CTC Notes

Battle Command Training Program (BCTP)

Synchronizing Engineers: Weighting the Main Effort in the Defense

By Lieutenant Colonel Ron Light

"The nature of water is that it avoids heights and hastens to the lowlands. When a dam is broken, the water cascades with irresistible force. Now the shape of an army resembles water. Take advantage of the enemy's unpreparedness; attack him when he does not expect it; avoid his strength and strike his emptiness, and like water, none can oppose you."

Sun Tzu, *The Art of War*

In the offense, doctrine tells us that "commanders attack to avoid the enemy's main strength." It should come as no surprise that the enemy seeks to do the same thing. As Sun Tzu noted, "the enemy flows like water, seeking the path of least resistance." However, sometimes engineers miss this point as they shape the battlefield during the defense. This article briefly reviews what it means to weight engineers in support of the defense.

Before exploring this concept, we must understand an important condition of the battlefield: the enemy is observing our defensive preparations. Wherever we have fought in the past and wherever we will fight in the future, the enemy is watching. During Warfighter exercises conducted by the Battle Command Training Program, the World Class Opposing Force (WCOPFOR) is adept at inserting special-purpose forces (SPF) throughout friendly forces' areas of operation. The WCOPFOR bases much of its plan on the information these SPF teams report.

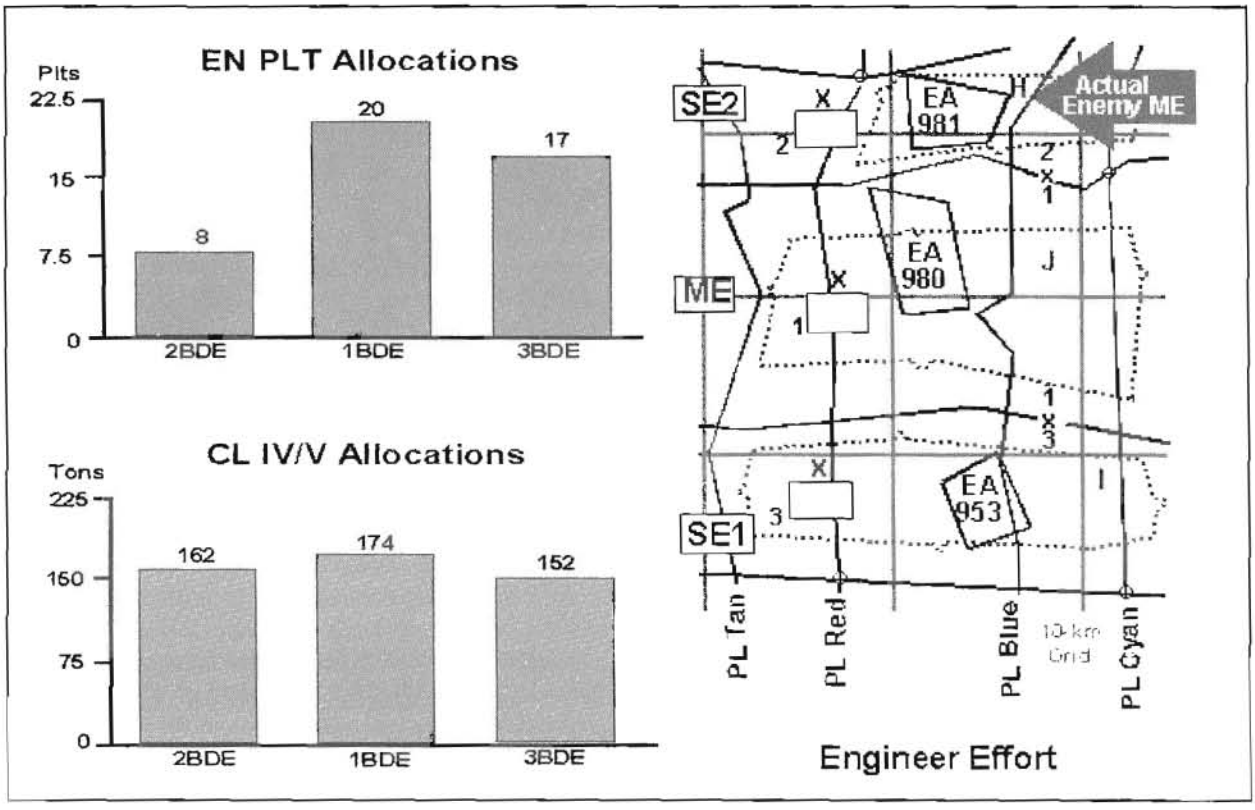
What do the SPF teams report during our preparations for the defense? Just as at the "dirt" combat training centers, the teams look for and report on the activities of friendly engineers. As an engineer once observed during a training rotation at the National Training Center, "Find his bulldozers, and you've found his defense." SPF teams are trained to look for engineers, armored combat earthmovers, and Volcano countermobility systems. With this information, the battlefield calculus to predict where our main defense effort is becomes relatively simple for the WCOPFOR. Simply stated, engineer activity is usually an accurate gauge to predict our main effort.

More often than not, friendly engineers make it far too easy for the WCOPFOR to identify the main effort. In the defense, engineer staffs weight the division's or corps's main effort (the force which will do most of the killing on the battlefield) with engineers. The main effort ends up in a strongpoint defense, and supporting efforts are relatively much weaker. As noted above, two things happen when this occurs. First, WCOPFOR SPF teams see this asset allocation, and they report accordingly. Second, the commander of the WCOPFOR uses this information to plan his attack against our weakness. More often than not, the WCOPFOR correctly reads where the friendly main effort is by identifying where the preponderance of friendly engineers are arrayed on the battlefield—and he attacks elsewhere. The enemy flows like water.

The figure on page 19 illustrates this point. The enemy was known to be attacking from the east. The division designated that 1st Brigade (in the center) was the main effort. This is where the division commander wanted the enemy to go and where he wanted to kill the enemy. In the north, 2d Brigade was a supporting effort, as was the 3d Brigade in the south. Notice, however, where engineers were arrayed on the battlefield. The bar chart in the figure shows that 1st Brigade received most of the engineer assets available: 20 engineer platoons. Moreover, 1st Brigade also received the largest allocation of Class IV/V (obstacle) barrier material: 174 short tons.

Recalling that the enemy is adept at reporting on our defense preparations, where do you suppose he attacked? Seeking to avoid friendly strength (easily read as 1st Brigade), and noting a relative weakness between the two supporting efforts, the enemy attacked into 2d Brigade in the north. The ensuing fight was quick and brutal.

By now it is probably obvious that *weighting engineers in the defense does not usually mean weighting the main effort with engineers.* The enemy will avoid our strength. One of the



primary ways he gauges our strength is by observing where we array engineer forces. We can deceive or mislead the enemy as to where our main effort is by weighting engineers to our supporting efforts.

Of course, we must allocate some countermobility assets to the main effort. Remember, however, that *doctrine urges commanders to mass effects, not necessarily assets.* We can allocate close air support and air Volcano missions to the main effort. These assets allow us to mass countermobility effects in a very short time. Moreover, with planning we can use these assets relatively late during our defensive preparations, when the enemy has less time to react. This technique was used effectively by a unit during a recent Warfighter exercise.

So what does it mean to "weight engineers in support of the defense?" Usually it does not mean making the main effort an impregnable force with all of the division's allocation of mines, wire, and pickets. What it does mean is creating a condition on the battlefield that confuses the enemy and causes him to commit his forces not against what he perceives to be our weakness but against our strength.

Lieutenant Colonel Light is the senior engineer observer/controller for the Battle Command Training Program at Fort Leavenworth, Kansas. He is scheduled to command the Honolulu District, U.S. Army Corps of Engineers, in July 2000.

Joint Readiness Training Center (JRTC)

The Engineer Survivability Execution Matrix

By Sergeant First Class Isaac N. Horton and Sergeant First Class Thomas V. Murray

We have observed a trend at the Joint Readiness Training Center concerning the engineer survivability execution matrix and how it impacts force-protection operations here and ultimately on the modern battlefield. The trend is that units employ the age-old blocked-time survivability execution matrix. This means that rather than conducting a detailed mission analysis, each unit with an established priority is allocated the same amount of time and engineer assets. The result is that the final product we observe routinely fails to adequately address