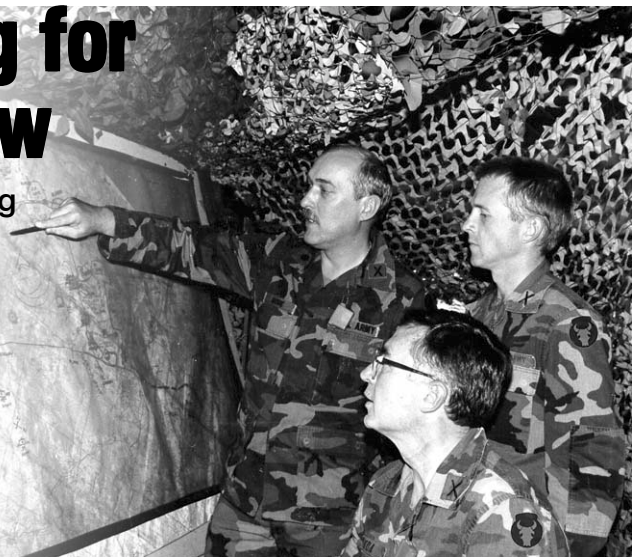


Fire Support Planning for the Brigade and Below

by Major David A. Lee and Colonel John A. Yingling

The combat training centers (CTCs) have identified several problems that consistently plague fire support planning: fire support and targeting are poorly integrated into the military decision-making process (MDMP) and fire support officers (FSOs) are unsure of their role in staff planning.

First, a fire support plan that is not integrated with the maneuver plan results in unsuccessful fires in support of the operation. Integrating fire support requires the commander and his staff to think both maneuver *and* fires at each step of the MDMP and as part of that process—beginning at “Receipt of Mission” and continuing throughout the process. (See Figure 1.)



Input	MDMP Steps	Output
<ul style="list-style-type: none"> Mission is received from higher headquarters or deduced by the commander/staff. 	Receipt of Mission	<ul style="list-style-type: none"> Commander's Initial Guidance* WARNO 1
<ul style="list-style-type: none"> Higher headquarters develops the WARNO, plan and IPB. Staff analyzes the higher headquarters OPORD to develop facts and assumptions required for planning. 	Mission Analysis	<ul style="list-style-type: none"> Initial IPB Products Restated Mission* Commander's Intent* Commander's Guidance* WARNO 2 Staff Products Battlefield Framework Preliminary Movement
<ul style="list-style-type: none"> Staff uses the restated mission, commander's guidance, commander's intent, staff estimates and products, and enemy COA to develop the friendly COA. 	COA Development	<ul style="list-style-type: none"> COA Statements and Sketches
<ul style="list-style-type: none"> Staff uses the enemy and friendly COA statements and sketches plus each staff sections' COA to wargame. 	COA Analysis (Wargame)	<ul style="list-style-type: none"> Wargaming Results Task Organization Mission to Subordinate Units CCIR
<ul style="list-style-type: none"> The staff uses criteria approved by the commander and the results of the wargaming to conduct COA comparison and develop the decision matrix. 	COA Comparison	<ul style="list-style-type: none"> Decision Matrix
<ul style="list-style-type: none"> Commander approves the COA. 	COA Approval	<ul style="list-style-type: none"> Approved COA* Refined Commander's Intent* Specified Type of Order* Specified Type of Rehearsal* HPTL* WARNO 3
<ul style="list-style-type: none"> Staff produces and disseminates the orders. 	Orders Production	OPLAN/OPORD*

*Responsibility of the Maneuver Commander

Legend: CCIR = Commander's Critical Information Requirements COA = Course of Action	HPTL = High-Payoff Target List IPB = Intelligence Preparation of the Battlefield MDMP = Military Decision-Making Process	OPLAN = Operations Plan OPORD = Operations Order WARNO = Warning Order
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Figure 1: Military Decision-Making Process

Second, the potential benefits of the targeting process to focus and improve the MDMP are great. Targeting provides a mechanism to break out of the “stovepipe” battlefield operating system (BOS) view to better integrate combined arms planning. Unfortunately, too many commanders and staffs view targeting as a separate process or, at best, one that’s parallel to the MDMP.

At the brigade and battalion levels, the targeting process requires no more people, equipment or time in planning than what the MDMP already requires. The MDMP and targeting need the same people: *the battle staff*. Targeting during MDMP merely requires each member of the battle staff provide more specific information and clearer focus at each step of the MDMP.

Most maneuver staffs don’t realize they conduct targeting with every order they produce. For example, the decision to use an armored versus mechanized task force is the result of targeting. The “Concept of the Operation” (both maneuver and fires) developed by the battle staff must reflect the results of good targeting that’s built into the MDMP.

The last CTC observation is that most task force and brigade FSOs don’t understand how to integrate their actions and products in the MDMP steps as part of the battle staff. The current fire support manuals don’t give enough details as to what the FSO does at each step. FSOs often don’t understand the information and products needed as inputs of the steps. And they don’t know the specific actions they must take to produce the outputs—which both support the MDMP and allow him to continue fire support planning.

To address these problems, the FA School, Fort Sill, Oklahoma, worked with the CTCs to develop tactics, techniques and procedures (TTP). The result is the white paper “Fire Support Planning for the Brigade and Below.”

The purpose of the white paper is to outline a fire support planning process for the maneuver brigade and battalion that aligns with the MDMP outlined in *FM 101-5 Organization and Operations* and integrates the fire support components of the targeting process. The fire support plan produced using the process outlined in the white paper and, briefly, in this article will better integrate combined arms operations. This paper not only complements the MDMP steps outlined in *FM 101-5*, but

also amplifies procedures for FSOs and others involved in fire support planning at brigade and below.

The Military Decision-Making Process. The MDMP is a single, established and proven analytical process. It is an adaptation of the Army’s analytical approach to problem solving and a tool that assists the commander and

staff develop a plan. (*FM 101-5* details the steps of the MDMP in Chapter 5.)

What the FM does not describe in detail is the interrelationship of fire support planning and targeting with the MDMP. As a member of the brigade or battalion staff, the FSO serves as both the staff fire support expert and a member of the targeting team.

Key Definitions from the White Paper:

“Fire Support for the Brigade and Below”

Essential Fire Support Tasks (EFSTs)—A task for fire support to accomplish that is required to support a combined arms operation. Failure to achieve an EFST may require the commander to alter his tactical or operational plan. A fully developed EFST has a *task*, *purpose*, *method* and *effects*. The *task* describes what targeting objective (delay, disrupt, limit or destroy) fires must achieve on an enemy formation’s function or capability. The *purpose* describes why the task contributes to maneuver. The *method* describes how the task will be accomplished by assigning responsibility to observers or units and delivery assets and providing amplifying information or restrictions. Typically the method is described by covering three categories: priority, allocation and restrictions. The *effects* quantify success for accomplishing the task.

Sample EFST

Phase IV: Be Prepared to Assault Obj Tiger.

Task: Disrupt MIC long-range AT and tank fires against assaulting forces on Obj Tiger and limit the CAR’s ability to counterattack TF 1-3.

Purpose: To enable TF 1-3 to seize Obj Tiger.

Method: *Priority*—FA POF to TF 1-3. *Allocations*—FA fires AB2001 (SEAD) and AB2002 (ground-burst illum) to support CAS sorties. Bde will control 3xCAS (A-10s) to destroy enemy armor forces in CTB1. *Restrictions*—FASCAM firing requires Bde Cdr approval and cannot be delegated. Illum and Smk missions must be cleared by Bde prior to execution. NFAs (300-m radius) on COLTs, scout OPs, churches and hospitals throughout operation. Division and Bde CFL is PL Newt. O/O ACA Big Sky; no fires north of the 24 E/W grid line, east of Hwy 44 and south of Hwy 7.

Effects: MIC direct fires ineffective against assault forces on Obj Tiger. CAS destroys six tanks and three BMPs in CTB1.

Legend:

ACA = Airspace Coordination Area	FASCAM = Family of Scatterable Mines
AT = Antitank	Illum = Illumination
Bde = Brigade	MIC = Motorized Infantry Company
BMPs = Soviet-Made Tracked Infantry Combat Vehicles	NFAs = No-Fire Areas
CARs = Combined Arms Reserves	Obj = Objective
CAS = Close Air Support	O/O = On Order
Cdr = Commander	OPs = Observation Posts
CFL = Coordinated Fire Line	PL = Phase Line
COLTs = Combat Observation Lasing Teams	POF = Priority of Fires
CTB = CAS Target Box	SEAD = Suppression of Enemy Air Defenses
E/W = East/West	Smk = Smoke
	TF = Task Force

Fire Support Planning Imperatives.

Four imperatives provide the foundation for integrated fire support planning as outlined in the white paper.

1. *Fire support planning must be part of the MDMP and mirror the steps of the existing planning process.* FM 6-20 *Doctrine for Fire Support*, Page 3-3, states “it is essential that fire support

planning is performed concurrently with the development of the scheme of maneuver.” Fire Support planning is merely a component of the MDMP; the FSO must plan in concert with the combined arms battle staff. The terminology and focus of fire support planning must mirror the MDMP as much as possible. As a member of the battle staff, the FSO

contributes at each step of the MDMP and gains the information and decisions he needs to formulate and (or) refine his fire support plan. Fire support planning requires the interaction of the battle staff and commander to be effective.

2. *Fire support planning truly must integrate the functions of targeting: decide, detect, deliver and assess (D³A).* FM 6-20-10 *TTP for the Targeting Process*, Page 1-3, states “targeting is integral to the planning process” and FM 101-5 states “targeting is closely related to the MDMP,” but they do not always clearly show where and how they’re integrated.

While targeting isn’t a function of fire support planning, per se, the FSO is a key player as part of the targeting team and his plan must reflect the results of targeting. The targeting process at brigade and below must be achieved within the MDMP without an additional set of steps. If targeting is successfully integrated into the MDMP, the resulting operational and fire support plans will answer the questions in Figure 2.

3. *Fire support planning must support and be integrated with the reconnaissance and survey (R&S) plan.* A key link between the MDMP, fire support planning and targeting is the R&S plan. It requires combined arms operational

Essential Field Artillery Tasks (EFATs)—A task for the Field Artillery that must be accomplished to achieve an EFST. A fully developed EFAT has a *task*, *purpose*, *method* and *effects*. The *task* describes the effects of fires against a specific enemy formation(s): suppress, neutralize, destroy, screen or obscure. (Note that firing family of scatterable minefields, or FASCAM, and suppression of enemy air defenses, or SEAD, are special cases.) The *purpose* is a summary of the task and purpose from the EFST. The *method* describes how the task will be accomplished by assigning responsibilities to the batteries, survey and FA battalion tactical operations center (TOC). Typically, the method is described by covering three categories: priority, allocation and restrictions. Priority provides the batteries with priority of fire (POF) and priority of survey. Allocation includes movement triggers, routes, position areas (PAs), azimuth of fire (AOF), targets (priority and final protective fires, or FPFs) and radar zones. Restrictions cover fire support coordinating measures (FSCMs) and survivability movement criteria. *Effects* is a quantification of the FA task and positioning of FA units.

Sample EFAT

Phase IV: Be prepared to assault Obj Tiger.

Task: Fire SEAD and ground-burst illum in support of CAS attack in CTB1.

Purpose: Disrupt MIC long-range AT and tank fires against assaulting forces on Obj Tiger and limit the CAR’s ability to counterattack TF 1-3 to enable TF 1-3 to seize Obj Tiger.

Method: *Priority*—FA POF to TF 1-3. Priority for survey is A, C, B, Q-36 radar in order. *Allocations*—A Btry moves from PA 14 O/O along Route Purple to PA 15, AOF 1600. C Btry moves from PA 33 after A Btry is set in PA 15 along Route Brown to PA 34, AOF 0800. A Btry fires AB2001 (SEAD) and B Btry fires AB2002 (ground-burst illum) to support CAS sorties into CTB1. *Restrictions*—FASCAM firing requires Bde Cdr approval and cannot be delegated. Illum and Smk missions must be cleared by Bde prior to execution. NFAs (300-m radius) on COLTs, scout OPs, churches and hospitals throughout the operation. Division and Bde CFL is PL Newt. O/O ACA Big Sky; no fires north of 24 E/W grid line, east of Hwy 44 and south of Hwy 7.

Effects: ADA sites suppressed, enemy MIC position marked. A Btry in PA 15. B Btry in PA 24. C Btry in PA 34. Q-36 located in PA 63. FAT located in PA 71. CAT located in PA 83. TOC located at PA 93.

Legend:

ADA = Air Defense Artillery

AOF = Azimuth of Fire

CAT = Combat Artillery Trains

FAT = Field Artillery Trains

PA = Position Area

TOC = Tactical Operations Center

- **Decide**—What specific enemy formations and capabilities must we attack with fires and what objectives must we achieve with which specific fire support assets to support the commander’s intent and the concept of the operation?
- **Detect**—How and where will we find these enemy formations, and where can we best attack them to achieve the required objectives?
- **Deliver**—How (with what assets) and when will we attack these enemy formations?
- **Assess**—What defines success or the objectives for each fire support task, and how will we assess them?

Concept of Fires—The logical sequence of EFSTs when integrated with the scheme of maneuver will accomplish the mission and achieve the commander’s intent. In broad terms, the concept of fires allocates the fire support assets to achieve the EFSTs. The concept of fires is the basis of the fires paragraph of the operations order (OPORD).

Scheme of Fires—The detailed, logical sequence of targets and fire support events to find and attack the high-payoff targets (HPTs). The scheme of fires details how to execute the fire support plan to accomplish the commander’s EFSTs in accordance with the allotted time and the space on the battlefield. To articulate the scheme of fires, the products of the OPORD’s fire support annex are the fire support execution matrix (FSEM), target list/overlay and (or) a modified target synchronization matrix (TSM).

Figure 2: The targeting process (Decide-Detect-Deliver-Assess) at brigade and below is achieved in the military decision-making process and integrated into fire support planning without separate processes or steps. The result is an operational and fire support plan that answers the questions in this figure.

MDMP Steps	Input	Actions	Output																					
Receipt of Mission and Mission Analysis	Higher WARNO or OPORD Facts from FA Bn, ALO, Others Facts from Higher, Lower, and Adjacent FSEs and FISTs IPB Products Enemy COAs from S2 HVTs by Enemy Phase or Critical Event	Understand higher maneuver and fire support plan. Organize and analyze facts. Identify specified and implied tasks. Translate status of fire support assets into capabilities. Analyze effects of IPB on fire support. Use above to develop draft EFSTs.	FSO issues fire support WARNO 1 (or fire support information is included in the Bde WARNO). FSO portion of Mission Analysis brief is the higher fire support plan and briefing charts: <ul style="list-style-type: none"> • Fire Support Status • Fire Support Capabilities/Limitations • Fire Support IPB Analysis • Fire Support Timeline Recommend EFSTs. Commander approves or modifies EFSTs and gives other fire support guidance. FSO issues fire support WARNO 2 (or fire support information is included in the Bde WARNO).																					
COA Development	See Output from the Receipt of Mission and Mission Analysis step.	Determine where to find and attack EFST formations. Identify HPTs in those formations (TVA). Quantify the effects for EFSTs. Plan Methods for EFSTs: <ul style="list-style-type: none"> • Allocate assets to acquire. • Allocate assets to attack. • Integrate triggers with maneuver COA. Use battle calculus. Assist S2 in R&S development to support fire support.	For Each COA: <ul style="list-style-type: none"> • Concept of Fires • Draft FSEM • Draft Target List/Overlay • Draft TSM or Modified TSM • Collection/R&S Plan 																					
COA Analysis and COA Comparison	See Output from the COA Development step.	Targeting Decisions: Finalize HPTL. Wargame fire support plan(s) vs enemy COAs. Modify/refine input as required. Refine and test fire support plan.	Final Drafts of Fires Paragraph and Fire Support Annexes: <ul style="list-style-type: none"> • FSEM • Target List • Target Overlay • TSM or Modified TSM (HPTL, AGM and TSS) 																					
COA Approval and Orders Production Staff Supervision	See Output from the COA Analysis and COA Comparison step.	Approve briefing: <ul style="list-style-type: none"> • Fire support plan briefed as part of each COA. • FSO presents analysis as part of battle staff. 	Commander selects, modifies or approves the COA. FSO issues fire support WARNO 3 (or fire support information is included in the Bde WARNO). Clean up, finalize and reproduce written products. Prepare, rehearse and issue OPORD as part of staff. Back brief fire support. Manage refinement. Rehearse.																					
<p>Legend:</p> <table> <tr> <td>AGM = Attack Guidance Matrix</td> <td>FSEs = Fire Support Elements</td> <td>MDMP = Military Decision-Making Process</td> </tr> <tr> <td>ALO = Air Liaison Officer</td> <td>FSEM = Fire Support Execution Matrix</td> <td>OPORD = Operations Order</td> </tr> <tr> <td>Bde = Brigade</td> <td>FSO = Fire Support Officer</td> <td>R&S = Reconnaissance and Surveillance</td> </tr> <tr> <td>Bn = Battalion</td> <td>HPTs = High-Payoff Targets</td> <td>TSM = Target Synchronization Matrix</td> </tr> <tr> <td>COA = Course of Action</td> <td>HPTL = High-Payoff Target List</td> <td>TSS = Target Selection Standards</td> </tr> <tr> <td>EFSTs = Essential Fire Support Tasks</td> <td>HVTs = High-Value Targets</td> <td>TVA = Target Value Analysis</td> </tr> <tr> <td>FISTs = Fire Support Teams</td> <td>IPB = Intelligence Preparation of the Battlefield</td> <td>WARNO = Warning Order</td> </tr> </table>				AGM = Attack Guidance Matrix	FSEs = Fire Support Elements	MDMP = Military Decision-Making Process	ALO = Air Liaison Officer	FSEM = Fire Support Execution Matrix	OPORD = Operations Order	Bde = Brigade	FSO = Fire Support Officer	R&S = Reconnaissance and Surveillance	Bn = Battalion	HPTs = High-Payoff Targets	TSM = Target Synchronization Matrix	COA = Course of Action	HPTL = High-Payoff Target List	TSS = Target Selection Standards	EFSTs = Essential Fire Support Tasks	HVTs = High-Value Targets	TVA = Target Value Analysis	FISTs = Fire Support Teams	IPB = Intelligence Preparation of the Battlefield	WARNO = Warning Order
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Figure 3: Fire Support Planning Process

planning and links acquisition assets to find specific enemy formations for attack or to provide the information needed to answer the commander's critical information requirements (CCIR).

Fire support planning must support and be supported by the R&S plan. The R&S named areas of interest (NAIs) and target areas of interest (TAIs) must support the requirements of the fire support plan; fire support acquisition assets can be tasked to support the collection requirements. The R&S plan is the "observation" plan for the combined arms commander.

4. *The result of fire support planning must be an effective, integrated and executable plan.* The white paper describes a process for fire support planning at brigade and below. But it's the product of the process (the plan), not the process itself, that's important.

An *effective* plan clearly defines and focuses on achieving the effects required against the identified high-pay-off targets (HPTs). An effective fire support plan uses all available acquisition and attack assets and pits the best combination against the right HPTs to support the commander's intent.

An *integrated* fire support plan provides focus and timing of acquisition and attack systems to achieve a unified effect on the HPTs. Integration means the plan is coordinated and combines with maneuver and other BOS to maximize the results of each attack and best achieve the objectives.

An *executable* fire support plan has the time, space and resources to achieve the objectives as planned. It ties detect

and deliver assets to the HPTs and has a plan to assess the effects achieved. It must be simple, clearly communicated and flexible, using well-defined decision points and triggers.

Finally, maneuver commanders and fire supporters must understand the plan—to include the FA battalion, brigade and task force commanders and their staffs; mortar platoon leader; FSOs and fire support NCOs; forward observers and scouts; company commanders and their platoon leaders; the chemical platoon leader (mechanical smoke); intelligence/electronic warfare systems officer (IEWSO); and air liaison officers (ALOs).

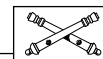
Fire Support Planning as a Process. Like any process, fire support planning has inputs that are transformed by action and result in outputs. Figure 3 describes the sequence of inputs, actions and outputs of fire support planning for each step of the MDMP. This process helps FSOs better understand what they contribute to the battle staff and how to arrive at a plan. The process described in the white paper is a means to an end: an effective, integrated and executable fire support plan.

Other Areas in the White Paper. Other appendices included in the white paper are "Fire Support Planning in a Time-Constrained Environment," "Company/Team Fire Support Planning," "Fire Support Planning Terms," "Commander's Planning Guidance for Fire Support" and "The Fires Paragraph."

The 27-page "Fire Support Planning for Brigade and Below" white paper can be viewed in its entirety at the Center for Army Lessons Learned (CALL) web page

at <http://call-army.mil>, "CALL Products, Special Products."

Fire supporters must tie the fire support planning process to the MDMP and help the battle staff realize the benefits of simultaneously applying the targeting methodology. The result will be more effective fires and an operation that achieves the commander's intent.



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1-127 FA—First NG Unit to Field Paladin

The 1st Battalion, 127th Field Artillery (1-127 FA) with its headquarters in Ottawa, Kansas, is the first Army National Guard unit to be fielded the M109A6 Paladin. The battalion, with subordinate units in Kansas City, Topeka and Burlington as well as Ottawa, is one of two firing battalions in the 130th Field Artillery Brigade. The other, 2-130 FA, was recently fielded the multiple-launch rocket system (MLRS). With the completion of the two-year preparation for fielding and Paladin New Equipment Training (NET) in June 1998, 1-127 FA became a fully modernized general support 155-mm battalion.