

COORDINATING DRAFT TO Change 1 to FM 7-10

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Troop Leading Procedures

The Troop Leading Procedures (TLPs) are a sequence of actions that enable company commanders to use available time effectively and efficiently in the preparation and execution of combat missions. Collectively, they are a tool to assist the company commander in making, issuing, and supervising operations orders. They are consistent with the Military Decision Making Process (MDMP) described in FM 101-5 Staff Organizations and Operations, though they are not identical. This is because the specific steps of the MDMP (especially the internal steps of Step 2 Mission Analysis) are designed and intended to help coordinate staff and commander responsibilities of units with staffs. While company commanders have subordinate leaders who assist them with aspects of planning operations, these leaders are not company staff officers. This fact places the burden of planning at the company level primarily on the shoulders of the company commander. The TLP reflect this reality while incorporating the spirit, language, and general process of the MDMP to assist the company commander in the preparation of company operations orders.

The TLP are not a hard and fast set of rules. Rather, they provide a guide that the commander applies consistent with the situation, his experience, and the experience of his subordinate leaders. The tasks involved in some steps (such as Initiate Movement, Issue the Warning Order, and Conduct Reconnaissance) may recur several times during the process. The last step, the activities of supervising and refining the plan, occur throughout the Troop Leading Process. In some situations, time constraints or other factors may prevent leaders from conducting steps as thoroughly as they would like, or from conducting certain steps at all.

The following discussion of the TLP assumes that company commanders will plan in a time-constrained environment. As such, the suggested techniques are oriented to help a company commander quickly develop and issue a combat order.

Step 1, Receive the mission. As the title indicates, this step addresses the actions a company commander takes as he "receives" his mission. Receiving the mission may come about in one of several ways. It may begin with the receipt of an initial Warning Order from the battalion headquarters, or it may not begin until the company

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commander actually receives the battalion's OPORD (which would be the case if the battalion did not use Warning Orders prior to issuing the OPORD). Or, in the most challenging situation, it may come about as a result of a change in the overall situation during the execution of an OPORD.

For example, after crossing the Line of Departure in an attack, the company commander recognizes that his existing mission is no longer appropriate to the new situation his unit faces. The enemy is now attacking him rather than remaining on the defense, which was the most likely enemy course of action. He recognizes the mission he received must be changed due to a radically new situation. Similarly, during a defense, a company commander anticipates that he is about to be given new instructions after listening to the situation on the battalion command net and learning that the attacking enemy has penetrated the battalion's sector.

Besides receiving (or deducing) his mission during the first step of the TLP, the commander must also assess the time he has available to prepare and execute the mission. As a result of his time assessment, he will prepare an initial time line for planning and execution.

Although the focus of the first step of the TLP is on determining the company mission and assessing the time available to accomplish the mission, this step also begins an activity called *Mission Analysis*. For the company commander, Mission Analysis is not as complex or as involved as it is at higher levels of command. The company commander's Mission Analysis is essentially analyzing the mission, enemy, time, terrain, and troops available (METT-T).

The first step of the TLP is intended to get the planning and preparation process quickly underway. It should enable the company commander to prepare a Warning Order as rapidly as possible. Consequently, the company commander must not become caught up in a detailed METT-T analysis at the expense of quickly getting a Warning Order to his subordinates. The company commander will normally conduct a more detailed and thorough Mission Analysis after he has issued the initial company Warning Order.

Step 2, Issue a Warning Order. After the company commander has determined his unit's mission and assessed the time available for planning and execution of the mission, he should try to immediately issue a Warning Order to his subordinates. In addition to telling his subordinates of

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the company's new mission, the Warning Order also gives them the commander's planning timeline. The company commander may also pass on any other instructions or information that he thinks will assist them in preparing for the new mission. This includes any information on the enemy and the nature of the battalion overall plan and any specific instructions for preparing their platoons for the mission. The most important thing is for the company commander not to waste any time in issuing the initial Warning Order. If and when more information becomes available, the commander can—and should—issue additional Warning Orders. By issuing the initial Warning Order as quickly as possible, the company commander enables his subordinates to begin their own planning and preparation (parallel planning) while he begins to develop the company operation order.

Step 3, Make a tentative plan. After receiving the battalion operation order (or FRAGO), the company commander develops a tentative plan. There are five steps to developing the plan:

- Mission Analysis
- Course of Action Development
- Analysis of Courses of Action
- Comparison of Courses of Action
- Course of Action Selection/Decision.

MISSION ANALYSIS.

This step requires the commander to complete his Mission Analysis (analysis of METT-T) started with Receipt of Mission. He does this in as much depth as time and quality of information allows. Although Mission Analysis is classified as a specific step in the development of a tentative plan, analyzing the factors of METT-T is a continuous process that never really ends. Even after the plan is being executed, the commander is still conducting Mission Analysis. This is because the commander constantly receives information from the time he begins planning through execution. He must assess if the new information affects his mission and his plan. If it does, he then must decide how to adjust his plan to meet this new situation.

The company commander doesn't have to analyze the METT-T factors in any set order or sequence. How and when the commander analyzes each factor depends on when information is made available to him, and his own

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experience and preference. One technique is to parallel the Troop Leading Procedures and the Intelligence Preparation of the Battlefield (IPB) process. Using this technique, one analyzes Time first, Mission second, then terrain & weather, then enemy, and finally troops available, or TMTE-T.

Regardless of the sequence, the commander's analysis must reach significant conclusions about how each factor could affect mission accomplishment. The most important conclusions are captured in an initial commander's intent for the mission, the identification of a potential decisive point (or points), a mission statement, and the commander's initial risk assessment. The following technique offers a way to analyze thoroughly and systematically the factors of METT-T.

Analysis of Mission. Leaders at every echelon must have a clear understanding of the intent and concept of operation of the commanders one and two levels higher. Without this, it is nearly impossible to exercise responsible initiative. Once the company commander understands the operation at the battalion and brigade levels, the company commander can place the company's mission in perspective with relation to the overall plan. He captures his understanding of what his unit must accomplish in a Restated Mission. The following steps help the company commander prepare a Restated Mission:

- Understand the purpose of the company's mission. It is critical for the company commander to understand why the battalion commander gave his unit its task or tasks and how his unit fits into the battalion's concept of the operation. The company commander must understand how his company's purpose relates to the purposes of the other companies within the battalion. (NOTE: The purpose of the main effort company usually matches the purpose of the battalion. Similarly, supporting effort companies' purposes must relate directly or indirectly to the purpose of the main effort company). The commander must also understand how the battalion fits into the brigade concept of operation and to understand the purpose of the battalion's mission within the brigade plan.
- Identify and understand specified tasks. The company commander must identify and understand the tasks the OPORD directly tells his company to accomplish (e.g., "seize OBJ FOX," "reconnoiter

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route BLUE," "assist the forward passage of B company," "send two soldiers to assist in the loading of ammunition.").

- Identify implied tasks. After receiving the OPORD, the company commander must also identify tasks, though not stated in the OPORD, that his company must execute to successfully accomplish specified tasks. During execution, on the other hand, the commander must be aware that a change in the situation may require new tasks that must be accomplished to remain consistent with the original purpose and intent of the battalion commander
- Determine essential tasks. The company commander must identify those specified tasks from the OPORD that his unit must accomplish for the battalion to be successful in achieving its concept of operation and mission. For example, in the battalion OPORD, a specified task may be for B Company to occupy an assembly area by a certain time. Additionally, the OPORD directs B Company, after departing from its assembly area, to seize a piece of key terrain to secure the battalion main effort's movement to an assault position. The first task, although specified, is not necessarily an essential task. The success of the battalion and its main effort may not depend on B Company's occupation of an assembly area (it may merely be a way to help control movement within the battalion). B Company's securing key terrain may be a key task or a key condition for the battalion's overall plan as it directly affects the battalion main effort's success. Likewise, if during execution, an unanticipated situation arises, the company commander must determine if the new situation has generated tasks that must be accomplished to comply with the battalion commander's intent or to ensure the company's or battalion's mission success.
- Understand constraints. The commander must understand the constraints the OPORD places on his unit's ability to execute its mission. There are two types of constraints, those that require action (e.g. "maintain a platoon in reserve"), and those that prohibit action (e.g. "do not cross Phase Line BULL until authorized.").

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- Prepare the company's mission statement. The commander prepares his mission statement expressed around the five "W"s: The who, what, when, where, and why. The *Who* (the company), the *When* (taken from the OPORD), and the *Where* (Objective area or defense location, taken from the OPORD) are rather obvious. The *What* is the mission essential tactical task. (It's customarily expressed along with the type of operation the unit is to conduct.) The *Why* is the rationale (purpose) for the task taken from the Concept of Operations portion of Paragraph Three of the higher commander's OPORD. For example: A Company attacks in zone at 012000 October XX to seize OBJ FOX (NB123456) in order to prevent enemy forces from counterattacking into the battalion's main effort.

Enemy analysis. (Note: In analyzing the enemy, the company commander must understand the Intelligence Preparation of the Battlefield--IPB. This is not because he will prepare IPB products for his subordinates but because it enables him to effectively use the battalion's IPB.) The following discussion examines areas the commander should consider as he analyzes the enemy. The critical outcome of this step is for the company commander to identify the enemy's strengths and potential weaknesses or vulnerabilities so that he might exploit them to generate overwhelming combat power in achieving his mission. To achieve this end, the company commander must know how the enemy may fight (given his doctrine) and the ground where the fighting will take place. It is equally important the company commander understands what is actually known of the enemy as opposed to what is only assumed or templated. Without this appreciation, it is possible to develop a plan that is based solely on assumptions, which is obviously a foolish thing to do. It is also essential that the company commander remember that he is the company's S2. As such, he must understand the assumptions the battalion S2 used to portray the enemy's courses of action covered in the battalion's plan. Furthermore, the company commander's own assumptions about the enemy must be consistent with those of the battalion commander.

- Doctrinal analysis.⁷ It is not enough simply to know the number and types of vehicles, soldiers, and weapons the enemy has. The company commander must

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thoroughly understand when, where, and how the enemy prefers or tends to use the assets he possesses. A *doctrinal template* is a visual illustration of how the enemy force might look and act *without* the effects of weather and terrain. The company commander looks at specific enemy actions during a given operation (such as defense out of contact, security zone defense, or movement to contact) and uses the appropriate doctrinal template to gain insights into how the enemy may fight. Likewise, he must understand enemy doctrinal objectives. In doctrinal terms, the company commander asks: Is the enemy oriented on the terrain (for example, a forward detachment), on his own force (such as an advance guard), or on friendly forces (as in a security zone)? What effect will this have on the way the enemy fights?

- Composition (order of battle). The company commander's analysis must determine the number and types of vehicles, soldiers, and equipment the enemy could use against his company. His analysis must also examine how the enemy organizes for combat, to include the possible use of a reserve. He also analyzes what CS and CSS assets the enemy has to support him.
- Capabilities. Based on the S2's assessment and the enemy's doctrine and current location, the company commander must determine what the enemy is capable of doing against his company during the mission. In short, the company commander must have a clear understanding of what the enemy could do against him. Will the enemy defend, or withdraw, or attack? Such an analysis also includes studying the planning ranges for each enemy weapon system and the enemy's doctrinal march rates and associated timelines to accomplish certain offensive actions or missions.
- Anticipated enemy COAs. To identify potential enemy COAs, the commander weighs the result of his initial analysis of terrain and weather against the enemy's composition, capabilities, and doctrinal objectives. The end product is a company Situational Template (SITTEMP); a visual/graphic depiction of how he believes the enemy will fight under the specific conditions expected on the battlefield. The

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battalion S2 develops event and situational templates to support the enemy COA briefed at the battalion OPORD. Using the battalion's SITTEMP, the company commander prepares his own SITTEMP to array the specific enemy force the company anticipates fighting. The company's SITTEMP is portrayed one echelon lower than that developed by the battalion S2. For example, if the battalion SITTEMP identifies a Motorized Infantry Platoon (MIP) on the company's objective, the company commander, using his knowledge of the both the enemy's doctrine and terrain, develops a SITTEMP that positions individual vehicles from the MIP and possibly individual infantry fighting positions or trenches in the MIP's defense. Included in this SITTEMP are the likely range fan of the enemy's weapons and any tactical and protective obstacles, either identified or merely templated that support the defense. It is important to remember that the company commander must not develop the company SITTEMP independently of the S2's product. If there are differences between the company and battalion SITTEMP, the company commander must resolve them before continuing with his analysis of the enemy. Finally, given the scale of a 1/50,000 map with which the company commander is often forced to develop his SITTEMP, it is advisable to transfer the SITTEMP to a large scale sketch for briefing purposes. This is not for analysis, but to enable subordinates to see the details of the anticipated enemy COA. Once the company commander briefs the enemy analysis to his subordinates, he must ensure they understand what is known, what is suspected, and what is merely templated (a guess). Unless given the benefit of reconnaissance or other intelligence, the company commander's SITTEMP is an "educated guess" of what the enemy may dispose his unit. He must not take these as facts.

- Factors influencing enemy COAs. In conjunction with the SITTEMP he has already developed, the company commander looks at the factors of METT-T from an enemy perspective to develop the details of various possible enemy COAs. The following points can assist in this process:

Mission. Based on threat doctrine and knowledge of the situation, as well as the enemy's capabilities,

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the company commander determines what the enemy's likely mission might be. He can do this by trying to answer some basic questions: Why is the enemy conducting this operation? What are his likely tasks or objectives? Is he trying to protect another threat unit, deceive friendly forces, allow another unit to bypass them, or prevent them from seizing terrain? Is the operation oriented on the terrain, on the enemy force, or on friendly forces? Specifically, what key terrain, enemy force, or friendly element is involved? How will this affect how the enemy attacks or defends?

Objectives. Based on the SITTEMP and the projected mission, the commander must identify the enemy's march objectives (offense) or the terrain or force he intends to protect (defense).

Terrain and weather. Typical questions concerning terrain and weather might be the following: If the enemy is attacking, which avenues will he use to reach his objectives in executing his COAs? How will terrain affect his speed and formations? How will he use key terrain and locations with clear observation and fields of fire? Which avenues of approach should friendly forces deny him or divert him from? If the enemy is in the defense, which avenues provide the most direct or fastest access to the terrain the enemy is defending or to the enemy force itself? How will these affects positioning of the enemy's forces? From the enemy perspective, what is the most dangerous approach for friendly units? Does the weather aid or hinder the enemy in accomplishing his mission? Does the weather degrade the enemy's weapons or equipment effectiveness?

Enemy obstacles. Enemy obstacles give the company commander insights into how the enemy is trying to accomplish his mission. When linked to key terrain over watching the obstacles, the company commander can assess if the obstacles are tactical or protective and, consequently, how the enemy might sight units and weapons to secure them.

Terrain and weather analysis.

Terrain Analysis. If the battalion has developed a Modified Combined Obstacle Overlay (MCOO), the company commander can quickly accomplish his analysis of the

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terrain. From the MCOO, the company commander will already have an appreciation for the general nature of the ground and the affects of weather. Despite this, the company commander must conduct his own detailed analysis of the ground to determine how the ground will uniquely affect his unit and the enemy he anticipates having to fight.

It is vitally important that the company commander gain a genuine "feel" for the ground before attempting to develop either enemy or friendly COAs. He must go beyond merely making observations of the ground (this is high ground, this is an avenue of approach). He must arrive at significant conclusions about how the ground will affect the enemy and his unit.

Because of limited planning time, the company commander normally prioritizes his terrain analysis. For example, in the conduct of an assault, his priority may be the area around the objective, followed by analysis of the company's specific axis leading to the objective. Time permitting; he might then analyze the rest of the battalion area of operations.

Also, given the relatively small area that the company will actually occupy and fight on, coupled with the small scale of 1/50,000 maps, the company commander does not prepare a company level MCOO. Rather, he prepares some sort of visual aide to depict and explain the results of his analysis for his subordinates so that they can understand the effects the terrain will have on the operation.

Traditionally, the military aspects of terrain are used to analyze the ground. They are:

- Observation and Fields of Fire
- Cover and Concealment
- Obstacles.
- Key Terrain.
- Avenues of Approach

(Note: The sequence that the commander uses to analyze the military aspects of terrain can vary. One may prefer to determine Obstacles first, Avenues of Approach second, Key terrain third, Observation and Fields of Fire fourth, and Cover and Concealment last.)

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Observation and Fields of Fire

The commander must identify locations along each avenue of approach that provide clear observation and fields of fire for both the attacker and the defender. He analyzes the area surrounding key terrain, objectives, and obstacles. He locates inter-visibility lines (terrain that inhibits observation from one point to another) and assesses the ability of the attacking force to over watch or support (with direct fire) movement. In analyzing fields of fire, the commander focuses on both the friendly and enemy potential to cover terrain (especially avenues of approach and key terrain) with direct fires. Additionally, he must identify positions that enable artillery observers to call indirect fire. Whenever possible, the commander conducts a reconnaissance of the ground from both the enemy and friendly perspectives. This helps him see the ground in a more objective manner and to see how the ground affects both the enemy and friendly forces.

Offensive considerations

- Is clear observation and fields of fire available on or near the objective for enemy observers and weapon systems?
- Where can the enemy concentrate fires?
- Where will the enemy be unable to concentrate fires?
- Where is he vulnerable?
- Where are positions from which friendly forces can conduct support by fire or attack by fire?
- Where are the natural Target Reference Points (TRPs)?
- Where do I position indirect fire observers?

Defensive considerations

- What locations afford clear observation and fields of fire along enemy avenues of approach?
 - How obvious are these positions to the enemy?
 - Where will the enemy set firing lines and/or antitank weapons?
 - Where will I be unable to mass fires?
 - Where is the dead space in my sector? Where am I vulnerable?
 - Where are the natural TRPs?
 - Where do I position indirect fire observers?

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Cover and concealment

The commander looks at the terrain, foliage, structures, and other features on the avenues of approach to identify sites that offer cover (protection from fire) and concealment (protection from observation). In the defense, weapon positions must be both lethal and survivable, with effective cover and concealment being just as vital as clear fields of fire.

Offensive considerations

- What axes afford both clear fields of fire and effective cover and concealment?
- Which terrain provides bounding elements with cover and concealment while facilitating lethality?

Defensive considerations

- What locations afford effective cover and concealment as well as clear fields of fire?
- How can friendly and enemy forces use the available cover and concealment?

Obstacles

In analyzing the terrain, the commander first identifies existing and reinforcing obstacles that may limit mobility (affecting such features as objectives, avenues of approach, and mobility corridors) and affect the company's counter-mobility effort.

Existing obstacles include, but are not limited to the following:

- Gullies, ravines, gaps, and ditches over 3 meters wide.
- Tree stumps and large rocks over 18 inches high.
- Forests or jungle with trees 8 inches or more in diameter and with less than 4 meters of space between trees.
- Man-made existing obstacles, including built-up areas such as towns, cities, or railroad embankments.

Reinforcing obstacles include, but are not limited to the following:

- Minefields (conventional and situational).

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- Antitank ditches.
- Road craters.
- Abatis and log cribs.
- Wire obstacles.
- Infantry strongpoints.

Terrain is further classified in one of the following categories:

- Unrestricted. This is terrain free of any restrictions to movement; no actions are required to enhance mobility. For armored and mechanized forces, unrestricted terrain is typically flat or moderately sloped, with scattered or widely spaced obstacles such as trees or rocks. This type of terrain generally allows wide maneuver and offers unlimited travel over well-developed road networks. For light infantry, it is the ability to move with little hindrance.
- Restricted. This terrain hinders movement to some degree. Little effort is needed to enhance mobility, but units may have to zigzag or make frequent detours. They may have difficulty maintaining optimum speed, moving in some types of combat formations, or transitioning from one formation to another. For armor and mechanized forces, restricted terrain typically encompasses moderate to steep slopes and/or moderate to dense spacing of obstacles such as trees, rocks, or buildings. Swamps and rugged ground are examples of restricted terrain for Infantry forces. Poorly developed road systems may hamper logistical or rear area movement.
- Severely restricted. This terrain severely hinders or slows movement in combat formations unless some effort is made to enhance mobility. It may require commitment of engineer forces to improve mobility or deviation from doctrinal tactics, such as using a column rather than a line formation or moving at speeds much slower than otherwise preferred. For armor and mechanized forces, steep slopes, densely spaced obstacles, and/or the virtual absence of a developed road system typically characterize severely restricted terrain.

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Offensive considerations

- How is the enemy using obstacles and restricted terrain features?
- What is the composition of the enemy's reinforcing obstacles?
- How will obstacles and terrain affect my movement and/or maneuver?
- If necessary, how can the company avoid such features?
- How do we detect and, if desired, bypass the obstacles?
- Where has the enemy positioned weapons to cover the obstacles, and what type of weapons is he using?
- If I must support or execute a breach, where is the expected breach site?

Defensive considerations

- Where do I want to kill the enemy? Where do I want him to go?
- How will existing obstacles and restricted terrain affect the enemy?
- How can I use these features to force the enemy into my engagement area, deny him an avenue, or disrupt his movement?

Key terrain

Key terrain is any location or area which the seizure, retention, or control of affords a marked advantage to either combatant. It is a conclusion rather than an observation. As an example, a prominent hilltop overlooking an avenue of approach may or may not be key terrain. Even if the hill offers clear observation and fields of fire, it will be of no marked advantage to the unit that controls it if the opposition can easily bypass it on another avenue of approach. On the other hand, if the hilltop affords cover and concealment, observation, and good fields of fire on multiple avenues of approach or the only avenue of approach in the area, the terrain offers a definite advantage to whoever controls it. Furthermore, an area where several trails converge may be key terrain for a company, whereas an area in which several battalion-size avenues of approach join may prove key for a brigade. The company commander must assess what terrain is key to his mission accomplishment. An example of key terrain for a company in the attack could be a small hill or tree line that overlooks the enemy's reverse slope defense.

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Controlling this area may be critical in establishing a support by fire position to protect the breach force.

The company commander must also determine if any ground is decisive terrain. This is key terrain which the seizure, retention, or control of is necessary for mission accomplishment. Decisive terrain will not be present in every situation. By determining terrain as decisive, the commander recognizes that seizing and/or retaining it is an absolute requirement for successful accomplishment of the mission.

Operational considerations

- What terrain is key to the company and to the battalion and why?
- Is the enemy controlling this key terrain?
- What terrain is key to the enemy and why?
- How do I gain or maintain control of key terrain?
- What terrain is key for friendly observation, both for command and control and for calling for fires?

Avenues of approach

By definition, an avenue of approach is an air or ground route of an attacking force of a given size leading to its objective or key terrain. As a result, the size unit classifies avenues of approach that can best employ them. The battalion staff identifies avenues of approach that affect the battalion's battle space by first analyzing mobility corridors.

Mobility corridors are areas where a force will be canalized due to terrain constrictions. They are areas that are relatively free of obstacles, allowing units to move with speed and mass.

The company commander must assess the ground's potential to support movement and maneuver for both the enemy and his own unit. Further, he must identify mounted, dismounted, and air avenues of approach within his area of operations. He must determine how the ground supports or hinders both mounted forces and dismounted forces.

After identifying avenues of approach, the commander must evaluate each avenue. He determines the size and/or type of force that could use the avenue and evaluates the terrain that the avenue traverses as well as the terrain that bounds or otherwise influences it.

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Offensive considerations

- How can I use each avenue of approach to support my movement and/or maneuver?
- How will each avenue support movement techniques, formations, and (once we make enemy contact) maneuver?
- Will variations in trafficability or lane width force changes in formations or movement techniques or require clearance of restricted terrain?
- What are the advantages and/or disadvantages of each avenue?
- What are the enemy's likely counterattack routes?
- Do lateral routes exist that we can use to shift to other axes or that the enemy can use to threaten our flanks?

How will each avenue of approach affect the rate of movement of each type of force?

Defensive considerations

- What are all likely enemy avenues into my sector?
- How can the enemy use each avenue of approach?
- Do lateral routes exist that the enemy can use to threaten our flanks?
- What avenues would support a friendly counterattack or repositioning of forces?

Weather analysis. Consideration of the effects of weather conditions is an essential part of Mission Analysis. The commander reviews the results of his terrain analysis and determines the impact of the following factors on terrain, personnel, and equipment and on the projected friendly and enemy COAs.

Light data

At what times are Beginning Morning Nautical Twilight (BMNT) or Beginning Morning Civil Twilight (BMCT), sunrise, sunset, End of Evening Nautical Twilight (EENT) or End of Evening Civil Twilight (EECT), moonrise, and moonset? Is the sun to the back of friendly forces or the enemy? What effect will this have on either force's ability to see? Will friendly forces have to rely on Night Observation Devices? If so, when? What effect will long periods of darkness (such as during winter nights) have on soldiers' ability to stay awake and alert? How will this affect my soldier's ability to effectively report information, coordinate, move, and place fire on the enemy, and how will

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this affect the enemy? How will this affect my ability to control forces? What will be the effects on friendly and enemy movement formations and techniques? What will be the effects on friendly and enemy target acquisition capabilities?

Precipitation

How will precipitation affect the terrain along each avenue of approach? Will some restricted terrain become severely restricted if it rains or snows? Will moist air cause foggy conditions? Will lack of precipitation cause extremely dusty conditions? How will fog, dust, or stormy conditions affect visibility? What will be the effects on friendly and enemy troops and equipment?

Temperature.

What will the temperature be during the operation, and what effect will this have on soldiers and equipment? Will either force be able to sustain a long fight in extreme conditions? Will the ground freeze or thaw during the operation? What effect will this have on trafficability? How will extreme heat or cold affect the optical images in the sights? Will changes in the temperature and barometric pressure require MRS updates on the tanks if they are part of my task organization? How often? Are temperature dispersions favorable for the use of smoke or chemicals? Does the air temperature have a significant impact on the employment of aviation assets?

Wind speed and direction.

What is the expected wind speed and direction during operation? What effect will wind conditions have on use of smoke, flares, or chemical agents? Will the wind affect dust, fog, and other battlefield conditions? Will wind have significant effects on the ballistics of relevant weapons systems? Will wind affect either forces ability to use aviation assets?

Visibility.

How will weather conditions (including light conditions, precipitation, temperature, and wind speed and direction) affect visibility? Will friendly forces have the sun in their eyes? Will the wind blow dust or smoke

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away from the route of march (making it easier to see) or back toward friendly forces? Under such conditions, what is the maximum observation range? How will that range affect the enemy and my own forces?

Troop analysis. Perhaps the most critical aspect of Mission Analysis is determining the combat power potential of one's force. The commander must realistically and unemotionally determine what tasks his soldiers are capable of performing. This includes troops who are either attached to or in direct support of his unit. The company commander must know the status of his soldiers' morale, their experience, training, and the strength and weaknesses of subordinate leaders. The assessment includes knowing the strength and status of his soldiers and their equipment. It also includes understanding the full array of assets that are in support of the company. He must know, for example, how much indirect fire is available and when is it available.

Time analysis. As addressed in the first step of the TLP, time analysis is a critical aspect to planning, preparation and execution. The company commander must not only appreciate how much time is available, he must also be able to appreciate the time-space aspects of preparing, moving, fighting, and sustaining. He must be able to see his own tasks and enemy actions in relation to time. For example, he must be able to assess the impact of limited visibility conditions on the troop leading procedures. He must know how long it takes to prepare for certain tasks--such as order preparation and rehearsals and back briefs--and other time-sensitive preparations for subordinate elements under such conditions. He must understand how long it takes to deploy a support by fire element and determine the amount of ammunition that is needed to sustain the support for a specific period of time. He must know how long it takes to assemble a bangalore torpedo and to breach a wire obstacle. Most importantly, as events occur, the company commander must adjust his appreciation of time available to him and assess its impact on what he wants to accomplish. Finally, he must update previous timelines for his subordinates, listing all events that affect the company and subordinate elements.

Summary of Mission Analysis. The end result of Mission Analysis is the development of a number of insights and conclusions regarding how the factors of METT-T affect

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accomplishment of the company's mission. From these insights and conclusions, the company commander will derive a restated mission, initial commander's intent, an initial risk assessment, and a tentative decisive point. He will utilize these to develop courses of action, which are possible ways to accomplish his mission.

Commander's Intent: The commander's intent is a clear, concise statement of what the force must do to succeed with respect to the enemy and the terrain and to the desired endstate. It provides the link between the mission and the concept of operations by stating the key tasks that, along with the mission, are the basis for subordinates to exercise initiative when unanticipated opportunities arise or when the original concept of operation no longer applies. Key tasks are those that must be performed by the unit, or conditions that must be met, to achieve the stated purpose of the operation. They are not limited to "tactical tasks." Key tasks are not tied to a specific course of action. The operation's tempo, duration, and effect on the enemy, and terrain that must be controlled are examples of key tasks. The commander's intent does not include the "method" by which the force will get from its current state to the end state. The method is the concept of operations. The intent does not contain "acceptable risk." Risk is addressed in courses of action. An **example** of key tasks related to enemy, terrain, and desired endstate follows:

In relation to:

Enemy:

- a. All enemy forces on OBJ Atlanta destroyed
- b. Enemy forces fixed in EA DOG
- c. Enemy reconnaissance forces destroyed prior to reaching PL DOG
- d. Enemy unable to mass greater than 2 platoons against TF ME

Terrain:

- a. Company controls west side of Bush Hill NLT 231000 May XX
- b. Company clears OBJ DOG
- c. Major chokepoints along RTE BLUE cleared on obstacles and enemy forces
- d. Company reaches PL DOG NLT 210600 XX

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Desired Endstate:

- a. Company in defensive posture NLT 121400XX, able to destroy enemy counterattack along AA Red
- b. 52ID(M) passed through CP 2 without significant delay

An example of a completed Commander's Intent follows:

Commander's intent:

- all enemy forces on OBJ Atlanta destroyed, company controls west side of Bush Hill, company is in defensive posture NLT 121400XX able to defeat enemy CATK along AA Red, 52nd ID(M) passed through CP 2 without significant delay.

Risk Assessment: Risk assessment is the identification and assessment of hazards that allows a commander to implement measures to control hazards. Identification and assessment are the first two steps of the risk management process. Risk management is conducted to protect the force and increase the chance of mission accomplishment. The commander must consider two kinds of risk: tactical and accident. Tactical risk is associated with hazards that exist due to the presence of the enemy on the battlefield, and the consequences take two major forms: (1) enemy action in an area where the commander has accepted risk (such as an enemy attack where the friendly commander has chosen to conduct economy of force operations) and (2) lost opportunity (such as moving across restricted terrain and then being unable to mass effects of combat power because of inability to rapidly traverse the terrain). Accident risk includes all operational risk considerations other than tactical risk, and can include activities associated with hazards concerning friendly personnel, equipment readiness, and environmental considerations. Fratricide and being unable to complete a planned air movement because of weather conditions are two examples of accident risk. The commander must identify risks based on the results of his Mission Analysis, decide which risks he is willing to accept, and incorporate measures into his Courses of Action that will abolish or mitigate the consequences of the identified risks.

COURSE OF ACTION (COA) DEVELOPMENT

The purpose of COA development is to determine one or more ways to accomplish the mission that is consistent with the battalion commander's intent. A course of action

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describes how the company might generate the effects of overwhelming combat power against the enemy at the decisive place and time with the least friendly casualties. Each COA the company commander develops must be detailed enough to describe clearly how he envisions using his forces to achieve the unit's mission essential task(s) and purpose.

To develop a COA, the company commander focuses on the actions the unit must take at the decisive point and works backward to his start point. Time permitting; the commander should develop several COAs. A legitimate COA must be

- **Suitable.** If successfully executed, the COA will accomplish the mission consistent with the battalion commander's concept and intent.
- **Feasible.** A feasible COA means the company has the technical and tactical skill and resources to successfully accomplish the COA.
- **Acceptable.** The COA minimizes friendly casualties.
- **Distinguishable.** Each COA must be sufficiently different from the others to justify full development and consideration.
- **Complete.** The COA must cover the operational factors of **who, what, when, where, and how**, and address the mission from its start point to its conclusion. The COA must also address the doctrinal aspects of the mission. For example, in the attack against a defending enemy, the COA must address the movement to, deployment against, assault of, and consolidation upon the objective.

The following describes a six-step technique in developing a company course of action:

Step 1 - Analyze relative combat power. The purpose of this step is to compare combat power of friendly and enemy forces. It is not merely a numerical calculation and comparison of friendly and enemy weapons numbers or units with the aim of gaining a numerical advantage. Using the results of the enemy and troops available analysis done during Mission Analysis, the company commander compares his unit's combat power strength and weakness with those of the enemy. The company commander seeks to calculate the time

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and manner that his force and the enemy are able or unable to maximize the effects of maneuver, firepower, protection and leadership, in relation to the specific ground, disposition, and composition of each force. In short, the company commander is trying to determine where, when, and how his unit's combat power (the effects of maneuver, firepower, protection, and leadership) can overwhelm the enemy's ability to generate combat power. Where and when this occurs is, of course, the decisive point and time. It is a particularly difficult process if the company is fighting a dissimilar unit (i.e. if the company is attacking or defending against an enemy mechanized force as opposed to a similarly equipped light infantry force).

COA Step 2 - Generate options. As the company commander develops COAs, he should consider, if he has not done so during Mission Analysis, what doctrine suggests in terms of accomplishing the mission. For example, in an attack on a strongpoint, doctrine outlines several requirements: isolate the objective area and the selected breach site through the strongpoint's protective obstacle, attack to penetrate and secure a foothold in the strongpoint, and exploit the penetration and clear the objective. In this case, doctrine gives the commander a framework to begin developing a way to accomplish the mission. Doctrine doesn't give him any answer, but helps the commander to think through the situation more completely.

Next, the commander identifies his main effort and supporting efforts. This is done by determining the purposes of each effort. The main effort's purpose is directly related to the purpose of the company. The purposes of supporting efforts relate directly to the main effort. They set the conditions for the success of the main effort. The commander then determines the essential tasks of the main effort and the supporting efforts. The tasks are those that must be accomplished to achieve each element's purpose. The combined tasks and purposes of the main and supporting efforts must mass the effects of overwhelming combat power at the decisive point to achieve a specific result with respect to terrain, enemy, and time that will accomplish the unit's purpose. The commander will have already determined a decisive point during Mission Analysis.

COA Step 3 - Array Initial forces. The commander must then determine the specific number of squads and weapons

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necessary to accomplish each task. He should allocate resources required for the main effort's success first (weighting the main effort) and determine the resources needed for supporting efforts in descending order of importance. For example, the main effort in an attack of a strong point may require three rifle squads and an engineer squad to secure a foothold, whereas a support by fire force may require two squads and four machine guns.

COA Step 4 - Develop scheme of maneuver. The scheme of maneuver is a description of how the company commander envisions the COA unfolding from its start to its conclusion or endstate. He clarifies in his mind the best ways to use the available terrain and how best to employ the company's strengths against the enemy's weaknesses and includes the requirements of indirect fire to support the maneuver. The commander then develops the maneuver control measures necessary to convey his intent, to enhance the understanding of the schemes of maneuver, to prevent fratricide, and to clarify the tasks and purposes of the main and supporting efforts. He also determines the supply and medical evacuation aspects of the COA.

COA Step 5 - Assign headquarters. The commander assigns specific subordinate elements as the main and supporting efforts. The commander ensures that he has employed every unit in his command. The commander must ensure that he has provided for adequate command and control of each element, and should strive to avoid unnecessarily complicated command and control structures.

COA Step 6 - Prepare COA statements and sketches. The company commander bases the COA statement on the scheme of maneuver that he has already developed. It focuses on all significant actions from the start of the COA to its finish. The commander's ability to prepare COA sketches and statements depend on the amount of time available, as well as his skill and experience as a commander. He should, whenever possible, prepare a sketch showing each COA. It is also a useful technique to show the time it takes to achieve each movement and task in the COA sketch to gain an appreciation for the relative accumulation of time as the COA is executed.

Analysis of COAs After developing the COAs, the commander analyzes them to determine their strengths and weaknesses; to visualize the flow of the battle; to identify the

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conditions or requirements necessary to enhance synchronization; and, most significantly, to gain insights into the decisive point and action of the mission. He does this analysis through wargaming or "fighting" the COA against at least one enemy COA. Wargaming, depending on how much time is devoted to it, can also provide the following:

- An appreciation for the time and space, and triggers needed to integrate fire support, smoke, engineers, air defense, and NBC with maneuver platoons to support company tasks and purposes identified in the scheme of maneuver
- Flexibility built into the plan by gaining insights into possible branches to the basic plan.
- The need for control measures (such as checkpoints, contact points, and TRPs) that facilitate control, flexibility and synchronization.
- Coordinating instructions to enhance execution and unity of effort, and to mitigate confusion between subordinate elements.
- Information needed to complete paragraphs 3, 4, and 5 of the OPORD.
- Assessments regarding on-order and be-prepared missions.
- Projected CSS expenditures, friendly casualties, and resulting medical requirements.

Ideally, the company commander wargames each friendly COA against each likely enemy COA. Depending on the time available and his personal preference, he may use any method of war gaming:

- **Box technique**. The box method focuses the wargame on a specific area of the battlefield. This may be the objective area, the engagement area, or some other critical location where the decisive action will take place. It should include all of the units, friendly and enemy, that will have a direct impact on the decisive action. This technique is a good one to use when time is limited because of its focus on the decisive action. A key disadvantage, however, is that in considering only the actions at the decisive point, the commander may overlook

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other critical actions or events that could have a significant impact on the company's mission.

- **Belt technique.** The belt technique allows the commander to divide the COA into phases or belts. He may do this in several ways, such as from phase line to phase line or by significant event. Each phase is then war-gamed in sequence. This approach is most effective for offensive COAs.
- **Avenue in depth technique.** This method is most effective for a defensive COA, especially when there are several avenues of approach to consider. Using the enemy's most probable COA, the commander and subordinate leaders analyze friendly and enemy actions along one avenue of approach at a time.

War-gaming guidelines. To gain the benefits that result from a wargaming of a COA, the company commander must remain objective and record the results of the wargame. The company commander must remember the assumptions he made about the enemy, his unit, and the ground during the development of his tentative plan. He must not let the enemy or his units "win" just to justify the COA. Additionally, he must avoid drawing premature conclusions about the wargame or making changes to his COA until the wargame is completed.

COA comparison and selection If the commander has developed more than one COA, he must compare them. He does so by weighing the specific advantages, disadvantages, strengths, and weaknesses of each course as noted during the wargame. These attributes may pertain to the accomplishment of the company purpose, the use of terrain, the destruction of the enemy, or any other aspect of the operation that the commander believes is important. The commander uses these factors as his frame of reference in tentatively selecting the best COA. He makes the final selection of a COA based on his own judgment, also taking into account results of the company's essential tasks, when the operation begins, the area of operations, the scheme of maneuver, and subordinate unit tasks and purposes.

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Step 4, Initiate movement. The commander initiates any movement necessary to continue mission preparation or to posture the unit for the start of the mission. This may include movement to an assembly area, a battle position, a new defensive sector, an attack position, or the movement of reconnaissance elements, guides or quartering parties.

Step 5, Conduct reconnaissance Even if the company commander has made a leader's reconnaissance with the battalion commander and staff at some point during troop-leading procedures, he should still conduct a reconnaissance, if at all possible, after he has developed a plan. His reconnaissance should seek to confirm the Priority Intelligence Requirements (PIRs) that support his tentative plan. These PIRs are usually assumptions or critical facts concerning the enemy (his location, especially templated positions, and strength) and the terrain (to verify, for example, that a tentative support by fire position actually will allow for suppression of the enemy, or to verify the utility of an avenue of approach). If possible, the commander should include his subordinate leaders in this reconnaissance. This will allow them to see as much of the terrain and enemy as possible. The reconnaissance also helps subordinate leaders visualize the projected plan more clearly. At the company level, the leader's reconnaissance may include movement to or beyond the LD or walking from the FEBA back to and through the company sector or battle position along likely enemy avenues of approach. If possible, the commander should select a vantage point that provides the group with the best possible view of the decisive point. In addition to the leader's reconnaissance, the company may conduct additional reconnaissance operations. Examples include surveillance of an area by subordinate elements, patrols by Infantry squads to determine where the enemy is (and is not) located, and establishment of observation posts to gain additional information. The nature of the reconnaissance, including what it covers and how long it lasts, depends on the tactical situation and time available. The commander should use the results of the COA development process to identify information and security requirements for the company's reconnaissance operations.

Step 6, Complete the plan. During this step, the commander takes his selected COA and expands it into a complete OPORD. This includes preparing overlays, refining the indirect fire list, completing CSS and C2 requirements

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and, of course, updating the tentative plan as a result of the reconnaissance. It also allows the commander to prepare the briefing site and briefing material he'll need to present the OPORD to his subordinates. Finally, it allows the commander to make final coordination with other units or the battalion staff before issuing the order to his subordinates.

Step 7 Issue the order. The company commander's OPORD precisely and concisely explains both his intent and concept of how he envisions the unit accomplishing the mission. When issuing the company OPORD, the commander must ensure his subordinates understand and share his vision of what must be done, when it must be done, and how it must be done. They must understand how all the company's elements work together to accomplish the mission. They must also understand how it supports the intentions of the battalion commander. When the commander has finished issuing the order, subordinate leaders should walk away with a clear understanding of what he expects their elements to do. The order does not contain unnecessary information. Nice to know information clouds what is essential and important and often causes confusion and uncertainty.

Additionally, and in many respects more importantly, the company commander must issue the order in a manner that imbues his subordinates with confidence in the plan and a commitment to do their best to achieve the plan. Whenever possible, he must issue the order in person, looking into the eyes of his soldiers to ensure each leader understands his mission and what it is his element must achieve.

OPORD format. The five-paragraph OPORD format helps the commander paint a complete picture of all aspects of the operation: terrain, enemy, higher and adjacent friendly units, company mission, execution, support, and command. The format also assists him in addressing all relevant details of the operation. It provides subordinates with a smooth flow of information from beginning to end. In short, it is the best way for a company commander to structure his notes when issuing an oral OPORD.