

METT-TC,

The following discussion covers the six factors of Mission, Enemy, Terrain, Troop, -Time, Civilian in detail. (**NOTE:** METT-TC factors are not necessarily analyzed sequentially. How and when the commander analyzes each factor depends on when the information is made available to him.)

Mission,

After receiving an essential task and purpose, either in a warning order or the OPORD, the commander can then begin the analysis of his own mission. He may use a refined product to better visualize the interrelationships of the terrain, the enemy, and friendly forces. These may include a Modified Combined Obstacle Overlay (MCOO) and/or the Situational Template (SITEMP), if available.

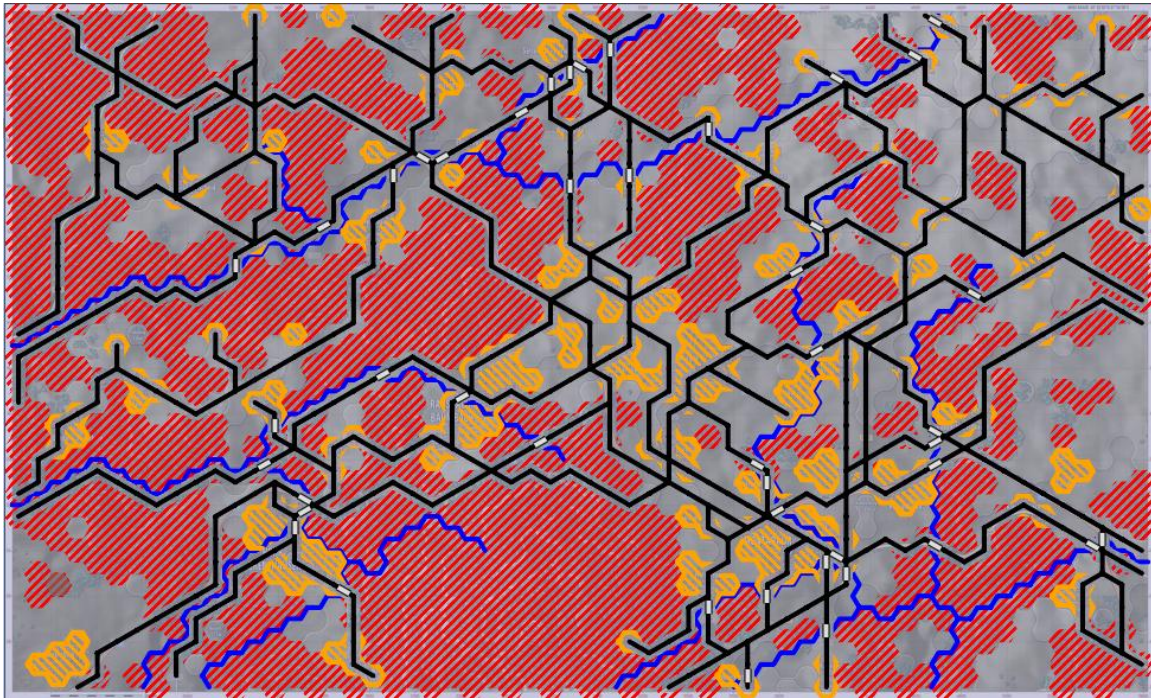


Figure 1, Modified Combined Obstacle Overlay

The commander's goal in this analysis is to clarify what the unit is to accomplish and why the unit must accomplish it. Key considerations in the analysis include the following:

- What is my task and purpose for this operation?
- What is the commander's intent?
- What are the specified tasks for the operation (those that the commander stated must be accomplished)? (**NOTE:** In the OPORD, these tasks are outlined in paragraph 3, which comprises the commander's intent, concept of the operation, tasks to subordinate units, and coordinating instructions.)
- What are the implied tasks for the operation? These are other tasks, not specifically noted by the commander, that must be accomplished during the operation.
- What are the essential tasks for the operation? These are all tasks, both specified and implied, that are absolutely required to ensure mission success.

Enemy,

The commander's analysis of the enemy situation should focus on the areas of doctrinal analysis and objectives, composition and disposition, capabilities, weaknesses, anticipated COAs, and factors that can influence these COAs. The analysis can focus on the following considerations:

- What types of enemy units is the unit up against?
- Where are these units?
- What is the enemy doing?
- How strong is he?
- What kind of equipment does he have?
- What are his capabilities and weaknesses?
- Where is he vulnerable?
- Where are his kill zones and fire sacks?
- What are the enemy's intentions, doctrinal objectives, and most probable COA(s)?
- What can he do in response to friendly actions?

Terrain (and weather),

The commander analyzes the terrain using the factors of OCOKA: observation and fields of fire; cover and concealment; obstacles; key terrain; and avenues of approach. The following discussion focuses on questions the commander can use in his analysis.

Observation and fields of fire.

The commander should cover the following considerations in his analysis:

- Where can the enemy observe and engage my platoon?
- Where can I establish OPs to maximize my ability to see the battlefield?

Cover and concealment.

The commander should include the following considerations in his analysis of cover and concealment:

- What routes within the area of operations offer cover and concealment for my unit or for enemy elements?
- What dismounted routes offer my unit the best 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).

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

- Gullies, ravines, gaps, and ditches over 3 meters wide.
- Streams, rivers, and canals over 1 meter deep.
- Mountains or hills with a slope in excess of 60 percent.
- Lakes, swamps, and marshes over 1 meter deep.
- Tree stumps and large rocks over 18 inches high.
- Forest or jungles 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.
- Antitank ditches.
- Road craters.
- Abatises.
- Wire obstacles.

Based on the degree of obstruction posed by obstacles, terrain is further classified in one of the following categories:

- **Unrestricted.** This is terrain that is free of any restriction to movement; no actions are required to enhance mobility. For mechanized vehicles, 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.
- **Restricted.** This is terrain that 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 mechanized vehicles, 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 dismounted infantry forces. Logistical or rear area movement in this type of terrain may be hampered by poorly developed road systems.
- **Severely restricted.** Terrain in this classification severely hinders or slows movement in combat formation unless some effort is made to enhance mobility. This could 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 lower than otherwise preferred.

Severely restricted terrain for mechanized vehicles is typically characterized by steep slopes, densely spaced obstacles, and/or the virtual absence of a developed road system.

Key terrain. Key terrain is any location or area whose seizure, retention, or control affords a marked advantage to either combatant. The commander's analysis should include these considerations:

- Where is the key terrain?
- How can the unit use key terrain to support the mission?

Avenues of approach. These are areas through which a unit can maneuver. The definition of an avenue of approach is an area that provides sufficient ease of movement and enough width to allow passage of a force large enough to significantly affect the outcome of the battle. The commander's analysis should include these considerations:

- Where are the most favorable mounted and dismounted avenues of approach for enemy and friendly forces?
- Where are the best air avenues of approach for enemy forces?

Weather,

The commander analyzes weather conditions as part of his evaluation of the terrain. The following considerations should be included in this evaluation:

- What are the light conditions (including percentage of night illumination) and visibility?
- What are the times for beginning of morning nautical twilight (BMNT), sunrise, sunset, end of evening nautical twilight (EENT), moonrise, and moonset?
- How has recent weather affected the area of operations?
- Will weather become better or worse during the mission?
- How will fog, rain, dust, heat, snow, wind, or blowing sand affect both friendly and enemy troops and equipment during the mission?

Troops,

The commander's analysis of troops available for an operation includes an assessment of the commander's vehicles and equipment. Considerations in the analysis include the following:

- What is the present condition of the commander's soldiers, vehicles, and equipment?
- What is the supply status of ammunition, fuel, and other necessary items?
- What is the state of training of the units?
- What is the state of morale?
- How much sleep have the men had?
- How much sleep can they get before and during the operation?
- Does the unit need any additional equipment to support or accomplish its mission?
- What attachments does the units have (or require) to accomplish its mission?
- How many OPs (mounted/dismounted) can be manned with the available assets?
- How big a frontage can be covered with the available assets?

Time available,

The commander's analysis of the time available for an operation begins with the "one-third/two-thirds" rule of planning and preparation discussed earlier in this section. This principle allows the commander to use one-third of planning and preparation time himself, then to allocate the remaining two-third to subordinates. Additional considerations in the analysis should include the following:

- How much time is available to plan and conduct reconnaissance?
- How much time is available for rearming, refueling, and resupply?
- How long will it take the units to move to planned OPs, to the line of departure (LD), and/or to the objective?
- Is there enough time for rehearsals?
- How much time is available to the enemy for the activities listed in the previous items?

- How does the potential enemy timeline for planning and preparation compare with that developed for friendly forces?

Civilian considerations,

In his analysis of how the units will handle situations involving civilians (including stability and support operations), the commander should assess the following considerations:

- What are the applicable rules of engagement (ROE) and/or rules of interaction (ROI)?
- What procedures and guidelines will the units use in dealing with refugees, prisoners, and other civilians?
- Will the units be working with civilian organizations, such as governmental agencies, private groups, or the media?
- Will the units be tasked to conduct stability operations (such as peace operations or noncombatant evacuation) or support operations (such as humanitarian or environmental assistance)?