
T-P-U evaluations. As we field the Bradley A2ODS vehicle with its laser rangefinder and automatic gun elevation correction, we will find that it outperforms its predecessors. And the Bradley A3, which will have a ballistic solution that applies automatic elevation and target lead, should outperform the A2ODS models.

Maintaining a standard based on the

threat capabilities and the crew's warfighting skills provides evaluation standards that are applicable to all Bradleys. It does not matter to the threat whether a crew is in a Bradley A0 or A3; his rounds are going to hit the Bradley in the same amount of time. Just as the vehicle has evolved, so have the methods of evaluating crew gunnery. With the publication of the new FM 23-1, we have

reached the gunnery goal of providing realistic threat-based training for the entire Bradley fleet.

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Direct Fire Planning

Platoon and Company Sector Sketch

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After a rotation at the National Training Center (NTC), our unit returned home with the realization that our direct fire planning procedures were disorganized, time-consuming, and ineffective. It was apparent that good direct fire planning was an art that required study, practice, and visualization.

Additionally, we were introduced to a set of planning considerations (thanks to our observer-controllers) that we had not been using effectively—time-phasing the engagement area, for example. We needed some tools to help us use this newly acquired knowledge. Clearly, the old method of designating sectors and covering deadspace with indirect fire does not make the most effective use of the company team's capability, nor does it constitute a direct fire plan (DFP). Direct fire is the biggest asset a company commander controls. Engaging a numerically superior force and winning requires higher-level work in direct fire planning.

We identified our major deficiencies as follows:

- Visualization and verification of the

plan was lacking. Platoon sector sketches of varying sizes and quality prevented the commander from visualizing and finding weaknesses in the DFP.

- We lacked a standard format for translating what a rifleman or gunner can see and engage up through the chain of command.

- Because of the lack of standardization, disseminating refinements and changes was difficult.

- Although many of the tools of direct fire planning were being used, there was no plan that centralized the effort.

In preparing for our next rotation, and to capitalize on this learning experience, we set out to develop some tools to help soldiers and leaders with direct fire planning. The guidelines we used were as follows: The plan had to be simple, standardized, easy to use, and understood by all soldiers. We had to find a way to bridge the gap between the handwritten range card and an accurate, scaled DFP. Additionally, we wanted to make it easier to disseminate the plan up and down the chain of command. For this, we needed clear, scaled, accurate representations of

the platoon and company fire plan. Since no plan is ever static, the plan would also have to allow for the rapid dissemination of changes.

The cornerstone of our system is DA Form 5517-R, the standard range card. We placed two forms back-to-back, with an example derived from the appropriate manual—for example, Field Manual (FM) 7-7J, *The Mechanized Infantry Platoon and Squad (Bradley)*, page 6-9, for the BFV; FM 7-8, *The Infantry Rifle Platoon and Squad*, page 2-77, for dismounted positions—on one side and laminated it (Figure 1). Each BFV kept two copies in the turret, and each dismounted soldier carried a reduced version in his helmet. This ensured that each two-man fighting position had one copy and the other copy went to the appropriate leader. The range cards were added to our pre-combat inspection checklist.

The 1:50,000-scale platoon fire plan overlay (Figure 2) is the platoon leader's sector sketch. The company commander issues the upper left and lower right grids during the warning order to ensure that all platoon overlays will line up when he

TRAINING NOTES

SOD _____
 PLT _____
 CO _____

May be used for all types of direct fire weapons

MAGNETIC NORTH

DATA SECTION

POSITION IDENTIFICATION _____ DATE _____

WEAPON _____ EACH CIRCLE EQUALS _____ METERS

NO.	DIRECTION/DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION

REMARKS:

Figure 1. Blank Form 5517-R on one side....

SOD ALL
 PLT Z
 CO C

May be used for all types of direct fire weapons

MAGNETIC NORTH

DATA SECTION

POSITION IDENTIFICATION PRIMARY DATE 3 MAR / 1140 HRS

WEAPON MZ C-21 EACH CIRCLE EQUALS 400 METERS

NO	DIRECTION/DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION
<u>L</u>	<u>350°/5800M</u>	<u>Ø M</u>	<u>2000 M</u>	<u>TOW 2</u>	<u>FARM HOUSE</u>
<u>R</u>	<u>105°/920M</u>	<u>+ 10 M</u>	<u>2600 M</u>	<u>TOW 2</u>	<u>R/SIDE WOODLINE</u>
<u>1</u>	<u>6400 M</u>	<u>+ 30 M</u>	<u>3200 M</u>	<u>TOW 2</u>	<u>RP - HILLTOP</u>
<u>2</u>	<u>6910 M</u>	<u>+ 10 M</u>	<u>2700 M</u>	<u>TOW 2</u>	<u>TRP - AB002 RJ</u>
<u>3</u>	<u>60 M</u>	<u>- 10 M</u>	<u>1800 M</u>	<u>TOW 2</u>	<u>TRP - AB002 RJ</u>

REMARKS
4 WRP - RJ AT 13629411, 100° AT 320 M

.... and example from FM 7-7J on the other side.

puts their sketches on his map. The platoon leader receives the range cards from his fighting position and is responsible for transferring and consolidating this information onto his platoon overlay. By standardizing the format, the commander does not have to rely on sketches of varying quality (on scraps of paper or MRE boxes).

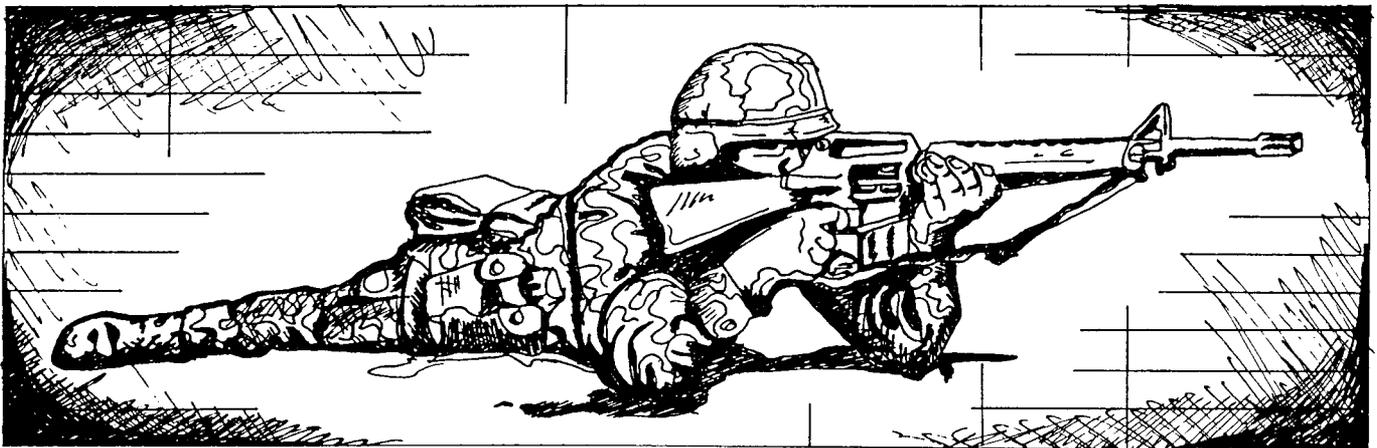
The platoon leaders don't have to sketch the terrain; it will be apparent when overlaid on the map. They include the following information on the sketch:

sectors (mounted and dismounted), maximum engagement lines, dead space, alternate positions and routes to alternate positions (space permitting), left and right limits, location of each position (derived from the global positioning system). All essential elements of information are detailed in FM 7-7J, page 6-10.

Color codes can be used to help the commander interpret the data faster. The best method is for each platoon to use a different color, which helps the com-

mander rapidly identify deadspace that another platoon can cover, weaknesses in alternate platoon sectors (quadrants), and the integration of direct fires and engineer support.

Indirect fires are not plotted on the copy given to the commander unless the platoon leader is nominating a target. Our experience showed that indirect fires are primarily "top-fed" and often change minutes before the battle. Omitting them from the initial DFP overlay avoids confusion and clutter.



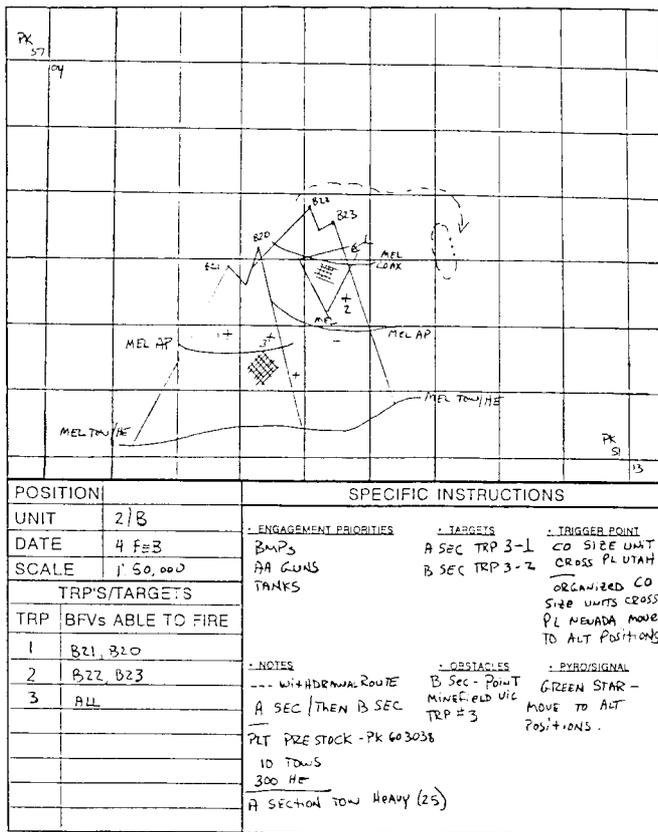


Figure 2. Platoon fire plan

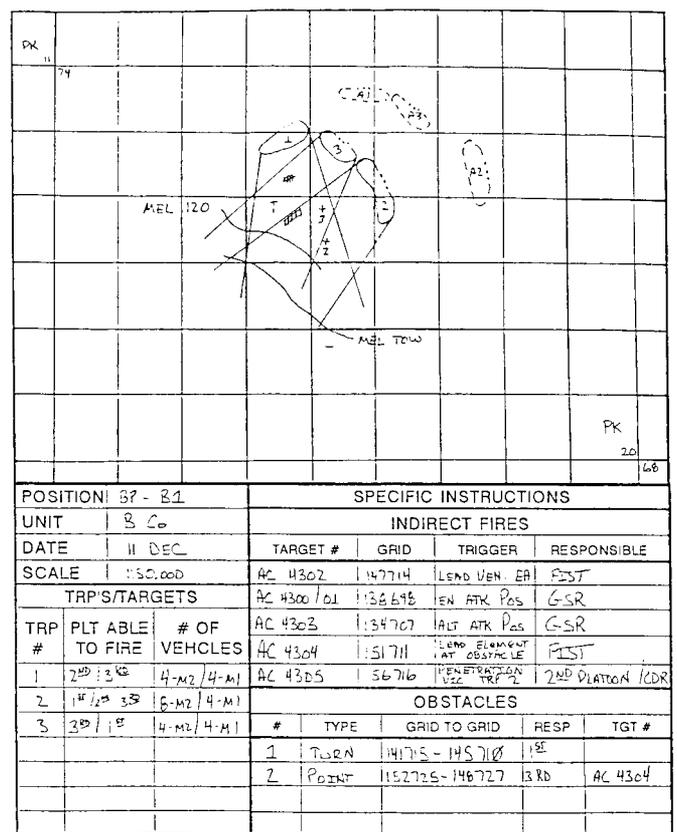


Figure 3. Company fire plan

Combined with proper fire planning techniques, this tool allows the platoon leader to develop his platoon fire plan. All essential combat information is recorded in the *Specific Instructions* section of the overlay. The platoon sector sketch, along with the company operational graphics, enables the platoon leader to plan his mission and brief his subordinate leaders accordingly. The plan briefed directly on the map and on the ground gives leaders a precise picture of the platoon's role in the DFP.

The company sector sketch is compiled by placing all platoon sector sketches directly on top of one another on the map. The commander can refine his plan and address his planning considerations. At this point, the indirect fire plan is validated in coordination with the company fire support officer (FSO). The commander can integrate and verify the engineer obstacle plan, and the indirect fire plan with the scheme of the operation. The FSO submits additional targets or target refinements through the TACFIRE system.

The commander can now produce his

company team fire plan quickly, providing the battalion commander with an accurate picture of his capabilities (Figure 3).

After solving problems in the plan, the commander can quickly get the company fire plan back to the platoon leaders. The leaders bring their copy of the DFP, overlay it with the commander's, and trace the company fire plan.

At the NTC, we found that this plan greatly helped soldiers understand and execute the platoon and company defense. This concept allowed the key leaders at squad and platoon level to see how their elements contributed to the overall scheme. In addition, it allowed the platoon leaders and the company commander to be more effective in briefing the DFP to their sub-unit leaders. This method used time more effectively and improved our mission accomplishment.

Although using these tools enabled us to make the most of the time available, they did not make a direct fire plan for us. A solid understanding of the principles of fire control and direct fire planning considerations was the basis for the brain

work. Using standardized fire plans to brief our soldiers enabled them to see the overall plan and the way each position contributed to the DFP. The platoon and company sector sketches help translate intentions into a visualized plan that everyone understands.

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