel gains.
Building an Airplane While It's Flying: Interim Lessons Learned on Activating a Battalion Already Slated to Deploy

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Unfortunately, the gains roster proves to be only an approximation of who is coming in and really doesn’t become accurate until about 2 to 3 months out. Figure 1 shows an example of what that initial training plan might look like. A comparison to Figure 2 shows the difficulty of using the gains roster as a forecasting tool.

Reassess and Report

Continually assess your unit based on its go-to-war standard. Report your status through vehicles like the weekly commander’s situational report and USR. Work through your higher headquarters to establish a series of in-progress review meetings to get visibility on your situation and to facilitate vertical and horizontal synchronization among the higher-echelon staffs.

Accept that the Army and FORSCOM staffs’ center of gravity is focused on the transformation of brigade combat teams (BCTs), so your reports will have to address the level of urgency that otherwise gets lost in the background noise. The United States Army Engineer School Fusion Cell video teleconferences (VTCs) (see article on page 5) were another great forum for reporting status. While not an official function of the Engineer School, this weekly VTC proved to be the best location to raise issues and simultaneously see the coordination between staffs and functional areas. As this goes on, continue to fight for resources as you train. Use your training plan to trigger “redlines” (key dates where you have to have certain resources or a readiness shortfall occurs) and report them through every vehicle you get.

Be Ready

Be ready to react to all sorts of unforeseen issues with standing up; this airplane you are building is not on autopilot.

Challenges

Following are some of the challenges the 19th Engineer Battalion encountered. They are shared in the interest of allowing new units to avoid them or equipping staffs with some insights of what may lay ahead.

School Training

Scheduling classes and filling with the right military occupational specialty (MOS)-qualified Soldiers is a challenge. Availability of the basic courses needed to operate a battalion may be an issue based on location (see location, location, location on page 10).

Many mobile training teams (MTTs) will not travel to locations that cannot generate a BCT’s worth of training slots. It is not that they are unwilling; it is that generally they are

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**Figure 1**

Initial Training Plan w/Projected Personnel Strength
(Command Assumption + 15 days)

Legend:
- Bn - battalion
- C2 - command and control
- CFLCC - Coalition Forces Land Component Command
- CPX - command post exercise
- FOBEX - forward operating base exercise
- LFX - live-fire exercise
- MRX - mission rehearsal exercise
- Plt - platoon
- T/O - table of organization
- TPE - theater-provided equipment
- T/O - table of equipment
- USR - Unit Status Report

Note: The percentages in circles are the forecasted strength per the unit gains roster.
unable to due to their schedule and the number of instructors available. This results in a heavy reliance on piggybacking MTTs at other installations, tapping into the Reserve Component schools, and other creative solutions.

School costs consume a large portion of the budget. The school requirements list should be developed early, for both Military Training Specific Allotment (MTSA) and non-MTSA funding, to prioritize and to provide the Resource Management Office an awareness of the scope of the funding requirement.

The commander must decide where to take risk in the training plan based on the perceived downrange mission, projected troops and time available, and estimated equipment available. Depending on the location, this finely tuned plan can be easily aggravated by training resources that may have been locked in by program of instruction (POI) requirements prior to the unit even activating.

**Ammunition**

Be aware of long lead times, and request your Standards and Training Commission (STRAC) allocation as soon as possible. Even then, the unit will likely have to borrow ammunition for its early individual qualification ranges, so establish those points of contact at your installation.

**Materiel**

It is absolutely essential that all Class VII items be placed on order as soon as possible. This briefs well, but is hard to accomplish without the proper personnel and Standard Army Management Information System (STAMIS) equipment on hand to execute.

Prioritize MTOE into minimal essential sets. These initial sets should include a basic Soldier set and training equipment sets. The basic Soldier set should consist of the minimal equipment necessary to train basic warrior skills and should be the first to arrive, along with initial troops and leaders. The training equipment sets are the minimal equipment required to conduct essential MOS-specific individual tasks and selected collective tasks. These training equipment sets need to arrive, fully mission capable, in time to support the commander’s training timeline.

In a perfect world, equipment transfer directives would be issued as soon as the MTOE was approved and would be waiting in holding yards for the unit to pick up on its effective date (E-date). Reality is a different story. This equipment transfer process is even more of a challenge when the unit has no corps headquarters to assist in the process. A corps will

![Figure 2](image_url)

Note: The percentages in circles are the forecasted strength per the unit gains roster.
ensure that all its shortages are filled within, prior to transferring excess equipment to a direct-reporting FORSCOM unit.

FORSCom must exhaust internal excess—through equipment transfer directives—prior to the DA Assistant Chief of Staff, Finance (G-8), contacting the item managers to request a release of equipment. This process needs to be a synchronized effort between the FORSCOM Assistant Chief of Staff, Logistics (G-4); the DA G-8; the United States Army Materiel Command; and item managers.

Personnel

Installation Assistant Chief of Staff, Personnel (G-1)/Adjutant General, must submit a request to add the battalion to the command section list early to get a commander on board. Early fill of leadership and key positions is essential (commander, command sergeants major, executive officer, S-3s, company commanders, first sergeants, personnel specialists, property book officers, supply sergeants). Get the leadership core on the ground prior to the influx of initial-entry training (IET) Soldiers.

Ensure that the installation strength manager works closely with the United States Army Human Resources Command (HRC), Distribution Division Branch, to validate personnel requirements and generate valid, open, unfilled (VOU) requirements for all open MTOE positions. Use the Enlisted Distribution and Assignment System (EDAS) and Total Officer Personnel Management Information System (TOPMIS) II to validate requisitions focusing on nonengineer MOSs, because these will slip through the cracks.

Facilities

Short-term activation requires the redrawing of unit footprints to integrate new organizations, but installations are accustomed to the long-term timeline of military construction. Work with the installation to develop an interim move plan that has the flexibility to meet the maturing requirements of the unit.

Funding

There is no such thing as modularity funding for echelon-above-brigade (EAB) units. Everything is a UFR.

Identify UFRs early, and submit them to FORSCOM to validate the requirements. In addition to the normal operation and maintenance cost, the unit must be funded for initial purchase of all stock-funded MTOE items, organizational clothing and individual equipment (OCIE), automated data processing equipment, and establishment of basic loads of all classes of supply.

The model used to project operation and maintenance requirements doesn’t take into account all the activation costs associated with standing up a new unit. The establishment of unit basic loads and temporary duty cost associated with the school’s requirement alone can burn much of the operational budget. The mass inflow of equipment transfer that is not quite at 10/20 standards can easily exhaust the remaining funds.

The unit will likely activate at the beginning of the fiscal year for various reasons, such as the chance of the federal government operating under a Continued Resolution Authority at the beginning of the fiscal year. This is fine for units that had a budget the previous year, but compounds the problems of a newly formed unit.

Additional Issues

While you may not have any control over it, begin the process early. Strive for as much time as possible between the establishment of the carrier unit identification code (UIC) and the E-date of the unit. To have only 13 days between the E-date of the carrier unit and the activation of the unit is not optimum.

Location, location, location. While in theory all Army installations now are Installation Management Agency installations (meaning there are no TRADOC or FORSCOM installations), the truth is that some installations are better suited for the multitude of tasks associated with activating a battalion. The facts are that an installation staff without an associated corps or division headquarters is rather thin. Distinct advantages can be observed between activating a unit at a location with corps staff present and a location that has not had a FORSCOM unit larger than a company on it since the mid-90s.

While an activating BCT will have an assigned Modular Force Coordination Cell, a Materiel Management Center, and the direct oversight of Headquarters, Department of the Army (HQDA), an EAB unit will seem like it is on its own. The Engineer School’s Fusion Cell is the keystone to bringing together all the key players needed to assist the unit going through activation or Future Engineer Force conversion. The Fusion Cell is a direct conduit and voice amplifier for an EAB unit to communicate its questions, concerns, and issues to FORSCOM, HRC, and HQDA.

Conclusion

We acknowledge that our airplane is far from complete, and a lot of work lies ahead before we can land the plane in theater. However, as things continue to change in today’s dynamic environment, hopefully others who also find themselves “building an airplane in the air” can benefit from our first experiences.

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