



## Training Combat Engineers the OSUT Way

By Captain Lawrence Farrell

30 March 1997, 10:05 hours: CPT Striker was not pleased; his armored vehicle-launched bridge (AVLB) maintenance readiness rate was 49 percent for the month. When he briefed the company's highlights, the battalion commander wanted to know if all the AVLBS had two soldiers assigned to them. Striker answered, "No." Irritated, the battalion commander asked, "Why don't you fully man your AVLB crews?" CPT Striker's reply was, "Sir, I am at 85 percent strength. If I fully man my AVLBS, I won't have six trained engineer squads for the upcoming National Training Center rotation." The battalion executive officer interjected, "Your company is getting six new 12B soldiers today from the replacement center. That should help alleviate your personnel problem."

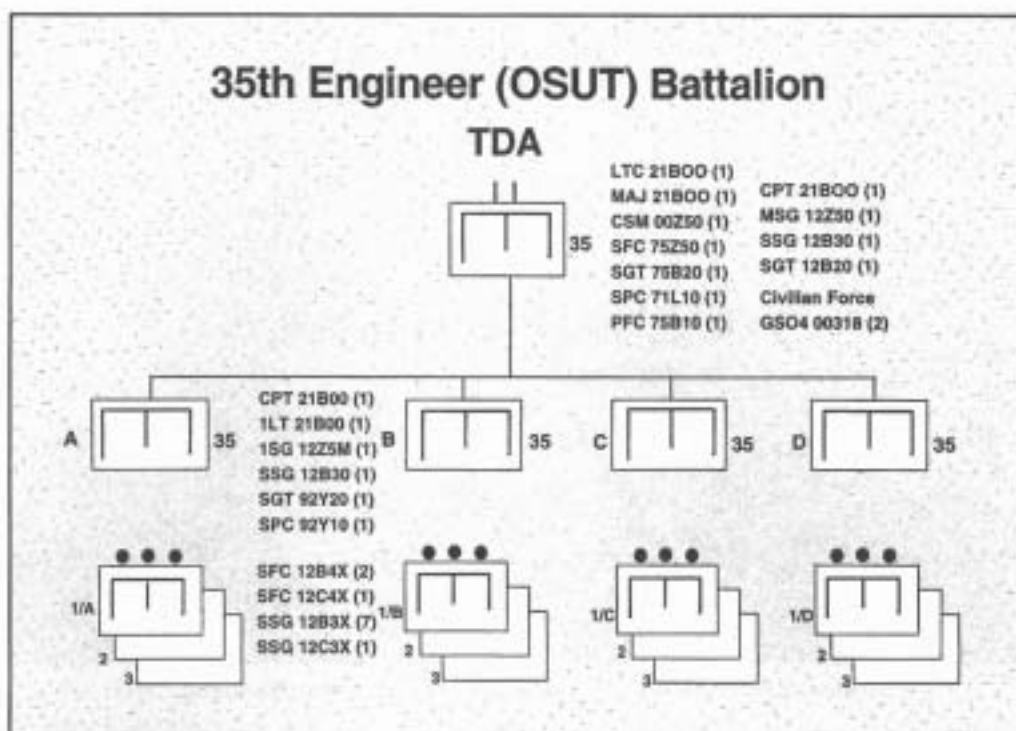
Later, as CPT Striker walked into the company orderly room, the first sergeant approached and said, "Sir, here are Alpha Company's six soldiers." Half-seriously, CPT Striker asked two of them, "How much AVLB training do you have?" The first soldier replied, "Sir, I have three hours of stick time

in an AVLB." The second soldier answered, "Sir, I have nine hours of stick time in an AVLB." CPT Striker was more than a little confused. He asked his first sergeant, "Top, did both of these soldiers graduate from the same 12B school at Fort Leonard Wood?"

### Training Structure

This article provides an update of the current combat engineer career management field (CMF) 12 training at Fort Leonard Wood. Unlike other engineer training there, combat engineer training is not a joint effort among the four services. It is only offered to Army soldiers.

All CMF 12 training conducted at Fort Leonard Wood occurs in a One-Station Unit Training (OSUT) environment—the Army's method of combining basic combat training (BCT) with advanced individual training (AIT). OSUT provides the following benefits:



- It is relatively inexpensive compared to other training. Soldiers performing OSUT at Fort Leonard Wood do not travel between posts during BCT and AIT. However, soldiers who graduate from BCT at Fort Jackson, South Carolina, are shipped to different posts around the country for AIT. Besides the obvious savings on travel costs, many hidden expenses are saved in an OSUT environment. For example, soldiers do not draw and clear equipment from the central issue facility twice or obtain a set of orders for each type of training. When viewed on an Armywide basis, the time, money, and effort saved quickly become enormous. OSUT also allows the unit to focus on additional training.
- It allows units more time to mold and train soldiers than BCT, which lasts only eight weeks. With OSUT, engineer companies keep soldiers from reception to graduation. The two OSUT engineer battalions at Fort Leonard Wood—the 35th and the 169th—have identical tables of distribution and allowances and both are part of the 1st Engineer Brigade.

OSUT companies are authorized 17 permanent-party soldiers: 11 drill sergeants and six headquarters personnel (see figure). One drill sergeant is always off because of charge of quarters, leaving 10 available for training. Each company is structured to have three platoons at full capacity with three or four drill sergeants in each platoon. OSUT companies have the same standards as any other unit in the U.S. Army. They have brigade, battalion, and post inspections as well as the more routine requirements (such as officer and NCO development classes, mandatory training requirements, family support group meetings and activities, and a variety of other events). When these responsibilities are

viewed collectively, it is understandable why drill sergeants earn an additional \$275 per month as "Special Duty Pay."

### Training Phases

OSUT is divided into five phases. Phases I through III occur in BCT and Phases IV and V occur in AIT. Although not the official names of each phase, the following descriptions accurately portray the training soldiers receive.

**Phase I:** Soldierization and Common Task Training

**Phase II:** Weapons Training

**Phase III:** Fire and Maneuver Training

**Phase IV:** Light Engineer Training

**Phase V:** Mechanized Engineer Training

### BCT Phases

**Phase I.** Soldierization lasts 14 days and focuses on basic soldiering skills. It includes more than thirty subjects, such as drill and ceremony; wearing and appearance of the Army uniform; first aid; map reading; nuclear, biological and chemical procedures; Army family team building; and environmental awareness. Soldiers train continuously for 14 days and are constantly in the drill sergeant's presence. This is the most critical training phase, because it provides the foundation on which all follow-on training is based.

**Phase II.** Weapons training lasts 11 days and teaches soldiers to properly fire, maintain, and qualify on the M16A2



A soldier trains on the AVLB simulator in an indoor environment.

semiautomatic rifle—a requirement for successful phase completion. It also familiarizes soldiers with other weapons, such as the M203 grenade launcher, the M249 semi-automatic machine gun, and the M60 automatic machine gun.

**Phase III.** Fire and maneuver training introduce soldiers to live-fire ranges and grenades and their first field problem. During this phase, soldiers are aggressively and repeatedly tested on their ability to shoot, move, and communicate.



OSUT training includes training with mine-detection systems.

They train at five live-fire ranges to hone this skill. Soldiers must qualify on two hand-grenade ranges—live-fire and combat assault (inert)—to successfully complete this phase.

At the end of Phase III, soldiers must pass two more tests to move into the AIT portion of the OSUT cycle. They must score at least 80 percent on the End-of-Cycle Test, which serves as a final exam for BCT and ensures that each soldier knows how to execute basic combat tasks on the battlefield. Soldiers must also pass the Army Physical Fitness Test (APFT) according to BCT standards, which differ from regular Army standards. A minimum score of 50 percent in each tested category is required, which is a challenging requirement.

There is no Army requirement concerning physical fitness for soldiers enlisting in the Army. The only weight requirement states that they cannot be more than 60 pounds over their maximum allowed weight. If an overweight soldier enlists in the Army, he is placed on the overweight program and treated like any other soldier. In today's society, where physical fitness and total health are not highly valued or emphasized, many soldiers cannot successfully complete one push-up when they arrive at the reception station.

Soldiers who complete all the BCT requirements are awarded a weekend pass, which is the only pass given during the entire cycle. It is a motivational tool for the advanced individual training that is about to begin.

**Phase IV.** Light engineer training includes 13 days of demolitions and land mine warfare training. During demolitions training, soldiers learn to properly construct electric and nonelectric firing systems and to detonate demolitions. They participate in two demolitions ranges to test their proficiency in these tasks. Then they are taught the fundamentals of mine laying and mine clearing with a variety of antitank mines.



In simulated mine training, recycled tires are used in place of traditional sawdust.

**Phase V.** Mechanized engineer training, which lasts 10 days, consists of M60 chassis training, AVLB emplacement, and armored combat earthmover (ACE) operations. Class size is extremely important during this phase. Simply stated, the fewer soldiers in a class, the more driving time per soldier, which answers CPT Striker's question in the opening scenario.

The military occupational specialty (MOS) 12B Combat Engineer program of instruction states that the minimum, optimum, and maximum class sizes are respectively 135, 150, and 200 soldiers per company. Often, these classes are either overbooked or not filled at all. During the summer and fall, many classes have more than 250 soldiers per company because of the large number of soldiers who enter the service after high school graduation. From November to May, classes are small due to the limited number of recruits. The Engineer School tries to prevent this accordion effect, but potential recruits usually enlist in whichever service has the quickest opening (and paycheck). Competition is especially keen between the Marines and the Army, because both services have similar combat MOSs and are often recruiting the same potential enlistees.

The last three major events of AIT are the End-of-Cycle Comprehensive Test (EOCCT), the five-day field training exercise (FTX), and the APFT according to regular Army standards.

To successfully complete the EOCCT, soldiers must score a "GO" in every category. Every aspect of the 12B POI, including M9 ACE and AVLB employment, is tested. This is accomplished by using realistic simulators and training aids, which are fabricated at the local Training Support Center. They provide soldiers the opportunity to train and be tested on equipment in an indoor environment.

After the EOCCT, soldiers must complete the combat engineer FTX and APFT. These two events are conducted using the same standards as a regular modified table of

organization and equipment unit. Once soldiers successfully complete these events, normal outprocessing occurs and they graduate from OSUT.

### Team Training

The training that each MOS 12B soldier receives at Fort Leonard Wood is challenging, realistic, and demanding. The Engineer School continually reviews and adjusts the training and subjects taught to meet demands of the modern battlefield. Suggestions and input from warfighting units are requested regularly. For example, before 1995, MOS 12B soldiers received training on the Bailey bridge. However, this instruction was eliminated when the Engineer School consolidated MOSs 12B and 12F and determined that more critical tasks should be taught in the time allowed. The "demise" of the combat engineer vehicle and requests from field units caused two days of Bailey bridge training to be reinstated into OSUT.

Each year more than 3,500 combat engineers are trained at Fort Leonard Wood. The soldiers come from unique backgrounds and circumstances, but each is expected to meet the same standards. These standards could not be met without the hard work and dedication from the team of quality civilians and soldiers who train them. The caliber of the combat engineers entering the Total Army force today is a direct reflection of this team-training approach.

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*Photographs by Jim Ray, TSC, Fort Leonard Wood.*