

“The greatest effect of firepower is generally not physical destruction—the cumulative effects of which are felt only slowly—but the disruption it causes.”

—MCWP 1, *Warfighting*

The Marine air-ground task force (MAGTF) possesses unparalleled capabilities to attack an enemy force simultaneously throughout the entire depth of the battlespace. Much of this capability comes from the combined arms nature of the MAGTF and its ability to deliver effective and timely lethal and non-lethal fires¹. To capitalize on these impressive capabilities, commanders and their staffs must plan for the effective integration of fires within their concept of operations.

Combat operations are dominated by fire and maneuver conducted by combined arms forces. Combined arms forces maneuver to enhance the effects of their fires and fire to enhance their ability to maneuver. Synchronizing fires with maneuver is critical to the successful prosecution of combat operations. While this concept is well understood, the MAGTF Staff Training Program often sees commanders and planners fail to successfully synchronize organic and supporting joint fire assets with their scheme of maneuver to get maximum effects of fires. Examples include failure to—

- Ensure that the desired conceptual effects of fires are understood and articulated.
- Ensure the MAGTF’s movement plan provides artillery units with priority of movement necessary to position for essential fire support tasks.
- Ensure the main effort is appropriately weighted with fires.
- Ensure that assigned fires tasks can be accomplished within established controlled supply rates.

As a result of these failures to synchronize fires with the scheme of maneuver, MAGTFs are often unable to effectively apply the maximum amount of available combat power against the enemy. Generating effective firepower against an enemy requires that organic and supporting fires be coordinated with other five warfighting functions of intelligence, maneuver, command and control, force protection, and logistics.

This article discusses how the MAGTF plans fires to generate combat power. It addresses the fires planning and targeting actions that occur within the first two steps of the Marine Corps Planning Process (MCP): mission analysis and course of action (COA) development. Future articles will discuss fire planning in the remaining steps of the MCP, targeting, and execution.

As the commander begins to plan how he will achieve a decision and accomplish his mission, he must consider the role fires will play in his operational design. Once he has delivered this guidance on the use of fires, his planners begin to translate this conceptual guidance into functional planning as described in the battlefield framework. This article will discuss how the commander determines the role of fires in his operational design and how the fire planners in the operational planning team (OPT) build on that guidance to create the battlefield framework.

Operational Design

The commander initiates planning with a design that will guide their subordinate commanders and the OPT in planning, execution, and assessment. This operational design is the commander’s tool for translating the operational requirements of his superiors into the tactical guidance needed by his subordinate commanders and the OPT. Operational design helps the commander to visualize the operation and describe that vision. Visualization of the battlespace and the intended actions of both the enemy and the friendly force is a continuous process that requires the commander to understand the current situation, broadly define his desired future situation, and determine the necessary actions to bring about the desired end state. The commander begins his operational design during the mission analysis step of the MCP.

Operational design includes the commander's guidance for the use of fires to achieve a decision. The commander articulates this use of fires to his subordinate commanders and the OPT in his commander's battlespace area evaluation (CBAE) and guidance. By sharing his vision he provides them with the critical roles and tasks that fires will have to perform. This includes his initial thoughts on what constitutes decisive action, how fires can help to achieve that decision, and the role of fires in shaping the enemy and battlespace. He may identify critical enemy units, capabilities, and infrastructure that if attacked by fires could contribute to mission accomplishment.

Battlefield Framework

This framework is part of the commander's operational design and describes how the commander will organize his battlespace and his forces to achieve a decision. The battlefield framework consists of the battlespace organization of envisioned deep, close, and rear tactical operations as well as the organization of the force into the main effort, reserve, and security. Supporting efforts are addressed in the context of deep, close, and rear operations as part of the single battle. The battlefield framework provides the commander and the OPT with an organized way to ensure that they consider in planning and execution all essential elements of successful military operation. The OPT begins the battlefield framework during mission analysis and continues its development through COA development and COA wargaming.

In determining the battlefield framework the OPT takes the conceptual planning contained in the commander's operational design and translates it into functional and detailed planning. This includes targeting objectives, the selection and prioritization of targets, and the effects desired.

Mission Analysis

Mission analysis is the first step in planning. The purpose of mission analysis is to review and analyze orders, guidance, and other information provided by higher headquarters and produce a mission statement. This step drives the remainder of the MCPP.

<p>COMMANDER'S INTENT: The purpose of this operation is to prevent the first tactical echelon from attacking the joint task force main effort's eastern flank.</p> <p>METHOD: To support the higher commander's plan, we have to keep the reserve armored brigade from committing against our higher commander's main effort or being used decisively against my forces. I want to shape the enemy by conducting a tactical deception that leads him to first commit his reserve armor battalion against my supporting effort. Simultaneously, by using lethal and non-lethal fires, I want to control the timeline for the commitment of the enemy's reserve armored brigade by delaying its arrival into my battlespace by 96 hours. Once committed against my forces, I want to limit its capability to engage my decisive action. These shaping actions will allow me to fix the enemy reserves while I mass my combat power at the time and place of my choosing. I want to avoid the enemy's fixed defenses to defeat the mechanized brigades and focus my decisive action against the reserve armored brigade. Once defeated, I want to rapidly focus on the defeat of his remaining mechanized and reserve units that were fixed by my supporting effort.</p> <p>END STATE: Defeat the enemy's first tactical echelon and have the 102nd Armored Brigade commit to reinforce first tactical echelon. Once committed I want them defeated.</p> <p>CENTER OF GRAVITY: I see the enemy's tactical strength as his mobile reserves. I cannot let the enemy commit these reserves in a decisive manner. I want to exploit my center of gravity—my superior tactical mobility—and combined arms.</p> <p>BATTLESPACE: I see the enemy maximizing the use of obstacles and terrain to fix our forces, then exploit with fires and mobile counterattack forces. Maximize the use of our aviation as well as JFACC assets in our deep operations. I am concerned about enemy units penetrating my eastern flank as well as reinforcing from the north. Ensure that we maximize the use of theater collection assets to identify and monitor these enemy units.</p> <p>GUIDANCE: I want a viable security force covering the eastern flank of my main effort. My sustainment must be task-organized and positioned forward to allow the force to maintain operational momentum. Consider an attack on the flank and an envelopment. I want to use aviation and long-range fires to attack the 102nd Armored Brigade to disrupt its cohesion and reduce its combat power. I want a regimental-size reserve that is capable of defeating the 102nd Armored Brigade.</p>

Figure 1. Example of CBAE and commander's initial guidance.

The commander begins the planning process by issuing his commander's orientation. The commander's orientation includes the CBAE and initial guidance. He draws on his experience to visualize the relationship between friendly forces, enemy forces, and the battlespace. He envisions the interaction of these elements over time and how he will achieve a decision that leads to the desired end state. When the commander issues his intent and planning guidance, he addresses critical enemy units or infrastructure he wants attacked by fires. He may also give guidance on the role of fires in decisive and shaping actions. Figure 1 is an example of some of the elements of CBAE and the commander's initial guidance.

The fire planners in the OPT begin by reviewing and analyzing the higher headquarters orders, guidance and other information to determine the role of fires. They focus their analysis on the higher headquarters concept of fires to determine any fires-related specified or implied tasks or limitations. Figure 2 is an example of some specified and implied fires tasks.

<p>SPECIFIED FIRES TASKS</p> <ul style="list-style-type: none">• Use lethal and non-lethal fires to delay and disrupt the commitment of the 102nd Armored Brigade• Once the 102nd Armored Brigade is committed, use fires to neutralize or destroy its capability.• Once the 102nd Armored Brigade is defeated, use fires to support operations to defeat the remaining mechanized and reserve units. <p>IMPLIED FIRES TASKS</p> <ul style="list-style-type: none">• Use lethal and non-lethal fires to convince the enemy that the supporting effort is the main effort.• Provide fires to security forces employed on the eastern flank.
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Figure 2. Example of specified and implied fires tasks.

As part of the intelligence preparation of the battlespace, the G-2 identifies high-value targets (HVTs)². Fire planners and the target analysis personnel of the G-2 conduct target value analysis to identify HVTs for each enemy COA that is developed by the Red Cell.

The fire planners begin development of the staff estimate for fire support and each of the individual support assets (e.g., artillery, aviation, naval surface fire support, electronic warfare). As the OPT continues through the MCPP, the staff estimate for fire support becomes the basis for the concept of fires. The higher headquarters concept of fires, the target value analysis, and the commander's center of gravity (COG) analysis help frame the fires planner's thinking during mission analysis.

Course of Action Development

The second step in the MCPP is COA development. A COA is a broadly stated potential solution to an assigned mission. During COA development, the OPT will devise concepts of operations and supporting concepts—including fires—to form COAs. The OPT uses the battlefield framework to translate the commander's intent and planning guidance into initial COAs. This step is designed to generate options for follow-on wargaming and comparison that satisfy the mission, intent, and guidance of the commander. See Figure 3 for an example COA graphic.

The fire planners in the OPT determine how fires will support the shaping and decisive actions that make up each COA. They concentrate on the following questions—

- What do we want fires to accomplish?
- How do we want fires to do it?

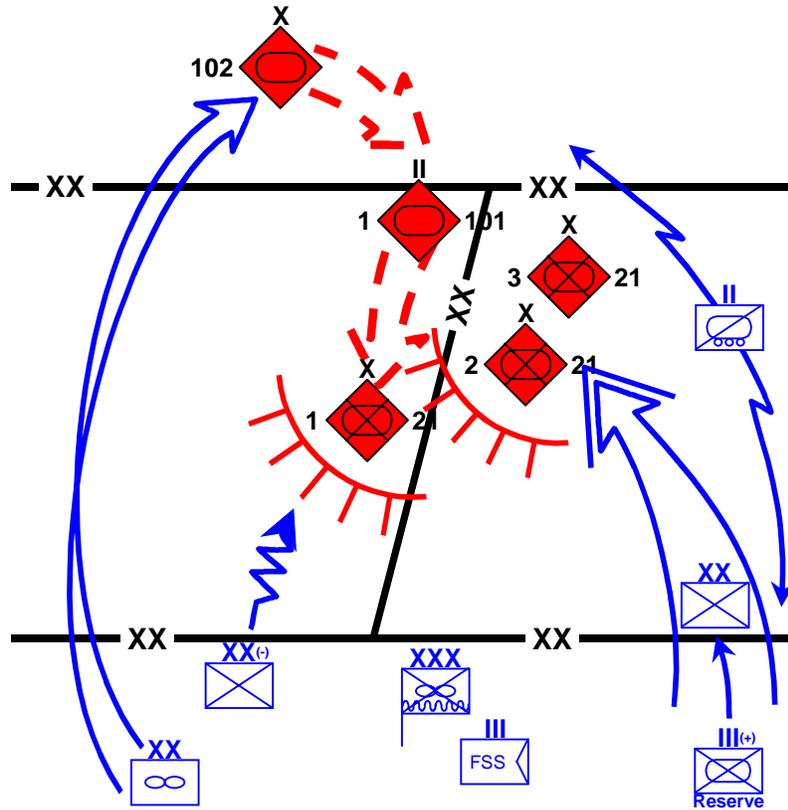


Figure 3. Example course of action graphic.

As a COA is developed, the fire planners in the OPT determine what specific enemy formations or capabilities must be attacked by fires for the commander to be successful. To do this, they analyze the HVTs to determine potential high-payoff targets (HPTs)³. The OPT uses four criteria in screening HVTs to determine if they will become HPTs—

- Can the HVT be acquired?
- Can the HVT be attacked by lethal or nonlethal assets?
- Is the HVT a critical node whose disruption or destruction will immediately degrade the enemy’s ability to command and control or conduct combat operations?
- Is the attack of the HVT by fires necessary for the success of the friendly COA?

If the answer to all of these questions is yes, then that target becomes an HPT. See Figure 4 for an example of a HPT list.

Phase I, Stage A		
PRIORITY	CATEGORY	TARGET
1	Maneuver	T-72 tank platoons, 102 nd Armored Brigade
2	Fire support	Artillery batteries, 102 nd Armored Brigade
3	Command and control	102 nd Armored Brigade command post
4	Engineer	Mobile armored bridge, 102 nd Armored Brigade
5	Class III (POL)	Refueling trucks, 102 nd Armored Brigade

Figure 4. Example of a high-payoff target list.

At the conclusion of COA development the commander selects or modifies the COAs to be wargamed in the next step of the MCPP. He may also provide additional COA and wargaming guidance, and express his desires concerning evaluation criteria.

The Marine Corps Targeting Process

The OPT fire planners use the Marine Corps targeting process of **decide, detect, deliver and assess** (D3A) (see Figure 5) within the MCPP. They use the D3A process to conduct the conceptual planning and make the broad functional decisions necessary to develop a concept of fires. The detailed planning for fires is conducted by those functional agencies tasked with providing or coordinating fires such as the force fires section, force artillery, the Marine aircraft wing, and radio battalion.

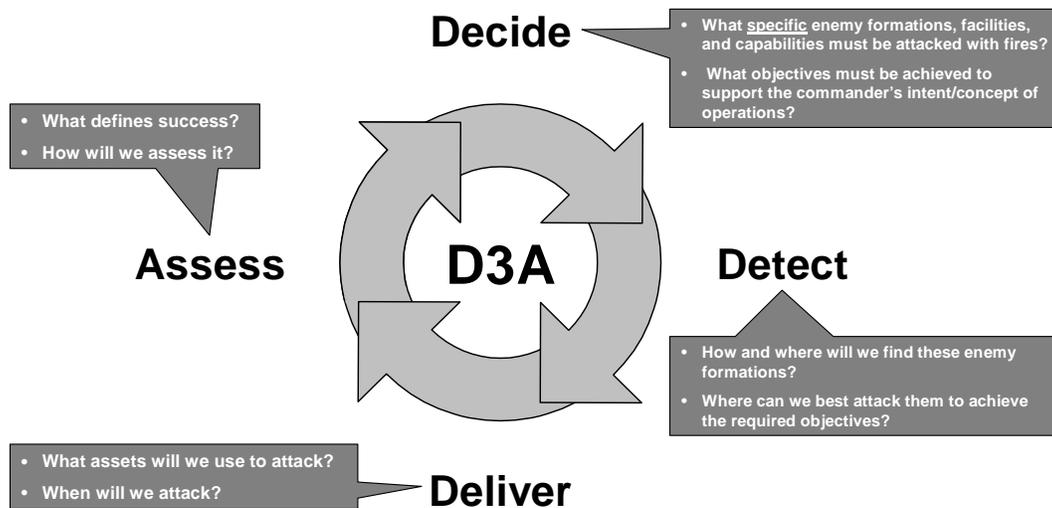


Figure 5. The Marine Corps targeting process.

In the **decide** step of D3A, the OPT fire planners identify the targeting objectives which translate to the desired effects of fires against specific enemy formations and functions. Targeting objectives include disrupt, delay, limit and divert. A technique for articulating targeting objectives is to express them in terms of the desired objective, enemy unit/formation to be attacked, the attacked unit/formation's function to be attacked, and the friendly formation that will benefit from the desired fires effects (i.e., the purpose). Because targeting objectives have level of effort and resourcing considerations, it is important that the OPT fire planners use proper terminology to determine targeting objectives. The following definitions are from Marine Corps Reference Publication 3-16A, *Tactics, Techniques, and Procedures for Targeting*:

- **Disrupt.** Prevent the effective interaction or cohesion of enemy combat power and combat support systems. *“Disrupt the 302nd Artillery Battalion’s ability to mass fires above the battery level on Assembly Area Tiger from H-hour to H+6 in order to allow 1st Marine Division (-) to maintain freedom of maneuver.”*
- **Delay.** Alter the time of arrival of forces at a point on the battlefield or the ability of the enemy to project combat power from a point on the battlefield. *“Delay 102nd Armored Brigade’s reinforcement of the first echelon of the enemy’s division in the vicinity of Objective Eagle from H-Hour to H+5 in order to allow the 2nd Marine Division to defeat the 2-21st and 3-21st Mechanized Infantry Brigades.”*
- **Limit.** Reduce the options or COAs available to the enemy. *“Limit the 2-21st Mechanized Brigade from moving to the west along Highway 14 from H-3 to H+3 to reinforce the 1-21st Mechanized Infantry Brigade in order to protect our supporting attack and cause the commitment of the of the 1-101st Armored Battalion.”*

- **Divert.** Tie up critical enemy resources. Attack of selected targets may cause the enemy commander to divert capabilities or assets from one area or activity to another. Diversion reduces the capability of the enemy commander to pursue his plan. *“As part of the deception plan, divert the 1-101st Tank Battalion from supporting the 2-21st and 3-21st Mechanized Infantry Brigades in order to allow our main effort to mass combat power.”*

It is important that the OPT fire planners not confuse targeting objectives with the terms suppress, neutralize or destroy which describe the intensity of fires required to achieve the targeting objectives of disrupt, delay, limit or divert. For example, if the commander tasks the aviation combat element (ACE) with delaying a specific unit from crossing a river, the ACE planners may determine that to achieve this targeting objective they need to suppress that unit’s air defenses and destroy its bridging assets.

Once the OPT fire planners had decided what enemy formations or functions to attack by fires, the OPT coordinates with the G-2 to develop a collection plan to **detect** HPTs. The collection plan should address questions such as: Where do the fire planners and the G-2 anticipate finding these HPTs on the battlefield? Who or what asset is best suited to acquire them? When should they be looking for these HPTs?

While the current operations section—the executors—have the lead in the **deliver** step, the OPT fire planners follow the execution of the plan. If changes are necessary they recommend to the commander when, and with what fire support assets the targets should be attacked.

Determining when to attack involves synchronization. When does the OPT fire planners anticipate acquiring the HPTs on the battlefield? When would their attack by fires best support the commander’s concept of operations? The OPT fire planners make an initial determination of when to attack HPTs by fires in COA development, but may refine the timing of the attack as their situational awareness increases or there are battlefield changes.

The final step in D3A is **assess**. The OPT fire planners must define the criteria for success for each targeting objective. Measures of effectiveness (MOE) linked to the targeting objective support assessment efforts. For instance, if the targeting objective was to delay a specific unit for six hours, one MOE might be that unit’s rate of movement. Combined with other information and military judgment, MOEs allow the OPT fire planners and executors to make assessments and determine reattack criteria.

Conclusion

To be successful, fires planning must be integrated with the planning of all aspects of the commander’s concept of operations. The OPT is the vehicle used to conduct this integrated planning, and the OPT employs to the MCPP to achieve integration. The fire planners work with the rest of the OPT in using the D3A targeting process within the framework of MCPP. This ensures that fires are synchronized—arranged in time, space and purpose to maximize combat power—with the other warfighting functions, and that fires best support the commander’s concept of operations.

¹ Fires are the employment of firepower against air, ground, and sea targets. Fires delay, disrupt, degrade, or destroy enemy capabilities, forces, or facilities, as well as affect the enemy’s will to fight. It includes the collective and coordinated use of target acquisition systems, direct and indirect fire weapons, armed aircraft of all types, and other lethal and nonlethal means, such as electronic warfare and physical destruction. Fires are normally used in concert with maneuver and help to shape the battlespace, setting conditions for decisive action.

² Those assets that the *enemy commander* requires for successful completion of his mission.

³ High-payoff targets are high-value targets that must be acquired and successfully attacked to achieve the *friendly commander’s* mission.