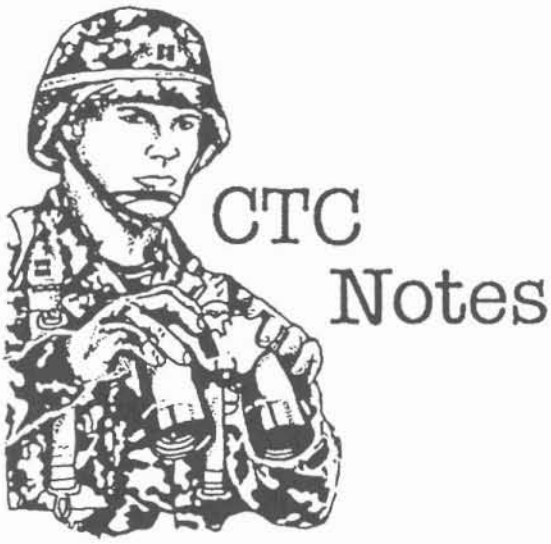


National Training Center (NTC)

Using Obstacle Group Designs

By Major Tom Buning

The last submission of *CTC Notes* from the National Training Center (August 1996) focused on the combat engineer platoon's role as executors. It emphasized that improvement in engineer platoon productivity in countermobiliity tasks requires taking action at all levels to narrow the platoon's focus in the defense to siting and emplacing minefields. Lessons learned at the NTC show that poor planning products at the engineer battalion and company levels are a primary cause of poor obstacle execution. This article provides a technique to produce an executable plan for the platoon leader as a way to improve productivity and support to the mission.

To provide an effective link between obstacle planning and execution, engineers need a tool that focuses the effort of the former to improve the efficiency of the latter. It is not sufficient to hand a set of obstacle graphics to a platoon leader and expect that a plan will be executed to a standard that either meets or supports the maneuver commander's intent. A recommended technique for providing the details required for timely execution is to introduce into the planning process an obstacle group design that includes each directed obstacle. (Note: Most tactical obstacles at the task-force level are directed; some may be reserve or situational.) Planners must provide a level of detail in the obstacle group design that enables platoons to emplace obstacles that meet the commander's intent.

Task force engineers (engineer company commanders) must produce an obstacle group design overlay that provides the following information as a minimum:

- Tentative layout of the obstacle group depicted on a 1:25,000- or 1:12,500-scale map showing (to scale) the size, shape, location, and orientation of each obstacle.
- Operations graphics showing the applicable engagement areas, battle positions, and target reference points.
- Various terrabase pictures from both friendly (key direct fire systems) and enemy (engagement area) perspectives.
- Text, including both the resources and effort required to execute the obstacle group and any special instructions. This information tells the platoon leader what he is siting, the effort he must commit to the project, and the expected duration of the effort.

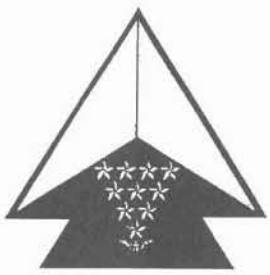
Production of an obstacle group design will force planners to more clearly understand the effort they are committing as they lay out the details of a directed obstacle group. It also forces planners to clearly and accurately define the Class IV/V requirements needed to integrate obstacles into the combat service support plan. *Commitment* is the key word. The value of preparing an obstacle group design is that it forces planners to provide the level of details required for the platoon to execute the plan. It also provides the capability to more accurately track the precious platoon hours and resources needed to accomplish the plan. The countermobility/survivability time line used to track planned versus executed performance enables engineer staff officers to better inform the chain of command on the status of building the defense.

Successful execution of an obstacle group design by task force engineers requires a task organization constraint. Engineer platoons cannot be placed in direct support to a maneuver company and remain effective in their ability to execute the plan established by the assistant and task force engineers. Therefore, combat engineer companies cannot be task organized beyond direct support to the supported task force. This does not mean that the engineer platoon leader is relieved of the responsibility to properly coordinate with the maneuver company team that owns the engagement area where they are constructing an obstacle group.

From a current doctrinal perspective, use of an obstacle group design fills a void. FM 90-7, *Combined Arms Obstacle Integration*, establishes that task force engineers (engineer

company commanders) are responsible for planning. FM 20-32, *Mine/Countermine Operations*, recommends an obstacle group design method as an initial step toward establishing a framework for emplacing obstacles, while FM 90-7 states that a platoon leader executes intent. This is where doctrine fails to discuss in detail the need to produce a detailed plan or the important role of the engineer platoon as its executor. In fact, chapter 5, FM 90-7, warns that given a plan with too much detail, a platoon leader will emplace minefields as articulated in concept and disregard proper obstacle siting. Given this line of thought, it may be argued that use of the obstacle group design will increase the problem of improper obstacle siting, because this technique places greater emphasis on precise design/execution standards. However, NTC engineer trainers submit as a strong counterpoint that, for efficiency in execution, it is a lesser training challenge to make lieutenants and platoon sergeants understand that they must site obstacles and adjust a given design to the terrain than to generate the design itself.

The goal of these two submissions from the NTC (August 1996 *Engineer* and this article) is to ensure that engineer leaders and staff officers manage the precious time available to engineers in establishing the defense. The most effective way to accomplish this is to prepare an executable plan that allows for the efficient use of engineer platoon hours. It is not sufficient to point out a problem without suggesting a solution. This article provides a technique (the obstacle group design) that will narrow the focus of the platoon to its organizational capabilities and instill discipline into obstacle emplacement. Disciplined execution of an obstacle plan will allow our combat engineer force to maintain its credibility as a member of the combined arms team. It will enable us to deliver what we promise—obstacle effects on the ground to shape the fight for the commander. With victory as the only acceptable alternative, there is no other choice.



Battle Command Training Program (BCTP)

By Lieutenant Colonel David Snodgrass

Recent BCTP Warfighter exercises show that targeting enemy capabilities presents a significant challenge for divisions. Complete targeting of an enemy capability almost always requires a combined arms operation. If successful, it provides an excellent opportunity to upset the opposing force (OPFOR) plan and time line and improve our position on the battlefield. For example: Some divisions use air interdiction (AI) missions to destroy fixed bridges over rivers deep in the enemy rear area, theoretically to slow enemy follow-on echelons and force him to expend various critical resources (time, bridging, and engineer effort). Unfortunately, they target only the fixed bridges and not the full spectrum of components that comprise the enemy force and its capability to move rapidly across a river. The usual result is only a minor inconvenience to the OPFOR and has little impact on their overall plan.

Consider for a moment how rare and valuable AI missions are and the risks we take to fly behind enemy lines to hit bridges. Are we accomplishing our objective if we fail to track the movement of the enemy force, interdict the bridges too early, or allow the enemy sufficient time to change routes without delaying his time line? Worse yet, what if we hit the bridges after he has already crossed? Assuming that the enemy's bypass options are difficult, how effective is knocking out a bridge if we fail to detect or target enemy engineer bridge units located near the bridge? How effective is the action if we fail to dedicate reconnaissance assets to watch the damaged/destroyed fixed bridges and detect his attempts to construct float bridges or repair the damaged fixed bridges? Have we maximized the delay time of the enemy force if we allow enemy engineers to work unimpeded? If we do not dedicate additional reconnaissance efforts to identify and report the enemy maneuver elements stacked up on routes into the crossing area, or if we do not dedicate assets to strike "target rich" environments, have we fully realized the maximum benefit of our actions? If we lose aircraft and pilots on the AI mission and the enemy has bridges up and forces moving again within a few hours, was the cumulative effect worth our efforts?

Our best option is to hit the enemy, specifically his capability to rapidly move forces across a river, with multiple problems from multiple directions and present him with more than one challenge to solve at any given time. Doctrine states and experience shows that an obstacle is effective only when it is combined with other types of obstacles and integrated with planned, dedicated direct and indirect fires to achieve a specific effect. To accomplish this, we must attack the spectrum of assets that comprise the enemy capability as well as the enemy forces. We must remove his ability to use fixed bridges, take away his crossing alternatives and bridge-repair capability, consider other means to make an obstacle complex (i.e., Gator minefields), and then strike his forces as they wait for an opportunity to move forward.

Division decision makers, in this case the combined arms

deep operations coordination cell (DOCC), need a cost-benefit analysis to assist their decision making. After we clearly define the desired effect, we should clearly identify the targeted capability, component pieces, and resources required; determine if the resources are available and in the proper position; and quantify the risk associated with the mission. Once this analysis is complete, the decision makers will clearly understand the challenges involved in the mission. Then they can determine if the committed resources and risks involved are worthy of the net effect gained over the enemy. Planners should brief the division commander on the high-risk operations that commit limited resources, potentially impact other operations, or have a potential payoff that is not clearly in our favor to assist him in the decision to execute an attack.

AI missions against bridges are one example of this concept using the mobility/survivability battle operating system (BOS). Enemy capability targeting challenges are found all across the battlefield, in each of the BOSs, and require a combined arms effort for success. Complete targeting of an enemy capability provides a much greater opportunity to significantly impact the OPFOR plan, presents the enemy with more than a minor inconvenience, and significantly improves our position on the battlefield.

Joint Readiness Training Center (JRTC)

Minefield Battle Tracking and Influencing the Low-Intensity Fight

By Captain Jeff Farnsworth

Enemy minefield battle tracking is an improving trend for units rotating through the JRTC. Successful units expend considerable effort to ensure their minefield-tracking charts and feeder reports include the information elements needed to show the mine threat across the battlefield. Many units disseminate minefield feeder reports widely and post them in all vehicles throughout the brigade. The flow of obstacle intelligence (OBSTINTEL) from subordinate units is improving, although the accuracy and timeliness of reporting still need attention. Detached engineer platoons are getting better at flipping the switch on their SINCGARS and reporting minefield incidents to the engineer company/brigade engineer cell as they occur. Engineer conference calls facilitate information flow to confirm/deny other OBSTINTEL at the brigade level. The engineer at the brigade level is better integrated with the intelligence and maneuver battlefield operating systems (BOSs). Most OBSTINTEL is captured and posted. Brigade engineers consistently confirm/deny and exchange information with the S2. These actions are positive indicators that systems are in place for commanders to "see" the battlefield. They set the stage for the application of battle command in the countermine fight.

To increase the effectiveness of their combat operations, units should focus training efforts on the dissemination and analysis of battlefield information. Some successful techniques follow:

Dissemination. Units typically disseminate updated minefield tracking reports as an engineer annex to daily brigade fragmentary orders. Most successful units ensure this information is quickly passed to company and platoon levels, where it is integrated into current operations. This technique, however, does not allow for rapid dissemination on a fluid, nonlinear battlefield. As minefield incidents occur, consider sending "flash minefield reports" over command nets, in much the same way that units disseminate flash NBC reports. This technique provides subordinate units and small unit leaders immediate access to this critical information and enhances their situational awareness.

Analysis. The brigade and task force engineers who are able to influence the maneuver targeting process experience significantly more success against an austere enemy than those who are not. Sharing, confirming/denying, and disseminating information is not enough. Engineers also must aggressively influence the S2's analyses and ensure that updated situational templates accurately reflect the relationship between enemy activity and disposition to OBSTINTEL. The engineer must advise and assist the S2 in adjusting templated caches, supply transfer points, and, therefore, likely enemy unit locations. Jointly with the S2, update the S3 on the current enemy situation. This information helps focus the intelligence picture used in targeting meetings at brigade and task-force levels. Engineers typically are passive observers during the targeting process. Instead, they should—

- Recommend a focused area around high-density enemy minefield activity for designation as named areas of interest and high-priority targets.
- Recommend using scouts and other intelligence assets to monitor enemy activity in these areas.
- Recommend that counterreconnaissance efforts and ambushes be employed near reseeded minefields.

By employing a combination of these efforts, engineers will assist maneuver commanders in exercising effective battle command to win the countermine fight.