HANDBOOK

No. 11-19

MAR 11

MDMP

Observations, Insights, and Lessons

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Foreword

The military decisionmaking process (MDMP) is a solid model for developing a solution to a problem. However, if the staff conducting the MDMP is unfamiliar with each of the steps, the process can become very complex.

There are ways to organize (planning checklists and worksheets) and conduct the MDMP to provide meaningful information to the commander. Keep in mind that errors committed early in the MDMP adversely affect later steps.

The MDMP facilitates interaction between the commander, staff, and subordinate headquarters throughout the operations process. It provides a structure for the staff to work collectively and produce a coordinated plan. During planning, staff members monitor, track, and aggressively seek information important to their functional areas. They assess how this information affects course of action development and apply it to any recommendations they make.

Every battlefield commander faces countless decisions. While the commander is central to the process, the use of standing operating procedures and manuals are helpful in preparing commanders to learn decision-making processes. Training leaders on the operations process sets them up for success as they proceed to complex issues and problems that require more thorough analysis.

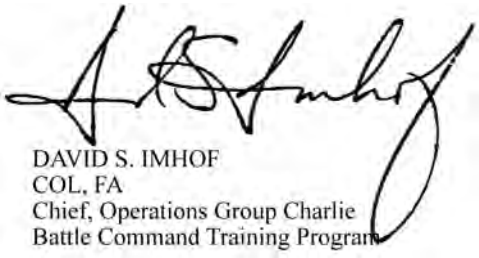
The realities of command decision making in combat indicate that success in the operational environment comes from a combination of factors. Often the definition of luck is "opportunity meeting preparation." Preparation includes learning how to conduct the MDMP.

Field Manual 6-22, *Army Leadership*, summarizes the problem-solving steps in the following manner:

- Recognize and define the problem.
- Gather information.
- Develop possible solutions to the problem.

- Analyze possible solutions.
- Select the best solution.
- Implement the solution and assess results.

The U.S. Army's MDMP provides multiple opportunities for commanders and staffs to think through and use a well-established process to develop sound plans in support of operations. The process effectively represents the realities of command decision making in full-spectrum operations and provides a practical guide to the efficient organization of large-unit staff planning activities.



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Military Decisionmaking Process

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Introduction

> "A good plan violently executed now is better than a perfect plan executed next week."
>
> — General George S. Patton

The military decisionmaking process (MDMP) is an iterative planning methodology that integrates the activities of the commander, staff, subordinate headquarters, and other partners to understand the situation and mission, develop and compare courses of action (COAs), decide on a COA that best accomplishes the mission, and produce an operation plan or order for execution. The MDMP helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. The MDMP is a process that helps commanders, staffs, and others think critically and creatively while planning.

The MDMP facilitates collaborative and parallel planning as the higher headquarters solicits input and continuously shares information concerning future operations with subordinate and adjacent units, supporting and supported units, and other military and civilian partners through planning meetings, warning orders (WARNOs), and other means. Commanders encourage active collaboration among all organizations affected by the pending operations to build a shared understanding of the situation, participate in COA development and decision making, and resolve conflicts before publication of the plan or order.

The MDMP also drives preparation. Since time is a factor in all operations, commanders and staffs conduct a time analysis early in the planning process. This analysis helps them determine what actions are required and when those actions must begin to ensure forces are ready and in position before execution. This may require the commander to direct subordinates to start necessary movements; conduct task organization changes; begin intelligence, surveillance, and reconnaissance (ISR) operations; and execute other preparation activities before completing the plan. The commander directs these tasks in a series of WARNOs as the commander and staff conduct the MDMP.

During planning, assessment focuses on developing an understanding of the current situation, ascertaining what to assess, and determining how to assess progress using measures of effectiveness and measures of performance. Developing the unit's assessment plan occurs during the MDMP — not after the plan or order is developed.

Depending on the complexity of the situation, commanders may initiate design activities before or in parallel with the MDMP. Commanders may choose to conduct design to assist them in understanding the operational environment, framing the problem, and considering operational approaches to solve or manage the problem. The products of design, including the design concept, would guide more detailed planning as part of the MDMP.

Commanders may also conduct design in parallel with the MDMP. In this instance, members of the staff conduct mission analysis as the commander and other staff members engage in design activities prior to COA development. In time-constrained conditions or if the problem is relatively straightforward, commanders may conduct the MDMP without the benefit of a formal design process. During execution, commanders may conduct design to help refine their understanding and visualization and adjust the plan as required.

Chapter 1

Design

Design is a methodology for applying critical and creative thinking to understand, visualize, and describe complex, ill-structured problems and develop approaches to solve them. The design methodology relies heavily on structuring inquiry about the operational environment and the problem through collaboration and dialogue. Design emphasizes developing a holistic understanding of the operational environment and framing the problem. From this understanding, design continues by considering an operational approach for problem resolution and developing a design concept. The design concept consists of the problem statement, initial commander's intent, mission narrative, and commander's planning guidance. The design concept serves as the foundation for more detailed planning, including course of action (COA) development and the production of plans and orders using the military decisionmaking process (MDMP).

In contrast to the MDMP focus on analysis to develop a COA, the design focus is to understand the nature of an ill-structured or complex problem. MDMP is a tool to help solve "a problem," while design is a tool to help ensure you are solving the "right problem" without creating collateral problems.

Points to remember with regard to design:

- Conceptual planning and design are enduring concepts of U.S. Army planning doctrine.
- Context distinguishes the nature of problems.
- Design is commanders leading learning through an honest, forthright exchange of ideas aimed at collective understanding.
- Design is a best-practice approach to counter the three fatal problem-solving errors and, thus, improve decision making:
    - Decide a problem is solved when the problem remains.
    - Decide a problem is not solved when it is.
    - Devote effort in solving the wrong problem.

Commanders conduct design to help them with the conceptual aspects of planning, to include understanding, visualizing, and describing.

The situation — to include the complexity of the problem — guides the commander's decision on whether to use design or not.

Doctrine has a consistent emphasis on the commander's role to lead planning through understanding the situation, visualizing how to achieve a desired end state, and describing that visualization to planners.

Understand (Frame the Environment)

In understanding the operational environment, the commander and staff focus on defining, analyzing, and synthesizing the characteristics of the operational variables (political, military, economic, social, infrastructure, information, physical environment, and time). They do so in the context of the dynamic interactions and relationships among and between relevant operational variables and actors in the operational environment. Often, learning about the nature of the situation helps them to understand the groupings, relationships, or interactions among relevant actors and operational variables. This learning typically involves analysis of the operational variables while examining the dynamic interaction and relationships among myriad other factors in the operational environment.

The environmental frame is a narrative and graphic description that captures the history, culture, current state, and future goals of relevant actors in the operational environment. The environmental frame describes the context of the operational environment — how the context developed (historical and cultural perspective), how the context currently exists (current conditions), and how the context could trend in the future (future conditions or desired end state).

Visualize (Frame the Problem)

Problem framing involves understanding and isolating the root causes of conflict — defining the essence of a complex, ill-structured problem. Problem framing begins with refining the evaluation of tendencies and potentials and identifying tensions between existing conditions and the desired end state. It articulates the expectation of how the operational variables can resist or facilitate transformation and how you can leverage environmental inertia to ensure achievement of the desired conditions.

The problem frame is a refinement of the environmental frame that defines, in text and graphics, the areas for action that will transform existing conditions toward the desired end state. The problem frame extends beyond analyzing interactions and relationships in the operational environment. It identifies areas of tension and competition — as well as opportunities and challenges — that commanders must address to transform current conditions to achieve the desired end state.

A concise problem statement clearly defines the problem or problem set to solve.

Describe (Frame the Concept)

The aim of this component is to combine the environmental frame (understand) with the problem frame (visualize) into expressions that drive staff planning and shape expectations for external audiences. The operational approach is a broad conceptualization of the general actions that will produce the conditions that define the desired end state.

In very basic terms, commanders communicate an operational approach through a statement of intent that outlines the purpose of the operation and conditions the force must establish to achieve the end state. Commanders also describe acceptable risk and issue planning guidance that establishes specific activities in developing concepts on "how to deal with the problem" for subordinates and staff planners.

The mission narrative is the expression of the operational approach for a specified mission. It describes the intended effects for the mission, including the conditions that define the desired end state. The mission narrative represents the articulation, or description, of the commander's visualization for a specified mission and forms the basis for the concept of operations developed during detailed planning. An explicit reflection of the commander's logic, the mission narrative, is used to inform and educate the various relevant partners whose perceptions, attitudes, beliefs, and behaviors are pertinent to the operation.

The mission narrative is part of a strategic communications process and aims to let select audiences know what to expect.

Forging the Design Concept

The design concept is the proper output of design, conveyed in text and graphics, which informs detailed planning and is articulated to the planning staff through the following:

- Products created during design.
- Problem statement.
- Initial commander's intent.
- Commander's initial planning guidance (to include the operational approach).
- Mission narrative.

Reframing is a shift in understanding that leads to a new perspective on the problems or their resolution. Reframing involves significantly refining or discarding the hypotheses or models that form the basis of the design

concept. It allows for adjustments throughout the operations process, ensuring that tactical actions remain fundamentally linked to achieving the desired conditions.

Chapter 2

Military Decisionmaking Process

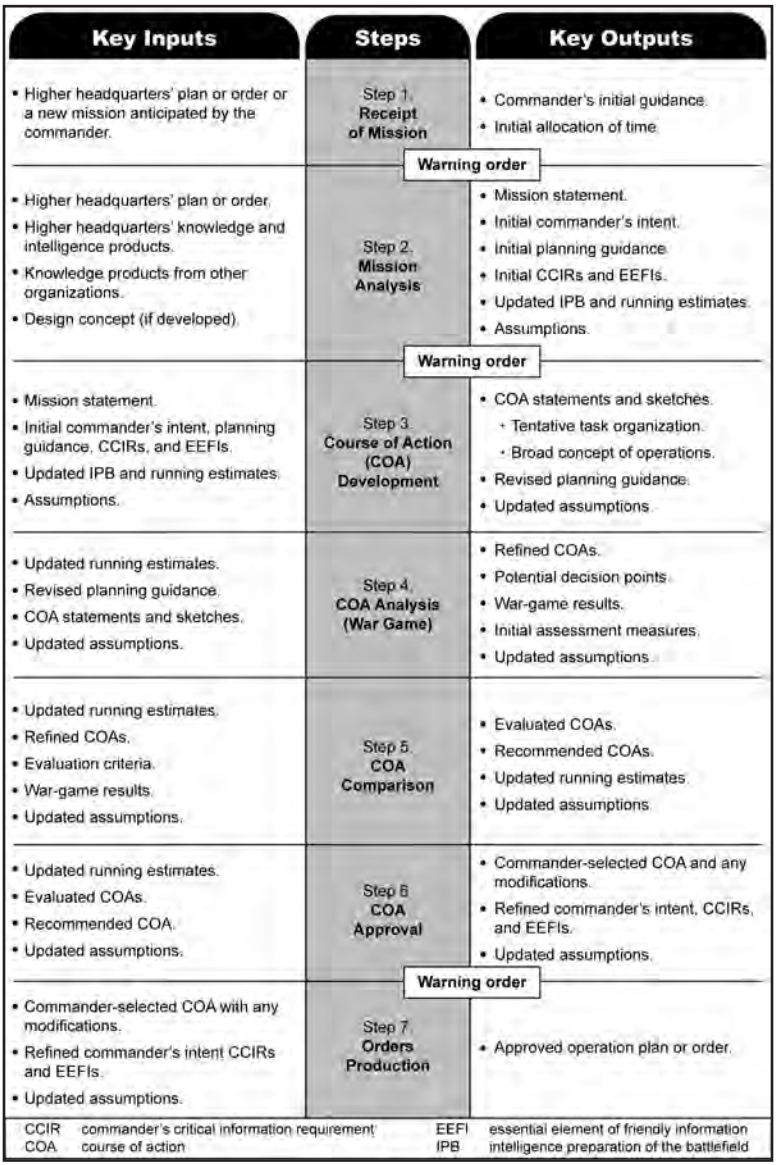


Figure 2-1. Military decisionmaking process

Chapter 3

Receipt of Mission

Commanders initiate the military decisionmaking process (MDMP) upon receipt or in anticipation of a mission. The purpose of this step is to alert all participants of the pending planning requirements, determine the amount of time available for planning and preparation, and decide on a planning approach, including guidance on design and how to abbreviate the MDMP, if required. When a new mission is identified, commanders and staffs perform the actions and produce the outputs as described in the following paragraphs.

1. Alert the staff and other key participants.

2. Gather the tools. Once notified of the new planning requirement, the staff prepares for mission analysis by gathering the tools needed to perform it. These tools include, but are not limited to:

- Appropriate field manuals (FMs), including FM 5-0, *The Operations Process,* and FM 1-02, *Operational Terms and Graphics.*
- All documents related to the mission and the area of operations, including the higher headquarters' operation plan and operation order, maps and terrain products, and operational graphics.
- Higher headquarters' and other organizations' intelligence and assessment products.
- Estimates and products of other military and civilian agencies and organizations.
- Both its own and the higher headquarters'standing operating procedures.
- Current running estimates.
- Any design products, including the design concept.

3. Update running estimates.

4. Conduct an initial assessment. During receipt of mission, the commander and staff conduct an initial assessment of time and resources available to plan, prepare, and begin execution of an operation. This initial assessment helps commanders determine the following:

- Time needed to plan and prepare for the mission.
- Guidance on design and abbreviating the MDMP, if required.

- Which outside agencies and organizations to contact and incorporate into the planning process.
- The staff's experience, cohesiveness, and level of rest or stress.

The chief of staff or executive officer develops a staff planning timeline that outlines how long the headquarters can spend on each step of the MDMP. The staff planning timeline indicates what products are due, who is responsible for them, and who receives them.

5. Issue the commander's initial guidance. Initial guidance includes the following:

- Initial time allocations.
- Decision to initiate design or go directly into the MDMP.
- How to abbreviate the MDMP, if required.
- Necessary coordination to perform, including liaison officers to exchange.
- Authorized movements and any reconnaissance and surveillance to initiate.
- Collaborative planning times and locations.
- Initial information requirements.
- Additional staff tasks.

6. Issue a warning order (WARNO #1). The WARNO includes, at a minimum, the type of operation, the general location of the operation, the initial timeline, and any movement or reconnaissance to initiate.

Chapter 4
Mission Analysis

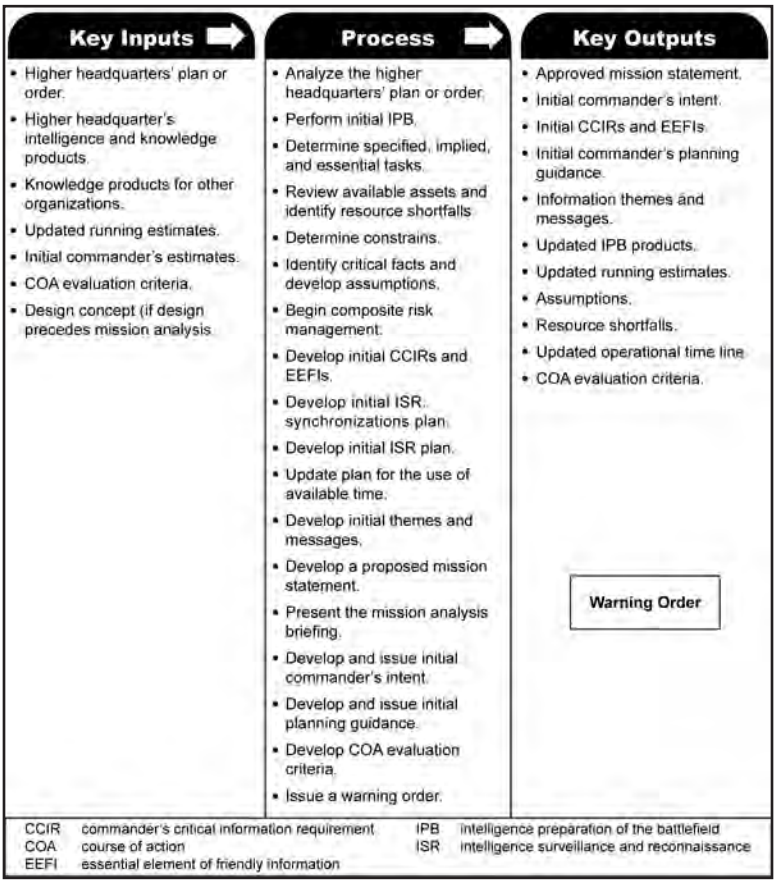


Figure 4-1. Mission analysis overview

If the military decisionmaking process (MDMP) is, simply-speaking, a systematic method to solve a specific problem, then mission analysis is the method to clearly identify the problem and the tools available to solve the problem.

Mission Analysis Steps

Step 1: Analyze the higher headquarters' plan or order.

Step 2: Perform initial intelligence preparation of the battlefield (IPB).

Step 3: Determine specified, implied, and essential tasks.

Step 4: Review available assets and identify resource shortfalls.

Step 5: Determine constraints.

Step 6: Identify critical facts and develop assumptions.

Step 7: Begin composite risk management (CRM).

Step 8: Determine initial commander's critical information requirements (CCIRs) and essential elements of friendly information (EEFIs).

Step 9: Develop initial intelligence, surveillance, and reconnaissance (ISR) synchronization plan.

Step 10: Develop initial ISR plan.

Step 11: Update plan for the use of available time.

Step 12: Develop initial information themes and messages.

Step 13: Develop a proposed mission statement.

Step 14: Present the mission analysis briefing.

Step 15: Develop and issue the initial commander's intent.

Step 16: Develop and issue initial planning guidance.

Step 17: Develop course of action (COA) evaluation criteria.

Step 18: Issue a warning order (WARNO).

Step 1: Analyze the higher headquarters' plan or order.

Commanders and staffs thoroughly analyze the higher headquarters' plan or order to determine how their unit — by task and purpose — contributes to the mission, commander's intent, and concept of operations of the higher headquarters. The commander and staff seek complete understanding of the following:

- Higher headquarters:
  - Commander's intent.
  - Mission.

- Concept of operations.
- Available assets.
- Timeline.

- Missions of adjacent, supporting, and supported units and their relationship to the higher headquarters' plan.
- Missions of interagency, intergovernmental, and nongovernmental organizations (IOs/IGOs/NGOs) that work in their operational areas.
- Their assigned area of operations (AO).

Liaison officers familiar with the higher headquarters' plan can help clarify issues. Collaborative planning with the higher headquarters also facilitates this task. Staffs also use requests for information (RFIs) to clarify or obtain additional information from the higher headquarters.

Step 2: Perform IPB.

(**Note:** The IPB is arguably the most important portion of the MDMP. It identifies where you are operating and who is operating with and against you. The rest of the MDMP builds upon this fundamental framework.)

The IPB is a systematic process — conducted by the entire staff — of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest (AI) and for a specific mission. It builds an extensive database for each potential area in which a unit may be required to operate. The staff then analyzes the database in detail to determine the impact of the enemy, terrain, weather, and civil considerations on operations and presents it in graphic form. The U.S. Army uses mission, enemy, terrain and weather, troops and support available, time available-civil considerations (METT-TC) as the framework for the analysis.

The IPB consists of four steps:

IPB Step 1: Define the operational environment (OE). Identifies specific features of the environment or activities within it and the physical space where they exist that may influence available COAs or the commander's decision.

The OE is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. At the tactical and operational levels, defining the OE involves defining a unit's AO and determining an AI. The AI is an area of concern to the commander, including the area of influence, areas adjacent to the area of influence, and extending into enemy territory to the objectives of current or

planned operations. This area also includes areas occupied by enemy forces that could jeopardize the accomplishment of the mission.

Commanders and staffs analyze and describe an OE in terms of eight interrelated operational variables: political, military, economic, social, information, infrastructure, physical environment, and time. They use the mission variables, in combination with the operational variables, to refine their understanding of the situation and to visualize, describe, and direct operations. The mission variables are the factors of METT-TC.

The AI can be large relative to the AO; it must often account for various influences that affect the AO, such as:

- Family, tribal, ethnic, religious, or other links that go beyond the AO.
- Communication links to other regions.
- Economic links to other regions.
- Media influence on the local populace and U.S., public, and multinational partners.
- External financial, moral, and logistic support for the enemy.

Integrating area structures, capabilities, organizations, people and events (ASCOPE) into the IPB:

The application of the elements of ASCOPE during system analysis identifies the key and decisive ASCOPE of each subsystem (e.g., the staff's application of ASCOPE factors to the entire concept of "economics"). The staff would ask the following questions: Where are the key and decisive areas of economic activity? Where are the key and decisive structures (infrastructures) associated with economic activity? (Do this for each variable.)

Note: Refer to FM 3-24.2, *Tactics in Counterinsurgency (COIN)*, for a thorough discussion on the IPB in COIN, which is generally applicable in most complex OEs.

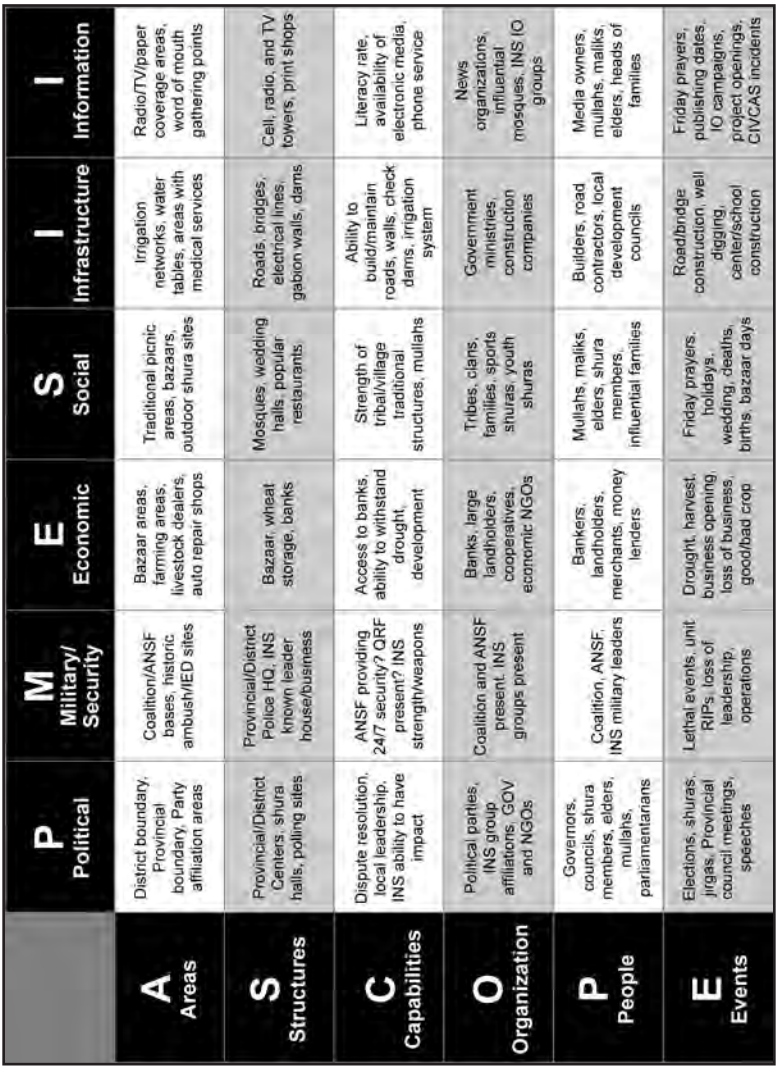


Figure 4-2. ASCOPE

IPB Step 2: Describe environmental effects on operations. The S-2 and the rest of the staff identify how the OE influences the operation and COAs of the threat and friendly forces.

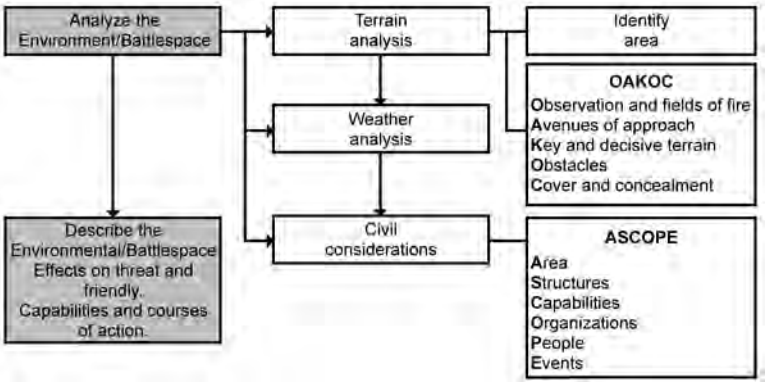


Figure 4-3. Describe the environment (Reference: FM 2-01.3)

IPB Step 3: Evaluate the threat. (This is more than an evaluation of the enemy.) The S-2 and staff analyze intelligence to determine how the threat normally conducts operations under similar circumstances. When operating against a new or less-defined threat, the S-2 may need to develop or expand intelligence databases and threat models concurrently. To accomplish this, the S-2 should conduct a threat characteristic analysis for each group identified in Step 1.

Threat (enemy) characteristics considered are: composition, disposition, tactics, training, logistics, operational effectiveness, communications, intelligence, recruitment, support, finance, reach, national agencies, law enforcement agencies, IOs/IGOs/NGOs, and personality.

(**Note:** Current IPB doctrine is very enemy-centric and neglects an adequate description of all the characteristics of the "threat" as previously defined. Commanders and staffs must ensure the evaluation of all characteristics of all threats.)

IPB Step 4: Determine threat (opponent) COAs. Based on METT-TC factors, the S-2 depicts the threat based on the commander's guidance (e.g., echelon or cell). At a minimum, the staff determines likely objectives and the desired end state. Against a conventional threat, the analysis should start at more than one level above the friendly echelon unit and work down. In many operations, due to its asymmetric nature, the analysis should start as low as possible.

IPB role in the MDMP:

Automated electronic production of mobility corridors, situation templates, threat/adversary templates, weather forecasts and effects, and range fans for direct- and indirect-fire weapons systems can provide the commander visualization and aid in determining the best friendly COA. Situation templates may be simple sketches, reserving in-depth development and analysis for later when more time is available.

The S-2, with collaborative staff involvement, develops initial event templates from the situation templates. Event templates are not required for the mission analysis brief; however, complete them before COA development.

An event template is a model against which to record and compare threat activity. It represents a sequential projection of events that relate to space and time on the battlefield and indicates the enemy's ability to adopt a particular COA. The event template is a guide for collection and reconnaissance and surveillance planning.

A good IPB allows staff collaboration to begin identifying high-payoff and high-value targets. The following definitions are enemy-centric and do not fully take into account all available "targets" in an area of responsibility.

- High-value target: A target the enemy commander requires for the successful completion of the mission. The expectation from the loss of high-value targets would be a serious degradation of important enemy functions throughout the friendly commander's AI.
- High-payoff target: A target whose loss to the enemy will significantly contribute to the success of the friendly COA. High-payoff targets are those high-value targets that must be acquired and successfully attacked for the success of the friendly commander's mission.

Step 3: Determine specified, implied, and essential tasks.

The staff analyzes the higher headquarters' order and the higher commander's guidance to determine their specified and implied tasks.

In the context of operations, a task is a clearly defined and measurable activity accomplished by Soldiers, units, and organizations that may support or that other tasks support. The "what" of a mission statement is always a task.

Specified tasks are tasks specifically assigned to a unit by its higher headquarters. The higher headquarters may assign them either orally during collaborative planning sessions or in directives from the higher commander.

Implied tasks are tasks the unit must perform to accomplish a specified task or the mission, but the higher headquarters' order does not state them. The staff derives implied tasks from a detailed analysis of the higher headquarters' order, the enemy situation, the terrain, and civil considerations. Additionally, analysis of doctrinal requirements for each specified task might disclose implied tasks. Retain only implied tasks that require allocating resources.

Units with an assigned AO are responsible for ensuring the conduct of essential stability tasks for the population in areas they control. While higher headquarters specifies some stability tasks, commanders consider the primary stability tasks found in FM 3-07, *Stability Operations,* as sources for implied tasks. These implied tasks, at a minimum, provide for civil security, restoration of essential services, and civil control for civil populations in the AO they control. Based on this analysis, the staff determines if there are other agencies, civil or military, that can provide these tasks. If not, the unit plans to provide these tasks using available assets. If the unit determines it does not have the assets, it informs its higher headquarters.

Once staff members have identified specified and implied tasks, they ensure they understand each task's requirements and the purpose for accomplishing each task. They then determine the task or tasks units must successfully execute to accomplish the mission.

Essential tasks are specified or implied tasks the unit must execute to accomplish the mission. Essential tasks are always included in the unit's mission statement.

Step 4: Review available assets and identify resource shortfalls.

The commander and staff examine additions to and deletions from the current task organization, command and support relationships, and status (current capabilities and limitations) of all units. This analysis also includes the capabilities of civilian and military organizations (joint, special operations, host nation, and multinational) that operate within the unit's AO. They consider relationships between and among specified, implied, and essential tasks and available assets. From this analysis, staffs determine if they have the assets needed to accomplish all tasks. If shortages occur, they identify additional resources needed for mission success to the higher headquarters. Staffs also identify any deviations from the normal task organization. A more detailed analysis of available assets occurs during COA development.

Step 5: Determine constraints.

The commander and staff identify any constraints placed on their command. A constraint is a restriction placed on the command by a higher headquarters. A constraint dictates an action or inaction, thus restricting the freedom of action of a subordinate commander. Commanders find constraints in paragraph 3 in the operation plan (OPLAN) or operation order (OPORD). Annexes to the order may also include constraints. The operation overlay, for example, may contain a restrictive fire line or a no-fire area. Commanders may issue constraints orally, in WARNOs, or in policy memorandums.

Note: U.S. Army doctrine does not include limitations.

> Joint doctrine (JP 5-0, *Joint Operation Planning*) uses the term "operational limitation," which includes the terms constraints and restrictions that differ from Army doctrine. An operational limitation is an action required or prohibited by higher authority, such as a constraint or a restraint, and other restrictions that limit the commander's freedom of action, such as diplomatic agreements, rules of engagement, political and economic conditions in affected countries, and host-nation issues. In the context of joint operation planning, a constraint is a requirement placed on the command by a higher command that dictates an action, thus restricting freedom of action. In the context of joint operation planning, a restraint is a requirement placed on the command by a higher command that prohibits an action, thus restricting freedom of action.

Step 6: Identify critical facts and develop assumptions.

Imperfect knowledge and assumptions about the future form the basis for all planning.

A fact is a statement of truth or a statement considered to be true at the time. Facts concerning the operational and mission variables serve as the basis for developing situational understanding, for continued planning, and when assessing progress during preparation and execution.

An assumption is supposition on the current situation or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the commander in the process of planning to complete an estimate of the situation and make a decision on the COA.

Appropriate assumptions used during planning have two characteristics:

- They are likely to be true.
- They are necessary — that is, essential — to continue planning.

Key points concerning the use of assumptions:

- Assumptions must be logical, realistic, and considered likely to be true.
- Too many assumptions result in a higher probability the plan or proposed solution may be invalid.
- The use of assumptions requires the staff to develop branches and sequels to execute if one or more key assumptions prove false.
- Often, an unstated assumption may prove more dangerous than a stated assumption proven wrong.

Replace assumptions with facts as soon as possible. The staff identifies information needed to convert assumptions into facts and submits them to the appropriate agency as information requirements. If the commander needs information to make a decision, he may designate the information requirement as one of his CCIR. Submit requirements for information about threats and the environment to the S-2, who incorporates them into the initial ISR plan.

Note: Assumptions induce risk into operational planning. Consider these assumptions during CRM.

Step 7: Begin CRM.

CRM is the Army's primary decision-making process for identifying hazards and controlling risks across the full spectrum of Army missions, functions, operations, and activities. CRM consists of five steps. Perform them throughout the operations process.

In the past, the Army separated risk into two categories: tactical risk and accident risk. While these two areas of concern remain, the primary premise of CRM is that it does not matter where or how the loss occurs, the result is the same — decreased combat power or mission effectiveness.

The guiding principles of CRM are:

- Integrate CRM into all phases of missions and operations.
- Make risk decisions at the appropriate level.
- Do not accept unnecessary risk.

- Apply the process cyclically and continuously.
- Do not be risk averse.

Military Decision-making Process	Risk Management Steps				
	Step 1 Identify Hazards	Step 2 Assess Hazards	Step 3 Develop Controls (+) Decision	Step 4 Implement Controls	Step 5 Supervise (+) Evaluate
Mission Receipt	X				
Mission Analysis	X	X			
COA Development	X	X	X		
COA Analysis	X	X	X		
COA Comparison			X		
COA Approval			X		
Orders Production			X	X	
Rehearsal	X	X	X	X	X
Execution/Assessment	X	X	X	X	X

Figure 4-4. CRM aligned with the MDMP (Reference: FM 5-19)

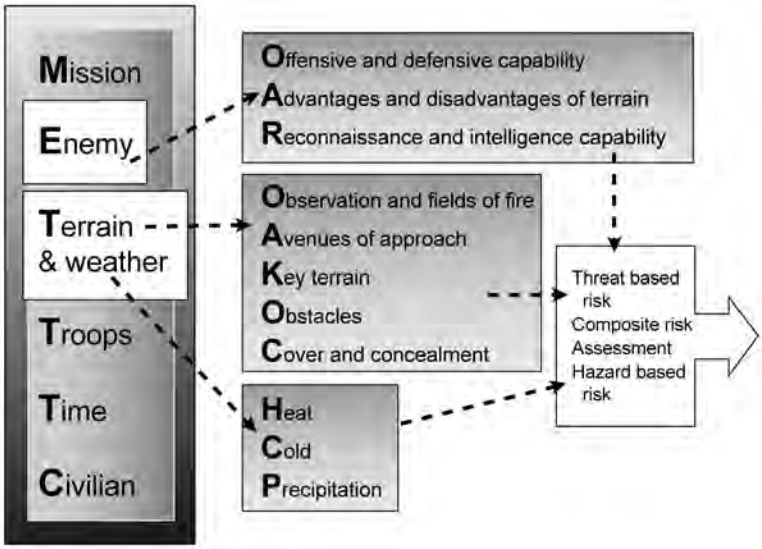


Figure 4-5. Risk assessment factors (Reference: FM 5-19)

Step 8: Develop initial CCIRs and EEFIs.

Mission analysis identifies gaps in information required for further planning and decision making during preparation and execution. During mission analysis, the staff develops information requirements.

Information requirements are all information elements the commander and staff require for the successful conduct of operations; that is, all elements necessary to address the factors of METT-TC. Some information requirements are of such importance to the commander that the staff nominates them to the commander to become a CCIR. The two types of CCIRs are priority information requirements (PIRs) and friendly force information requirements (FFIRs).

- PIRs: Those intelligence requirements stated as a priority for intelligence support that the commander and staff need to understand the adversary or the OE.
- FFIRs: Information the commander and staff need to understand the status of friendly force and supporting capabilities.

The initial CCIRs developed during mission analysis normally focus on decisions the commander needs to make to focus planning. Once the commander selects a COA, the CCIRs shift to information the commander needs to make decisions during preparation and execution.

EEFIs establish an element of information to protect rather than one to collect. EEFIs identify those elements of friendly force information that, if compromised, would jeopardize mission success.

Depending on the situation, the commander and selected staff meet prior to the mission analysis brief to approve the initial CCIRs and EEFIs. This is especially important if the commander intends to conduct ISR operations early in the planning process. The approval of the initial CCIRs, early in planning, assists the staff in developing the initial and subsequent ISR synchronization plan. Approval of EEFIs allows the staff to begin planning and implementing measures to protect friendly force information, such as deception and operations security.

Step 9: Develop an initial ISR synchronization plan.

Note: ISR planning is a collaborative staff process and not left to the S-2 to develop alone.

ISR synchronization is a key integrating process that helps the commander and staff prioritize, manage, and develop a plan to collect on information requirements. ISR synchronization ensures the acquisition of all available information concerning the enemy, terrain and weather, and civil

considerations through intelligence reach, RFIs, and reconnaissance and surveillance tasks. The results are successful reporting, production, and dissemination of relevant information and intelligence to support decision making. ISR synchronization accomplishes the following:

- Identifies requirements and intelligence gaps.
- Evaluates available assets (internal and external) to collect information.
- Determines gaps in the use of those assets.
- Recommends those ISR assets controlled by the organization to collect on the information requirements.
- Submits RFIs for adjacent and higher collection support.

The S-2 submits information gathered during ISR synchronization to the S-3 for integration and development of the ISR plan.

In many instances, a staff section within the headquarters can satisfy information requirements by researching open sources such as books, magazines, encyclopedias, websites, university personnel, and social scientists.

Information requirements have the following characteristics:

- Developed during mission analysis.
- Answer questions about terrain and the enemy.
- Information needed to complete the plan.
- Information needed to execute the fight.

Each information requirement should answer the following:

- What (activity or indicator).
- Where (named area of interest [NAI] or target area of interest [TAI]).
- When (time the indicator is expected to occur and the latest time the information is of value).
- Why (justification — what decision/action will be affected).
- Who (who needs the results).

Prioritize information requirements using METT-TC and the ISR priorities in the commander's initial guidance:

- How important is the information?
- What phase of the battle are we in?
- How much time do we have to collect the information?
- What types of collectors are available?

Figure 4-6. Prioritize information requirements.

ISR synchronization requires the development of the following products and tools used in ISR planning:

- Threat characteristics (to include a complete enemy order of battle).
- Enemy situational templates and COA statements.
- Enemy event template and matrix.
- High-payoff target list.
- Requirements management matrix.
- ISR synchronization matrix.
- ISR overlay.

Step 10: Develop an initial ISR plan.

The S-3 leads the staff through ISR integration to task available reconnaissance and surveillance assets to satisfy information requirements identified in the initial ISR synchronization matrix. ISR integration consists of the tasks below.

- Develop the ISR plan by developing the following:
  - ISR tasking matrix.
  - ISR overlay.
  - ISR scheme of support.
- Issue order (warning, operation, or fragmentary).

The initial ISR plan is crucial to begin or adjust the collection effort to help answer information requirements identified during ISR synchronization. As soon as possible, the S-3 tasks or dispatches ISR assets, and the initial ISR plan sets surveillance and reconnaissance in motion. The S-3 may issue the initial ISR plan as part of a WARNO, a fragmentary order, or an OPORD. Upon the completion of planning, the initial ISR plan becomes Annex L (Intelligence, Surveillance, and Reconnaissance) of the OPORD/OPLAN.

Step 11: Update plan for the use of available time.

The commander and staff compare the time needed to accomplish tasks to the higher headquarters' timeline to ensure mission accomplishment is possible in the allotted time. They also compare the timeline to the assumed enemy timeline or the projected timelines within the civil sector regarding the anticipation of how conditions may unfold. From this, they determine windows of opportunity for exploitation, times when the unit will be at risk for enemy activity, or when action to arrest (stop) deterioration in the civil sector is required.

The commander and executive officer (XO) also refine the staff planning timeline:

- Subject, time, and location of briefings the commander requires.
- Times of collaborative planning sessions and the medium over which they will take place.
- Times, locations, and forms of rehearsals.

Step 12: Develop initial information themes and messages.

Faced with the many different actors (individuals, organizations, and the public) connected with the operation, commanders identify and engage those actors that matter to their operational success. Gaining and maintaining the trust of key actors is an important aspect of operations.

Commanders and their units must coordinate what they do, say, and portray. Fundamental to that process is the development of information themes and messages in support of an operation and military action.

An information theme is a unifying or dominant idea or image that expresses the purpose for military action. Commanders tie information themes to objectives, lines of effort, and end state conditions. Information themes are overarching and apply to the capabilities of public affairs, military information support operations (MISO), and leader and Soldier engagements.

A message is a verbal, written, or electronic communication that supports an information theme focused on a specific actor and in support of a specific action (task).

Transmit information themes and messages to those actors whose perceptions, attitudes, beliefs, and behaviors matter to the success of an operation.

To assist in developing initial information themes and messages for the command, the S-7, with support from the entire staff, reviews the higher headquarters' information themes and messages. They also review internal design products (see chapter 3) if available, including the initial commander's intent, mission narrative, and planning guidance. Information themes and messages are refined throughout the MDMP as commanders refine their commanders' intents and planning guidance and COAs are developed, evaluated, and decided on.

Note: To ensure a common "narrative," develop, synchronize, and execute all themes and messages across all inform and influence activities.

Inform and influence activities is defined as the integrating activities within the mission command warfighting function which ensure themes and messages designed to inform domestic audiences and influence foreign friendly, neutral, adversary, and enemy populations are synchronized with actions to support full spectrum operations. Inform and influence activities incorporate components and enablers, expanding the commander's ability to use other resources to inform and influence.

Step 13: Develop a proposed mission statement.

The executive officer/S-3 prepares a proposed mission statement based on mission analysis and presents it for approval normally during the mission analysis brief.

The mission statement is a short sentence or paragraph that describes the organization's essential task (or tasks) and purpose — a clear statement of the action to be taken and the reason for doing so. The mission statement contains the elements of who, what, when, where, and why, but seldom specifies how.

The five elements of a mission statement answer the following questions:

- Who will execute the operation (unit/organization)?
- What is the unit's essential task (tactical mission task)?
- When will the operation begin (time/event) or what is the duration?
- Where will the operation occur (AO, objective, and grid coordinates)?
- Why will the force conduct the operation (for what purpose or reason)?

The unit mission statement, along with the commander's intent, provides the primary focus for subordinate actions during planning, preparation, execution, and assessing.

The who, what, where, and when of a mission statement are straightforward.

What and why are more challenging to write and can confuse subordinates if not stated clearly. What is a task? Express it in terms of action verbs.

The why puts the task into context by describing the reason for performing it. The why provides the mission's purpose — the reason the unit is to perform the task. It is extremely important to mission command and mission orders. Examples of three mission statements are shown below.

Example 1: Not later than (NLT) 220400 Aug 09 (when), 1st Brigade (who) secures ROUTE SOUTH DAKOTA (what/task) in AO JACKRABBIT (where) to enable the movement of humanitarian assistance materials (why/purpose).

Example 2: 1-505th Parachute Infantry Regiment (who) seizes (what/task) AIRPORT (where) not later than D-day, H+3 (when) to allow follow-on forces to air-land into AO SPARTAN (why/ purpose).

Example 3: The 1-509th Parachute Infantry Regiment (who) seizes (what/task) AIRPORT (where) not later than D-day, H+3 (when) to allow follow-on forces to air-land into AO SPARTAN (why/purpose). On order (when), secure (what/task) OBJECTIVE GOLD (where) to prevent the 2d Pandor Guards Brigade from crossing the BLUE RIVER and disrupting operations in AO SPARTAN (why/purpose).

Figure 4-7. Actions by a friendly force, effects on an enemy force, and types and forms of operations

Step 14: Present the mission analysis briefing.

Ideally, the commander holds several informal meetings with key staff members before the mission analysis briefing. Time permitting, the staff briefs the commander on its mission analysis using the following outline:

- Mission and commander's intent of the headquarters two levels up.
- Mission, commander's intent, and concept of operations of the headquarters one level up.
- Proposed problem statement.
- Proposed mission statement.
- Review of the commander's initial guidance.

- Initial IPB products, including civil considerations (using ASCOPE) that affect the conduct of operations.
- Specified, implied, and essential tasks.
- Pertinent facts and assumptions.
- Constraints.
- Forces available and resource shortfalls.
- Initial risk assessment.
- Proposed information themes and messages.
- Proposed CCIRs and EEFIs.
- Initial ISR plan.
- Recommended timeline.
- Recommended collaborative planning sessions.

Step 15: Develop and issue the commander's initial intent.

The commander's intent succinctly describes what constitutes success for the operation. It includes the operation's purpose and the conditions that define the end state.

Commander's intent links the mission, concept of operations, and tasks to subordinate units. During planning, the initial commander's intent summarizes the commander's visualization. Use the commander's intent to develop and refine COAs. During execution, the commander's intent spurs individual initiative.

Step 16: Develop and issue the initial planning guidance.

Commanders provide planning guidance along with their initial commander's intent. Planning guidance conveys the essence of the commander's visualization. Guidance may be broad or detailed, depending on the situation. The initial planning guidance outlines an operational approach — the broad general actions that will produce the conditions that define the desired end state. The guidance should outline specific COAs the commander wants the staff to look at as well as rule out any COAs the commander will not accept.

(**Note:** Refer to FM 5-0, Annex D for additional information on commander's guidance.)

When developing their concept of operations, commanders first visualize the decisive operation and develop shaping and sustaining operations to

support the decisive operation. The decisive operation is the focal point around which commanders develop the entire operation and prioritize effort.

The main effort is the designated subordinate unit whose mission at a given point in time is most critical to overall mission success. It is usual to weight the main effort unit with the preponderance of combat power (Reference: FM 3-0). Designating a main effort temporarily gives that unit priority of support.

Step 17: Develop COA evaluation criteria.

Evaluation criteria are factors the commander and staff will later use to measure the relative effectiveness and efficiency of one COA relative to other COAs. Developing these criteria during mission analysis or as part of the commander's planning guidance helps to eliminate a source of bias prior to COA analysis and comparison.

Normally, the executive officer initially determines each proposed criterion, with weights based on the assessment of its relative importance and the commander's guidance. Commanders adjust criterion selection and weighting according to their own experience and vision. Sample evaluation criteria:

- Simplicity.
- Maneuver.
- Fires.
- Civil control.
- Support mission narrative.

Other possible criteria: time required, casualties, damage to infrastructure, host-nation special operating forces integration, local support, media impact, and external agency support.

Step 18: Issue a WARNO.

Immediately after the commander gives the planning guidance, the staff sends subordinate and supporting units a WARNO (WARNO #2) that contains, at a minimum, the following information:

- Approved mission statement.
- Commander's intent.
- Changes to task organization.
- Unit AO (sketch, overlay, or some other description).

- CCIRs and EEFIs.
- Risk guidance.
- Priorities by warfighting functions.
- Military deception guidance.
- Essential stability tasks.
- Specific priorities.

Chapter 5

Course of Action Development

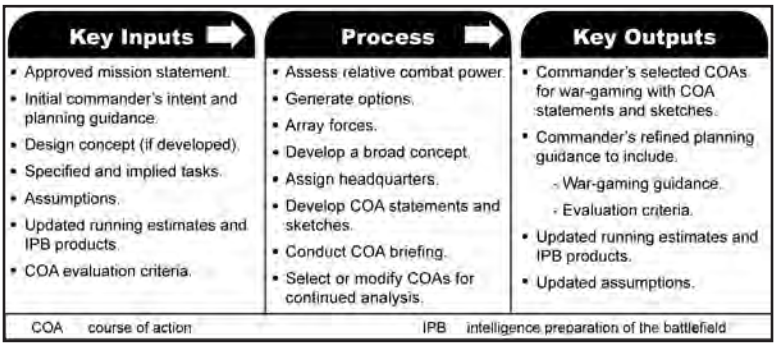


Figure 5-1. Course of action (COA) development (Reference: Field Manual [FM] 5-0, *The Operations Process*)

A COA is a broad potential solution to an identified problem. The COA development step generates options for follow-on analysis and comparison that satisfy the commander's intent and planning guidance. During COA development, planners use the problem statement, mission statement, commander's intent, planning guidance, and the various knowledge products developed during mission analysis to develop COAs.

Examine each prospective COA for validity using the following screening criteria:

- **Feasible:** The COA can accomplish the mission within the established time, space, and resource limitations.
- **Acceptable:** The COA must balance cost and risk with the advantage gained.
- **Suitable:** The COA can accomplish the mission within the commander's intent and planning guidance.
- **Distinguishable:** Each COA must differ significantly from the others (such as scheme or form of maneuver, lines of effort, phasing, day or night operations, use of reserve forces, and task organization).
- **Complete:** A COA must incorporate the following information:
    - How the decisive operation leads to mission accomplishment.

- ○ How shaping operations create and preserve conditions for success of the decisive operation or effort.
- ○ How sustaining operations enable shaping and decisive operations or efforts.
- ○ How to account for offensive, defensive, and stability or civil support tasks.
- ○ Tasks to be performed and conditions to be achieved.

COA Development

COA development includes the following eight steps:

- Step 1: Assess relative combat power.
- Step 2: Generate options.
- Step 3: Array forces.
- Step 4: Develop a broad concept.
- Step 5: Assign headquarters.
- Step 6: Develop COA statements and sketches.
- Step 7: Conduct COA briefing.
- Step 8: Select or modify COAs for continued analysis.

Step 1: Assess relative combat power.

According to FM 3-0, *Operations,* combat power is the total means of destructive, constructive, and information capabilities that a military unit can apply at a given time. It is the effect created by combining the elements of intelligence, movement and maneuver, fires, sustainment, protection, mission command, information, and leadership. The goal is to generate overwhelming combat power to accomplish the mission at minimal cost.

To assess relative combat power, planners initially make a rough estimate of force ratios of maneuver units two levels down. Planners then compare friendly strengths against enemy weaknesses, and vice versa, for each element of combat power. From these comparisons, they may deduce particular vulnerabilities for each force to exploit or that may need protection. These comparisons provide planners insight into effective force employment.

For stability and civil support operations, staffs often determine relative combat power by comparing available resources to specified or implied stability or civil support tasks. This is known as troop-to-task analysis. This

analysis provides insight as to what options are available and whether more resources are required. In such operations, the elements of sustainment, movement and maneuver, nonlethal effects, and information may predominate.

Comparing the most significant strengths and weakness of each force in terms of combat power gives planners insight into the following areas:

- Friendly capabilities that pertain to the operation.
- Types of operations possible from both friendly and enemy perspectives.
- How and where the enemy may be vulnerable.
- How and where friendly forces are vulnerable.
- Additional resources that may be required to execute the mission.
- How to allocate existing resources.

Assessing combat power requires assessing both tangible and intangible factors such as morale and levels of training. A relative combat power assessment identifies enemy weaknesses to exploit, identifies friendly weaknesses that require protection, and determines the combat power necessary to conduct essential stability or civil support tasks.

Planners combine the numerical force ratio with the results of their analysis of intangibles to determine the relative combat power of friendly and enemy forces. They determine what types of operations are feasible by comparing the force ratio with the historical minimum planning ratios for the contemplated combat missions and estimating the extent to which intangible factors affect the relative combat power. If, in the staff's judgment, the relative combat power of the force produces the effects of the historical minimum-planning ratio for a contemplated mission, that mission is feasible.

Elements of Combat Power	Enemy strengths/ weaknesses	Friendly strengths/ weaknesses	Advantage	
			Friendly	Enemy
Maneuver	**Strength**: Infantry with numerous anti-tank weapons. **Weakness**: Poorly maintained equipment. Lack of mobility between battle positions.	**Strength**: 3 X M1A2 equip combined arms task forces.	X	
Firepower	**Weakness**: Limited to mortar fires.	**Strength**: Air supremacy, unopposed CAS, rocket and cannon fires.	X	
Protection	**Strength**: Fully constructed defensive position with overhead cover.	**Strength**: Night vision capability; weapons standoff. **Weakness**: Soft skin vehicles and dismounted infantry.		X
Leadership	**Strength**: Elite unit very disciplined. **Weakness**: Lack of initiative by subordinates without orders from higher command.	**Strength**: Combat tested unit. Aggressive and offensive oriented command climate.	X	
Information	**Strength**: Full backing of local population and regional press. **Weakness**: C2 very acceptable to jamming and interception.	**Strength**: Secure and reliable C2 systems. **Weakness**: Seen as invaders and occupiers by opposing force and local population.		X

Figure 5-2. Elements of combat power analysis sample

Friendly Mission	Position	Friendly: Enemy
Delay		1:6
Defend	Prepared of fortified	1:3
Defend	Hasty	1:2.5
Attack	Prepared or fortified	3:1
Attack	Hasty	2.5:1
Counterattack	Flank	1:1

Figure 5-3. Historical minimum planning ratios (Reference: FM 5-0)

Step 2: Generate options.

Based on commander's guidance and initial results of the relative combat power assessment, the staff generates options. A good COA can defeat all feasible enemy COAs while accounting for essential stability tasks. In an unconstrained environment, the goal is to develop several possible COAs. Time dependent, commanders may limit the options in the commander's guidance.

Brainstorming is the preferred technique for generating options. It requires time, imagination, and creativity, but it produces the widest range of choices.

Note: When possible, brainstorming should include participants from all agencies and organizations that provide a capability to the planning unit.

When generating options, the staff starts with the decisive operation identified in the commander's planning guidance. The staff checks that the decisive operation nests within the higher headquarters' concept of operations. The staff clarifies the decisive operation's purpose and considers ways to mass the effects (lethal and nonlethal) of overwhelming combat power to achieve it.

- The decisive operation is the focal point around which commanders develop the entire operation and prioritize effort.
- The main effort is the designated subordinate unit whose mission at a given point in time is most critical to overall mission success.

Next, the staff considers shaping operations. The staff establishes a purpose for each shaping operation tied to creating or preserving a condition for the decisive operation's success. Shaping operations may occur before, concurrently with, or after the decisive operation.

The staff then determines sustaining operations necessary to create and maintain the combat power required for the decisive operation and shaping operations.

After developing the basic operational organization for a given COA, the staff then determines the essential tasks for each decisive, shaping, and sustaining operation.

Once staff members have explored possibilities for each COA, they examine each COA to determine if it satisfies the previously established screening criteria. In doing so, they change, add, or eliminate COAs as appropriate, but must avoid the common pitfall of focusing on the development of one good COA among several throwaway COAs.

Step 3: Array forces.

After determining the decisive and shaping operations and their related tasks and purposes, planners determine the relative combat power required to accomplish each task.

In counterinsurgency (and stability) operations, planners can develop force requirements by gauging troop density — the ratio of security forces (including host-nation military and police forces as well as foreign counterinsurgents) to inhabitants. Most density recommendations fall within a range of 20 to 25 counterinsurgents for every 1,000 residents in an area of operation (AO). (See FM 3-24, *Counterinsurgency.*)

A COA may require a follow-on force to establish civil security, maintain civil control, and restore essential services in a densely populated urban area over an extended period. Planners conduct a troop-to-task analysis to determine the type of units and capabilities to accomplish these tasks.

Planners initially array friendly forces starting with the decisive operation and continuing with all shaping and sustaining operations. Planners normally array ground forces two levels down. The initial array focuses on generic ground maneuver units without regard to specific type or task organization and then considers all appropriate intangible factors. During this step, planners do not assign missions to specific units; they only consider which forces are necessary to accomplish the task. In this step, planners also array assets to accomplish essential stability tasks.

If the number of units arrayed exceeds the number available and compensating the difference is not possible with intangible factors, the staff determines whether the COA is feasible. Commanders should also consider requirements to minimize and relieve civilian suffering. Establishing civil security and providing essential services such as medical care, food and water, and shelter are implied tasks for commanders during any combat operation.

		Battalion Areas of Operation			
		AO Copper	AO Iron	AO Tin	AO Metal
Specified/Implied Tasks	Secure key infrastructure	4/2/0	2/1/1	3/1/1	**9/4/2**
	Establish and secure CMOC	1/1/0	0/0/0	1/0/1	**2/1/1**
	Conduct population control	6/4/0	3/2/1	3/1/1	**12/7/2**
	Conduct route security	2/1/1	4/1/0	2/0/0	**8/2/1**
	Conduct base security (COPs)	1/0/1	1/1/0	1/1/0	**3/2/1**
	Rest/Refit	2/1/1	2/1/1	2/1/1	**6/3/3**
	Total Platoons	**16/9/3**	**12/6/3**	**12/4/4**	**40/19/10**

	US	ANA	ANP
Available Combat Platoons	48	20	12
Remaining Combat Platoons	8	1	2

Steps:
1. Subdivide urban area into areas of operation based on demographics.
2. List out specified and implied tasks that need to be accomplished.
3. Determine a combat power metric (i.e. 1 x PLT per key infrastructure. 1x PLT to per 1,000 people for population control. 1 x PLT per CO for rest/refit).
4. Fill out table with the number of platoons and total up at the bottom to determine number of platoons required for each AO.
5. Consolidate AOs if possible and assign headquarters.

Legend

ANA: Afghan National Army
ANP: Afghan National Police
CMOC: Civil-military operations center
CO: Company
COPs: Common operating pictures
PLT: Platoon

Figure 5-4. Troops-to-task analysis

Step 4: Develop a broad concept.

The broad concept describes how arrayed forces will accomplish the mission within the commander's intent. It concisely expresses the "how" of the commander's visualization and will eventually provide the framework for the concept of operations. The broad concept summarizes the contributions of all warfighting functions. The staff develops a broad concept for each COA, which it expresses in both narrative and graphic forms.

A sound COA is more than the arraying of forces. It should present an overall combined arms idea that will accomplish the mission.

The broad concept includes the following:

- Purpose of the operation.
- Statement of where the commander will accept risk.
- Identification of critical friendly events and transitions between phases (if the operation is phased).
- Designation of the decisive operation, along with its task and purpose, linked to how it supports the higher headquarters' concept.
- Designation of shaping operations, along with their tasks and purposes, linked to how they support the decisive operation.
- Designation of sustaining operations, along with their tasks and purposes, linked to how they support the decisive and shaping operations.
- Designation of the reserve force, including its location and composition.
- Intelligence, surveillance, and reconnaissance operations.
- Security operations.
- Essential stability tasks.
- Identification of maneuver options that may develop during an operation.
- Assignment of subordinate AOs.
- Scheme of fires.
- Information themes, messages, and means of delivery.
- Military deception operations.
- Key control measures.

Planners select control measures, including graphics, to control subordinate units during the operation. Good control measures foster freedom of action, decision making, and individual initiative.

Lines of operations and lines of effort are two key elements of operational design that assist in developing a concept of operations. Major combat operations are typically designed using lines of operations. These lines tie

tasks to the geographic and positional references in the AO. Commanders synchronize activities along complementary lines of operations to achieve the desired end state. Lines of operations may be either interior or exterior. (See FM 3-0, *Operations.*)

The line of effort is a useful tool for framing the concept of operations when stability or civil support operations dominate. Lines of effort link multiple tasks with goal-oriented objectives that focus efforts toward establishing end state conditions. Using lines of effort is essential in planning when positional references to an enemy or adversary have little relevance. In operations involving many nonmilitary factors, lines of effort may be the only way to link subordinate unit tasks with objectives and desired end state conditions. Lines of effort are often essential to helping commanders visualize how military capabilities can support the other instruments of national power.

Combining lines of operations and lines of efforts allows planners to include nonmilitary activities in their broad concept. This combination helps commanders incorporate stability or civil support tasks that, when accomplished, help set end state conditions of the operation.

Step 5: Assign headquarters.

After determining the broad concept, planners create a task organization by assigning headquarters to groupings of forces. They consider the types of units for assignment to a headquarters and the ability of that headquarters to control those units. Generally, a headquarters controls at least two subordinate maneuver units (but not more than five) for fast-paced offensive or defensive operations. The number and type of units assigned to a headquarters for stability operations will vary based on factors of mission, enemy, terrain and weather, troops and support available-time available and civil considerations. If planners need additional headquarters, they note the shortage and resolve it later.

Step 6: Develop COA statements and sketches.

The operations officer prepares a COA statement and supporting sketch for each COA. The COA statement clearly portrays how the unit will accomplish the mission. The COA statement should be a brief expression of how to conduct the combined arms concept. The sketch provides a picture of the movement and maneuver aspects of the concept, including the positioning of forces.

At a minimum, the COA sketch includes the array of generic forces and control measures, such as the following:

- Unit and subordinate unit boundaries.

- Unit movement formations (but not subordinate unit formations).
- Line of departure or line of contact and phase lines, if used.
- Reconnaissance and security graphics.
- Ground and air axes of advance.
- Assembly areas, battle positions, strong points, engagement areas, and objectives.
- Obstacle control measures and tactical mission graphics.
- Fire support coordination and airspace control measures.
- Main effort.
- Location of command posts and critical information systems nodes.
- Enemy known or templated locations.
- Population concentrations.

Planners can include identifying features (e.g., cities, rivers, and roads) to help orient users. The sketch may be on any medium.

Graphic control measures (GCMs) are graphic directives given by a commander to subordinate commanders to assign responsibilities, coordinate fire and maneuver, and control combat operations. In general, the commander and staff develop GCMs during COA development. They use GCMs to convey and enhance the understanding of the concept of operations, prevent fratricide, and clarify the task and purpose of the main effort.

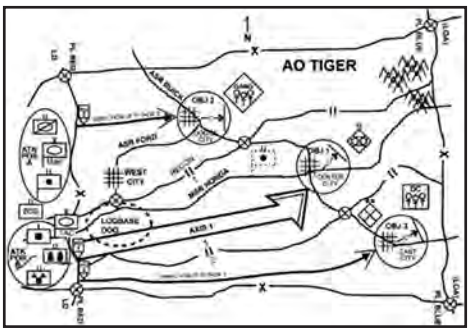


Figure 5-5. Sample brigade COA sketch (Reference: FM 5-0)

Step 7: Conduct COA briefing.

After developing COAs, the staff briefs them to the commander. The COA briefing includes the following information:

- Updated intelligence preparation of the battlefield.
- Possible enemy COAs.
- Approved problem statement and mission statement.
- Commander's and higher commander's intents.
- COA statements and sketches, including lines of effort if used.
- The rationale for each COA, including:
    - ○ Considerations that might affect enemy COAs.
    - ○ Critical events for each COA.
    - ○ Deductions resulting from the relative combat power analysis.
    - ○ Reason for unit arrangements as shown on the sketch.
    - ○ Reason the staff used the selected control measures.
    - ○ Impact on civilians.
    - ○ How the COA accounts for minimum essential stability tasks.
    - ○ Updated facts and assumptions.
    - ○ Refined COA evaluation criteria.

Step 8: Select or modify COAs for continued analysis.

After the COA briefing, the commander selects or modifies those COAs for continued analysis. The commander also issues planning guidance. If the commander rejects all COAs, the staff begins again. If one or more of the COAs are accepted, staff members begin COA analysis.

Chapter 6

Course of Action Analysis

Course of action (COA) analysis is one of the most important steps of the military decisionmaking process (MDMP), possibly second only to completing a thorough intelligence preparation of the battlefield (IPB). COA analysis (war-gaming) is a disciplined process, with rules and steps that attempt to visualize the flow of the operation given the force's strengths and dispositions, enemy's capabilities and possible COAs, impact and requirements of civilians in the area of operations (AO), and other aspects of the situation. The eight steps of COA analysis include the following:

- Step 1: Gather the tools.
- Step 2: List all friendly forces.
- Step 3: List assumptions.
- Step 4: List known critical events and decision points.
- Step 5: Select the war-gaming method.
- Step 6: Select a technique to record and display results.
- Step 7: War-game operation and assess results.
- Step 8: Conduct a war-game briefing (optional).

Figure 6-1. COA analysis (Reference: Field Manual [FM] 5-0, *The Operations Process*)

Each critical event within a proposed COA should be war-gamed using the action, reaction, and counteraction methods of friendly and enemy

forces interaction (as well as impact on the local population). It helps the commander and staff to synchronize warfighting functions and:

- Determine how to maximize the effects of combat power while protecting friendly forces and minimizing collateral damage.
- Develop a further visualization of the operation.
- Anticipate operational events.
- Determine conditions and resources required for success.
- Determine when and where to apply force capabilities.
- Focus the IPB on enemy strengths and weaknesses, important civil considerations, and the desired end state.
- Identify coordination needed to produce synchronized results.
- Determine the most flexible COA.

The staff's war-gaming results in refined COAs, a completed synchronization matrix, and decision support templates and matrixes for each COA. War gamers need to:

- Remain objective, not allowing personality or their sense of what the commander wants to influence them. (They avoid defending a COA just because they personally developed it.)
- Record advantages and disadvantages of each COA accurately as they emerge.
- Continually assess feasibility, acceptability, and suitability of each COA. (If a COA fails any of these tests, they reject it.)
- Avoid drawing premature conclusions and gathering facts to support such conclusions.
- Avoid comparing one COA with another during the war game. (This occurs during COA comparison.)

War-gaming Steps

Step 1: Gather the tools.

The executive officer directs the staff to gather tools, materials, and data for the war game. Units war-game with maps, sand tables, computer simulations, or other tools that accurately reflect the physical and human terrain. The staff posts the COA on a map displaying the AO. Tools required include but are not limited to the following:

- Running estimates.
- Event templates.
- Recording method.
- Completed COAs, including graphics.
- Means to post or display enemy and friendly unit symbols and other organizations.
- Map of the AO.

Step 2: List all friendly forces.

The commander and staff consider all units that can be committed to the operation, paying special attention to support relationships and constraints. This list must include assets from all participants operating in the AO. The friendly forces list remains constant for all COAs. The staff should take into account elements such as host-nation special operations forces and nongovernmental and interagency organizations.

Step 3: List assumptions.

The commander and staff review previous assumptions for continued validity and necessity.

Step 4: List known critical events and decision points.

Critical events are those that directly influence mission accomplishment. They include events that trigger significant actions or decisions (such as commitment of an enemy reserve), complicated actions requiring detailed study (such as a passage of lines), and essential tasks. The list of critical events includes major events from the unit's current position through mission accomplishment. It includes reactions by civilians that might affect operations or that will require allocation of significant assets to account for essential stability tasks.

A decision point is a point in space and time when the commander or staff anticipates making a key decision concerning a specific COA (Joint Publication [JP] 5-0, *Joint Operation Planning*). Decision points may also be associated with the friendly force and the status of ongoing operations. A decision point may be associated with the commander's critical information requirements (CCIRs), which describe what information the commander needs to make the anticipated decision. The priority information requirement (PIR) describes what the commander must know about the enemy or the operational environment and often is associated with a named area of interest (NAI).

Step 5: Select the war-gaming method.

There are three recommended war-gaming methods: belt, avenue in depth, and box. Each considers the area of interest and all enemy forces that can affect the outcome of the operation. The staff can use these methods separately or in combination and modified for long-term operations dominated by stability.

- The belt method divides the AO into areas running the width of the AO based on mission, enemy, terrain and weather, troops and support available-time available and civil considerations (METT-TC). It is most effective when the terrain is divided into well-defined cross-compartments, during phased operations, or when the enemy deploys in clearly defined belts or echelons. Belts can be adjacent to or overlap each other. The basis for this war-gaming method is a sequential analysis of events in each belt. It is preferred because it focuses simultaneously on all forces affecting a particular event. The modified belt method divides the AO into not more than three sequential belts. In stability operations, the belt method can divide the COA by events, objectives (goals, not geographic location), or events and objectives in a selected slice across all lines of effort.

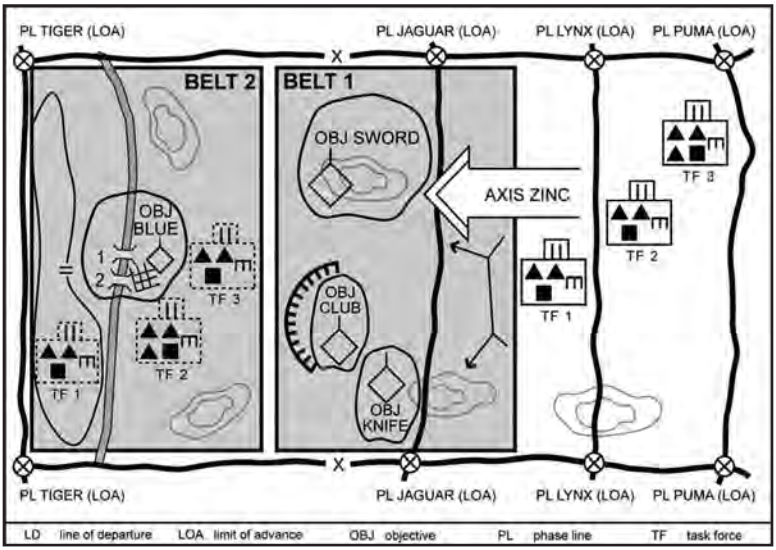


Figure 6-2. Sample belt method (Reference: FM 5-0)

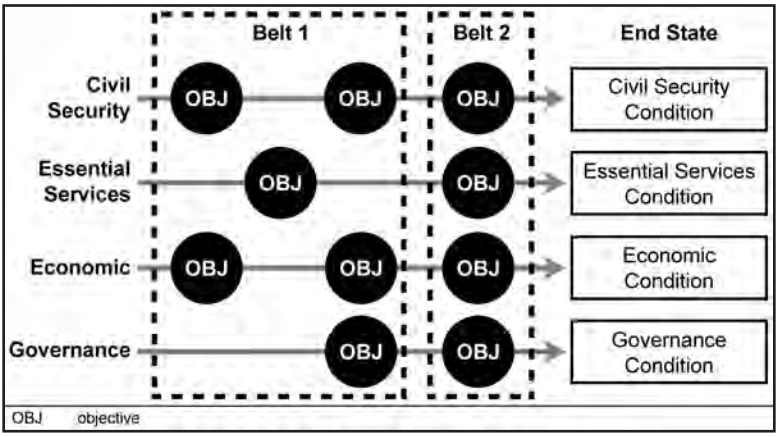


Figure 6-3. Sample belt method stability operations (Reference: FM 5-0)

- The avenue-in-depth method focuses on one avenue of approach at a time, beginning with the decisive operation. This method is good for offensive COAs or in the defense when canalizing terrain inhibits mutual support. In stability operations, the staff may modify the avenue-in-depth method. Instead of focusing on a geographic avenue, the staff war-games a line of effort. This method focuses on one line of effort at a time, beginning with the decisive line. It includes not only war-gaming events, objectives, or events and objectives in the selected line, but also war-gaming relationships among events or objectives on all lines of effort with respect to events in the selected line.

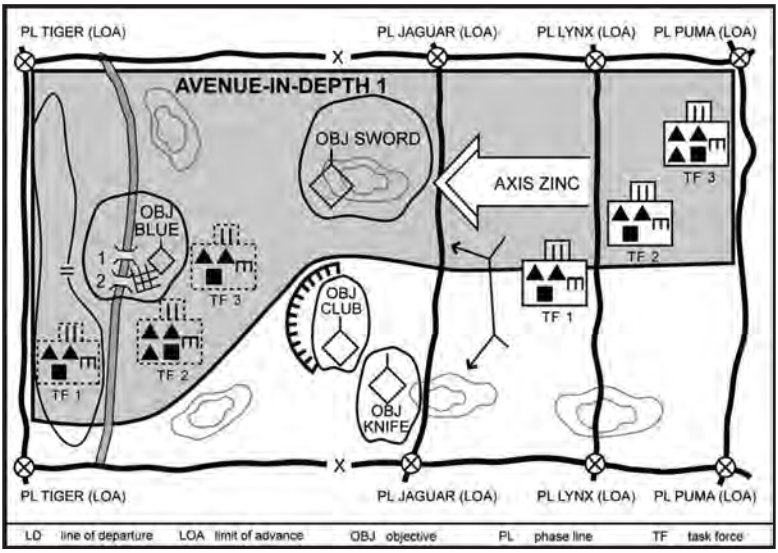


Figure 6-4. Sample avenue-in-depth method (Reference: FM 5-0)

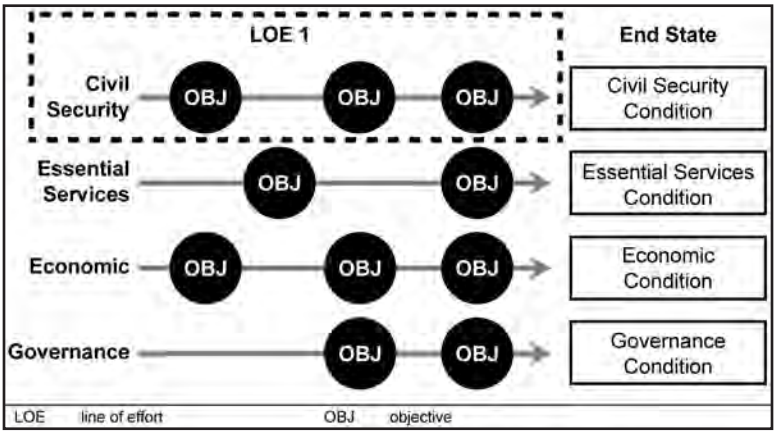


Figure 6-5. Sample avenue-in-depth method for stability operations (Reference: FM 5-0)

- The box method is a detailed analysis of a critical area, such as an engagement area, a river-crossing site, or a landing zone. It works best in a time-constrained environment, such as a hasty attack. It is particularly useful when planning operations in noncontiguous AOs. The staff isolates the area and focuses on critical events in it. Staff members assume that friendly units can handle most situations in the AOs and focus their attention on essential tasks. In stability operations, the box method may focus analysis on a specific objective along a line of effort such as development of local security forces as part of improving civil security.

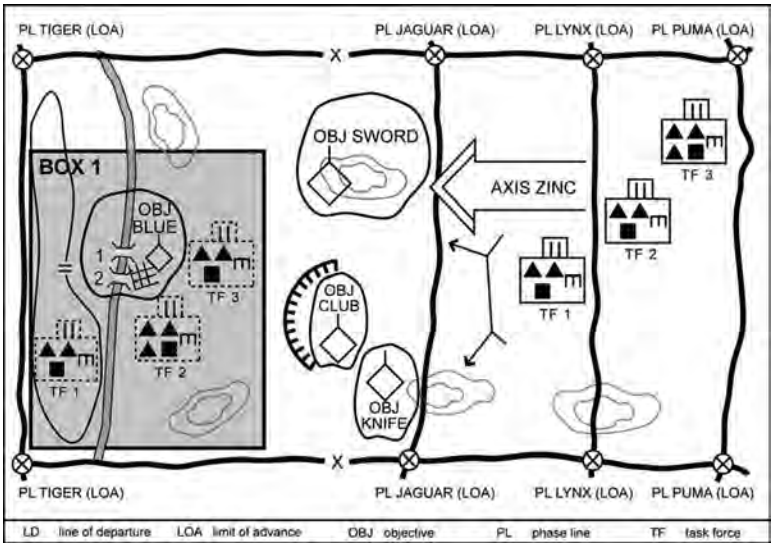


Figure 6-6. Sample box method (Reference: FM 5-0)

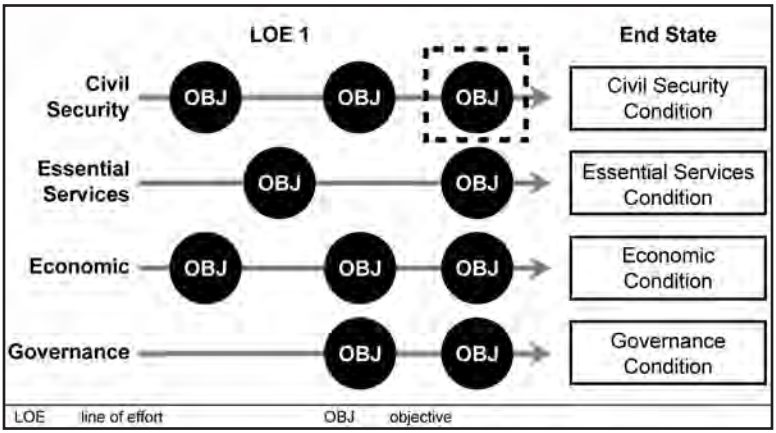


Figure 6-7. Sample box method for stability operations (Reference: FM 5-0)

Step 6: Select a method to record and display results.

The war-game results provide a record from which to build task organizations, synchronize activities, develop decision support templates, confirm and refine event templates, prepare plans or orders, and compare COAs. Two techniques are commonly used to record and display results: the synchronization matrix technique and the sketch note technique. In both techniques, staff members record any remarks regarding the strengths and weaknesses they discover.

The synchronization matrix is generally the most common technique. The synchronization matrix is a tool the staff uses to record the results of war-gaming and helps it synchronize a COA across time, space, and purpose in relationship to potential enemy and civil actions.

Step 7: War-game the operation and assess the results.

War-gaming is a conscious attempt to visualize the flow of operations given the friendly force's strengths and disposition, the enemy's capabilities and possible COAs, and civilians. During the war game, the commander and staff try to foresee the actions, reactions, and counteractions of all participants, to include civilians. The staff analyzes each selected event. They identify tasks the force must accomplish one echelon down and the use of assets two echelons down. Identifying strengths and weaknesses of each COA allows the staff to adjust the COAs as necessary.

The war game follows an action-reaction-counteraction cycle. Actions are those events initiated by the side with the initiative. (In defensive and

stability operations, this is generally the enemy.) Reactions are the opposing side's actions in response. With regard to stability operations, the war game tests the effects of actions, including intended and unintended effects, as they stimulate anticipated responses from civilians and civil institutions. Counteractions are the first side's responses to reactions.

The commander and staff examine many areas in detail during the war game to include:

- All friendly capabilities.
- All enemy capabilities.
- Civilian reactions to all friendly (and enemy) actions.
- Global media responses to proposed actions.
- Movement considerations.
- Closure rates.
- Lengths of columns.
- Formation depths.
- Ranges and capabilities of weapon systems.
- Desired effects of fires.

The staff identifies the required assets of the warfighting functions to support the concept of operations, including those needed to synchronize sustaining operations. If requirements exceed available assets, the staff recommends priorities.

Note: Do not become derailed by extraneous minutiae. If the allocation of the assets is appropriate to address a specific situation, then quickly assess the results and continue the process.

War-gaming responsibilities

The executive officer coordinates actions of the staff during the war game. The XO is the unbiased controller of the process, ensuring the staff stays on a timeline and achieves the goals of the war-gaming session. In a time-constrained environment, the XO ensures that, at a minimum, the decisive operation is war-gamed.

The following paragraphs list the staff members who are involved during the war game and their responsibilities.

Intelligence

The S-2 role-plays the enemy commander. The S-2 develops critical enemy decision points in relation to the friendly COAs, projects enemy reactions to friendly actions, and projects enemy losses. When additional intelligence staff members are available, the intelligence officer assigns different responsibilities to individual staff members within the section for war-gaming (such as the enemy commander, friendly intelligence officer, and enemy recorder). The intelligence officer captures the results of each enemy action and counteraction as well as the corresponding friendly and enemy strengths and vulnerabilities. By trying to win the war game for the enemy, the intelligence officer ensures the staff fully addresses friendly responses for each enemy COA. For the friendly force, the S-2:

- Identifies information requirements.
- Refines the situation and event templates, including NAIs that support decision points.
- Refines the event template with corresponding decision points, target areas of interest, and high-value targets.
- Participates in targeting to select high-payoff targets from high-value targets identified during the IPB.
- Recommends PIRs that correspond to the decision points.

Movement and maneuver

The S-3 normally selects the technique for the war game and role-plays the friendly maneuver commander. Various staff officers such as the aviation officer, engineer officer, and red team members assist the S-3. The S-3 executes friendly maneuver as outlined in the COA sketch and COA statement.

The S-5 assesses warfighting requirements, solutions, and concepts for each COA. This plans officer develops plans and orders and determines potential branches and sequels arising from the war-gaming of various COAs. The S-5 coordinates and synchronizes warfighting functions in all plans and orders. The planning staff ensures the war game of each COA covers every operational aspect of the mission. The members of the staff record each event's strengths, weaknesses, and the rationale for each action. They complete the decision support template and matrix for each COA.

Fires

The fire support officer assesses the fire support feasibility of each COA. For each COA, the chief of fires develops the fire support execution matrix

and evaluation criteria to measure the effectiveness of the fire support. This officer develops a proposed high-priority target list, target selection standards, and attack guidance matrix. The chief of fires identifies named and target areas of interest, high-value targets, high-priority targets, and additional events that may influence the positioning of fire support assets.

Protection

The provost marshal officer advises the commander regarding military police functions, security, force protection issues, and the employment of assigned or attached military police elements for each COA. The provost marshal assesses military police operations in support of freedom of movement, security for ground lines of communication, operational law enforcement, and operational internment and resettlement operations.

Sustainment

The S-4 assesses the logistics feasibility of each COA. This officer determines critical requirements for each logistics function (Classes I through VII and IX) and identifies potential problems and deficiencies. The S-4 assesses the status of all logistics functions required to support the COA, including potential support required to provide essential services to the civilians, and compares it to available assets.

The S-1 assesses the personnel aspect of building and maintaining the combat power of units. This officer identifies potential shortfalls and recommends COAs to ensure units maintain adequate manning to accomplish their missions. The personnel officer estimates potential personnel battle losses and assesses the adequacy of resources to provide human resources support for the operation.

Note: The sustainment section should also include host-nation security forces and local population battle losses and resource capabilities into war-gaming.

The S-8 assesses the commander's area of responsibility to determine the best COA for use of resources. This includes both core functions of financial management: resource management and finance operations. This officer determines partner relationships (joint, interagency, intergovernmental, and multinational), requirements for special funding, and support to the procurement process.

The surgeon (medical) section provides advice for medically related matters and exercises technical supervision of all medical activities within the AO.

Command and control

The S-6 determines communication systems requirements and compares them to available assets, identifies potential shortfalls, and recommends actions to eliminate or reduce their effects.

The S-7 assesses how effectively the unit reflects its information themes and messages in operations. This officer assesses the effectiveness of the media (in conjunction with the public affairs officer). Lastly, this officer assesses how information themes and messages influence various audiences of interest and populations in and outside the AO.

The S-9 ensures each COA effectively integrates civil considerations (the "C" of METT-TC). The S-9 considers not only tactical issues but also sustainment issues. This officer assesses how operations affect civilians and estimates the requirements for essential stability tasks commanders might have to undertake based on the ability of the unified action. Host-nation support and care of dislocated civilians are of particular concern. The analysis considers how operations affect public order and safety, the potential for disaster relief requirements, noncombatant evacuation operations, emergency services, and the protection of culturally significant sites. This officer provides feedback on how the culture in the AO affects each COA. If the unit lacks an assigned civil affairs operations officer, the commander assigns these responsibilities to another staff member.

The staff judge advocate advises the commander on all matters pertaining to law, policy, regulation, and good order and discipline for each COA. This officer provides legal advice across the spectrum of conflict on law of war, rules of engagement, international agreements, Geneva Conventions, treatment and disposition of noncombatants, and the legal aspects of lethal and nonlethal targeting.

An effective war game results in refining:

- Or modifying each COA, including identifying branches and sequels that become on-order or be-prepared missions.
- The locations and times of decisive points.
- The enemy event template and matrix.
- The task organization, including forces retained in general support.
- Command and control requirements, including control measures and updated operational graphics.

- CCIRs and information requirements — including the last time information of value — and incorporating them into the intelligence, surveillance, and reconnaissance (ISR) plan and information management plans.

An effective war game results in identifying:

- Key or decisive terrain and determining how to use it.
- Tasks the unit retains and tasks assigned to subordinates.
- Likely times and areas for enemy use of weapons of mass destruction and friendly chemical, biological, radiological, and nuclear defense requirements.
- Potential times or locations for committing reserve forces.
- The most dangerous enemy COA.
- The most dangerous civilian reaction.
- Locations for the commander, command posts, and information system (INFOSYS) nodes.
- Critical events.
- Requirements for support of each warfighting function.
- Effects of friendly and enemy actions on civilians and infrastructure and how these will affect military operations.
- Or confirming the locations of NAIs, target areas of interest, decision points, and information requirements needed to support them.
- Analyzing and evaluating strengths and weaknesses of each COA.
- Hazards, assessing their risk, developing controls for them, and determining residual risk.
- The coordination required for integrating and synchronizing interagency, host-nation, and nongovernmental organization involvement.

An effective war game results in analyzing:

- Potential civilian reactions to operations.
- Potential media reaction to operations.
- Potential impacts on civil security, civil control, and essential services in the AO.

An effective war game results in developing:

- Decision points.
- A synchronization matrix.
- A decision support template and matrix.
- Solutions to achieving minimum essential stability tasks in the AO.
- The ISR plan and graphics.
- Initial information themes and messages.
- Fires, protection, and sustainment plans and graphic control measures.

An effective war game results in:

- Determining requirements for military deception and surprise.
- Determining the timing for concentrating forces and starting the attack or counterattack.
- Determining movement times and tables for critical assets, including INFOSYS nodes.
- Estimating the duration of the entire operation and each critical event.
- Projecting the percentage of enemy forces defeated in each critical event and overall.
- Projecting the percentage of minimum essential tasks that the unit can or must accomplish.
- Anticipating media coverage and impact on key audiences.
- Integrating targeting into the operation, to include identifying or confirming high-payoff targets and establishing attack guidance.
- Allocating assets to subordinate commanders to accomplish their missions.

Step 8: Conduct a war-game briefing (optional).

If time permits, the staff delivers a briefing to all affected elements to ensure everyone understands the results of the war game. The staff uses the briefing for review and ensures it captures all relevant points of the war game for presentation to the commander, chief of staff or executive officer, or deputy or assistant commander in the COA decision briefing. In a collaborative environment, the briefing may include selected subordinate staffs. A war-game briefing format includes the following:

- Higher headquarters' mission, commander's intent, and military deception plan.
- Updated IPB.
- Friendly and enemy COAs that were war-gamed, including:
    - Critical events.
    - Possible enemy actions and reactions.
    - Possible impact on civilians.
    - Possible media impacts.
    - Modifications to the COAs.
    - Strengths and weaknesses.
    - Results of the war game.
- Assumptions.
- War-gaming technique used.

Chapter 7

Course of Action Comparison

Course of action (COA) comparison is an objective process to evaluate COAs independently of each other and against set evaluation criteria approved by the commander and staff. The goal to identify the strengths and weaknesses of COAs enables selecting a COA with the highest probability of success and further developing it in an operation plan or operation order. The commander and staff perform certain actions and processes that lead to the key outputs in Figure 7-1.

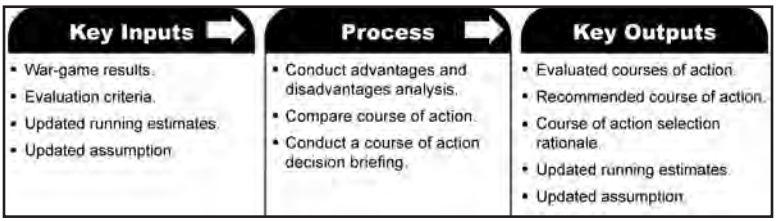


Figure 7-1. COA comparison (Reference: Field Manual [FM] 5-0, *The Operations Process*)

Step 1: Conduct advantages and disadvantages analysis.

COA comparison starts with all staff members analyzing and evaluating the advantages and disadvantages of each COA from their perspectives. Using the evaluation criteria developed before the war game, the staff outlines each COA, highlighting its advantages and disadvantages. Comparing the strengths and weaknesses of the COAs identifies their advantages and disadvantages with respect to each other.

Step 2: Compare COAs.

Comparison of COAs is critical. The staff may use any technique that facilitates developing those key outputs and recommendations and helping the commander make the best decision. A common technique is the decision matrix.

The staff compares feasible COAs to identify the one with the highest probability of success against the most likely enemy COA, the most dangerous enemy COA, the most important stability task, or the most damaging environmental impact. The selected COA should also:

- Pose the minimum risk to the force and mission accomplishment.

- Place the force in the best posture for future operations.
- Provide maximum latitude for initiative by subordinates.
- Provide the most flexibility to meet unexpected threats and opportunities.
- Provide the most secure and stable environment for civilians in the area of operations.
- Best facilitate initial information themes and messages.

Step 3: Conduct a COA decision briefing.

After completing its analysis and comparison, the staff identifies its preferred COA and makes a recommendation. If the staff cannot reach a decision, the chief of staff (executive officer) decides which COA to recommend. The staff then delivers a decision briefing to the commander. The chief of staff (executive officer) highlights any changes to each COA resulting from the war game. The decision briefing includes the following:

- The commander's intent of the higher and next higher commanders.
- The status of the force and its components.
- The current IPB.
- The COAs considered, including:
  - Assumptions used.
  - Results of running estimates.
  - A summary of the war game for each COA, including critical events, modifications to any COA, and war-game results.
  - Advantages and disadvantages (including risk) of each COA.
  - The recommended COA. (If a significant disagreement exists, then the staff should inform the commander and, if necessary, discuss the disagreement.)

Chapter 8

Assessments

According to Field Manual (FM) 3-0, *Operations*, assessment is the continuous monitoring and evaluation of the current situation — particularly the enemy — and progress of an operation. Assessment is both a continuous activity of the operations process and an activity of battle command. Broadly, assessment consists of the following activities: monitoring the current situation to collect relevant information; evaluating progress toward attaining end state conditions, achieving objectives, and performing tasks; and recommending or directing action for improvement.

Joint Publication 3-0, *Joint Operations*, defines measure of effectiveness (MOE) as a criterion used to assess changes (positive and negative) in system behavior, capability, or operational environment tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. MOEs help to answer the question, "Are we doing the right things?" A measure of performance (MOP) is a criterion used to assess friendly actions tied to measuring task accomplishment. MOPs help answer questions such as, "Was the action taken?" or "Were the tasks completed to standard?" An MOP confirms or denies the proper performance of a task.

In the context of assessment, an indicator is an item of information that provides insight into an MOE or MOP. Staffs use indicators to shape their collection effort as part of intelligence, surveillance, and reconnaissance synchronization.

The following steps are used to develop an assessment plan:

- Step 1: Gather tools and assessment data.
- Step 2: Understand current and desired conditions.
- Step 3: Develop assessment measures and potential indicators.
- Step 4: Develop the collection plan.
- Step 5: Assign responsibilities for conducting analysis and generating recommendations.
- Step 6: Identify feedback mechanisms.

Note: For additional information on the fundamentals of assessment, refer to FM 5-0, *The Operations Process*, Chapter 6 (Assessment) and Appendix H (Formal Assessment Plans).

MOE	MOP	Indicator
Answers the question: Are we doing the right things?	Answers the question: Are we doing things right?	Answers the question: What is the status of this MOE or MOP?
Measures purpose accomplishment.	Measures task completion.	Measures raw data inputs to inform MOEs and MOPs.
Measures *why* in the mission statement.	Measures *what* in the mission statement.	Information used to make measuring what or why possible.
No hierarchical relationship to MOPs.	No hierarchical relationship to MOEs.	Subordinate to MOEs and MOPs.
Often formally tracked in formal assessment plans.	Often formally tracked in execution matrixes.	Often formally tracked in formal assessment plans.
Typically challenging to choose the correct ones.	Typically simple to choose the correct ones.	Typically as challenging to select correctly as the supported MOE or MOP.

Condition 1: Enemy defeated in the brigade area of operations.

MOE 1: Enemy kidnapping activity in the brigade area of operations disrupted.

- **Indicator 1**: Monthly reported dollars in ransom paid as a result of kidnapping operations.
- **Indicator 2**: Monthly number of reported attempted kidnappings.
- **Indicator 3**: Monthly poll question #23: "Have any kidnappings occurred in your neighborhood in the past 30 days?" Results for provinces ABC only.

MOE 2: Public perception of security in the brigade area of operations improved.

- **Indicator 1**: Monthly poll question #34: "Have you changed your normal activities in the past month because of concerns about your safety and that of your family?" Results for provinces ABC only.
- **Indicator 2**: Monthly K through12 school attendance in provinces ABC as reported by the host-nation ministry of education.
- **Indicator 3**: Monthly number of tips from local nationals reported to the brigade terrorism tips hotline.

MOE 3: Sniper events in the brigade area of operations disrupted.

- **Indicator 1**: Monthly decrease in reported sniper events in the brigade area of operations. (***Note:*** It is acceptable to have only one indicator that directly answers a given MOE. Avoid complicating the assessment needlessly when a simple construct suffices.)

Condition 2: Role 1 medical care available to the population in city X.

MOE 1: Public perception of medical care availability improved in city X.

- **Indicator 1**: Monthly poll question #42: "Are you and your family able to visit the hospital when you need to?" Results for provinces ABC only.
- **Indicator 2**: Monthly poll question #8: "Do you and your family have important health needs that are not being met?" Results for provinces ABC only.
- **Indicator 3**: Monthly decrease in number of requests for medical care received from local nationals by the brigade.

MOE 2: Battalion commander estimated monthly host-nation medical care availability in battalion area of operations.

- **Indicator 1**: Monthly average of reported battalion commander's estimates (scale of 1 to 5) of host-nation medical care availability in the battalion area of operation.

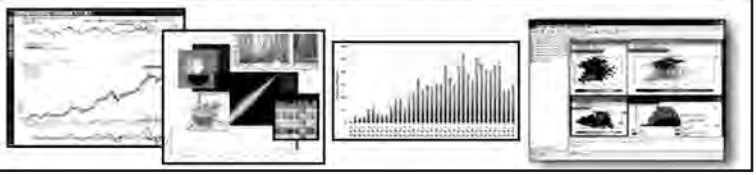


Figure 8-1. Assessments

Chapter 9

Operation Order

The following is an example of a way to format a typical operation plan (OPLAN)/operation order (OPORD).

Copy # of # copies

Issuing headquarters
Place of issue
Date-time group of signature
Message reference number

OPLAN/OPORD (Number) [(Code name)] [(Classification of title)]

(UNCLASSIFIED [U]) References:

(U) Time Zone Used Throughout the OPLAN/OPORD:

(U) Task Organization:

1. (U) Situation

a. (U) Area of Interest

b. (U) Area of Operations

(1) (U) Terrain

(2) (U) Weather

c. (U) Enemy Forces

d. (U) Friendly Forces

(1) (U) Higher Headquarters' Mission and Intent

(a) (U) [Higher Headquarters Two Levels Up]. (**Note:** Identify the actual unit.)

1 (U) Mission

2 (U) Commander's Intent

(b) (U) [Higher Headquarters] (**Note:** Identify the actual unit.)

1 (U) Mission

2 (U) Commander's Intent

(2) (U) Missions of Adjacent Units

e. (U) Interagency, Intergovernmental, and Nongovernmental Organizations

f. (U) Civil Considerations

g. (U) Attachments and Detachments

h. (U) Assumptions

2. (U) Mission

3. (U) Execution

a. (U) Commander's Intent

b. (U) Concept of Operations

c. (U) Scheme of Movement and Maneuver

(1) (U) Scheme of Mobility/Countermobility

(2) (U) Scheme of Battlefield Obscuration

(3) (U) Scheme of Intelligence, Surveillance, and Reconnaissance

d. (U) Scheme of Intelligence

e. (U) Scheme of Fires

f. (U) Scheme of Protection

g. (U) Stability Operations

h. (U) Assessment

i. (U) Tasks to Subordinate Units

j. (U) Coordinating Instructions

(1) (U) Time or condition when the OPORD becomes effective

(2) (U) Commander's Critical Information Requirements

(3) (U) Essential Elements of Friendly Information

(4) (U) Fire Support Coordination Measures

(5) (U) Airspace Coordinating Measures

(6) (U) Rules of Engagement

(7) (U) Risk Reduction Control Measures

(8) (U) Personnel Recovery Coordination Measures

(9) (U) Environmental Considerations

(10) (U) Information Themes and Messages

(11) (U) Other Coordinating Instructions

4. (U) Sustainment

a. (U) Logistics

b. (U) Personnel

c. (U) Health System Support

5. (U) Command and Control

a. (U) Command

(1) (U) Location of Commander

(2) (U) Succession of Command

(3) (U) Liaison Requirements

b. (U) Control

(1) (U) Command Posts

(2) (U) Reports

c. (U) Signal

ACKNOWLEDGE:

(Commander's Last Name)
(Commander's Rank)

(The commander or authorized representative signs the original copy. If the representative signs the original, add the phrase "For the Commander." The signed copy is the historical copy and remains in the headquarters' files.)

OFFICIAL:

(Authenticator's Last Name)
(Authenticator's Rank)

(Use only if the commander does not sign the original order. If the commander signs the original, no further authentication is required. If the commander does not sign, the signature of the preparing staff officer requires authentication and only the last name and rank of the commander appear in the signature block.)

ANNEXES:

A – Task Organization
B – Intelligence
C – Operations
D – Fires
E – Protection
F – Sustainment
G – Engineer
H – Signal
I – Not used
J – Public Affairs
K – Civil Affairs Operations
L – Intelligence, Surveillance, and Reconnaissance
M – Assessment
N – Space Operations
O – Not used
P – Host-Nation Support
Q – Not used
R – Reports
S – Special Technical Operations
T – Not used
U – Inspector General
V – Interagency Coordination
W – Not used
X – Not used
Y – Not used
Z – Distribution

DISTRIBUTION: (Furnish distribution copies either for action or for information. List in detail those who are to receive the plan or order. Refer to Annex Z (Distribution) if lengthy.)

BASE ORDER: The base OPORD consists of five primary paragraphs: (1) Situation, (2) Mission, (3) Execution, (4) Sustainment, and (5) Command and Control. The OPORD contains the following annexes:

ANNEX A – TASK ORGANIZATION (S-3 or S-5)

ANNEX B – INTELLIGENCE (S-2)

Appendix 1 – Intelligence Estimate

Tab A – Terrain (Engineer Coordinator)

Tab B – Weather (Staff Weather Officer)

Tab C – Civil Considerations

Tab D – Intelligence Preparation of the Battlefield Products

Appendix 2 – Intelligence, Surveillance, and Reconnaissance Synchronization Matrix

Appendix 3 – Counterintelligence

Appendix 4 – Signals Intelligence

Appendix 5 – Human Intelligence

Appendix 6 – Geospatial Intelligence

Appendix 7 – Imagery Intelligence

Appendix 8 – Measurement and Signature Intelligence

Appendix 9 – Open Source Intelligence

Appendix 10 – Technical Intelligence

Appendix 11 – Soldier Surveillance and Reconnaissance

ANNEX C – OPERATIONS (S-3 or S-5)

Appendix 1 – Design Concept

Appendix 2 – Operation Overlay

Appendix 3 – Decision Support Products

Tab A – Execution Matrix

Appendix 5 – Air Support

Appendix 6 – Naval Fire Support

Appendix 7 – Command and Control Warfare (Electronic Warfare Officer)

Tab A – Electronic Attack

Tab B – Electronic Warfare Support

Tab C – Computer Network Attack

Tab D – Computer Network Exploitation

ANNEX E – PROTECTION (Chief of Protection/Protection Coordinator as designated by the commander)

Appendix 1 – Air and Missile Defense (Air and Missile Defense Coordinator)

Tab A – Enemy Air Avenues of Approach

Tab B – Enemy Air Order of Battle

Tab C – Enemy Theater Ballistic Missile Overlay

Tab D – Air and Missile Defense Protection Overlay

Tab E – Critical Asset List/Defended Asset List

Appendix 2 – Personnel Recovery (Personnel Recovery Coordinator)

Appendix 3 – Fratricide Prevention

Appendix 4 – Operational Area Security (Provost Marshal)

Appendix 5 – Antiterrorism (Antiterrorism Officer)

Appendix 6 – Chemical, Biological, Radiological, and Nuclear Defense (CBRN Officer)

Appendix 7 – Safety (Safety Officer)

Appendix 8 – Operations Security (Operations Security Officer)

Appendix 9 – Explosive Ordnance Disposal (Explosive Ordnance Disposal Officer)

Appendix 10 – Force Health Protection (Surgeon)

ANNEX F – SUSTAINMENT (Chief of Sustainment [S-4])

Appendix 1 – Logistics (S-4)

Tab A – Sustainment Overlay

Tab B – Maintenance

Tab C – Transportation

Exhibit 1 – Traffic Circulation and Control (Provost Marshal)

Exhibit 2 – Traffic Circulation Overlay

Exhibit 3 – Road Movement Table

Exhibit 4 – Highway Regulation (Provost Marshal)

Tab D – Supply

Tab E – Field Services

Tab F – Distribution

Tab G – Contract Support Integration

Tab H – Mortuary Affairs

Tab I – Internment and Resettlement Support

Appendix 2 – Personnel Services Support

Tab A – Human Resources Support (S-1)

Tab B – Financial Management (S-8)

Tab C – Legal Support (Staff Judge Advocate)

Tab D – Religious Support (Chaplain)

Tab E – Band Operations (S-1)

Appendix 3 – Army Heath System Support (Surgeon)

Tab A – Medical Command and Control

Tab B – Medical Treatment

Tab C – Medical Evacuation

Tab D – Hospitalization

Tab E – Dental Services

Tab F – Preventive Medicine

Tab G – Combat and Operational Stress Control

Tab H – Veterinary Services

Tab I – Medical Logistics

Tab J – Medical Laboratory Support

ANNEX G – ENGINEER

Appendix 1 – Mobility/Countermobility

Tab A – Obstacle Overlay

Appendix 2 – Survivability (Engineer Officer)

Appendix 3 – General Engineering

Appendix 4 – Geospatial Engineering

Appendix 5 – Engineer Task Organization and Execution Matrix

Appendix 6 – Environmental Considerations

ANNEX H – SIGNAL (S-6)

Appendix 1 – Information Assurance

Appendix 2 – Voice and Data Network Diagrams

Appendix 3 – Satellite Communications

Appendix 4 – Foreign Data Exchanges

Appendix 5 – Electromagnetic Spectrum Operations

ANNEX I – Not Used

ANNEX J – PUBLIC AFFAIRS (Public Affairs Officer)

ANNEX K – CIVIL AFFAIRS OPERATIONS (S-9)

ANNEX L – INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (S-3)

ANNEX M – ASSESSMENT (S-3 or S-5)

ANNEX N – SPACE OPERATIONS (Space Operations Officer)

ANNEX O – Not Used

ANNEX P – HOST-NATION SUPPORT (S-4)

ANNEX Q – Not Used

ANNEX R – REPORTS (S-3)

ANNEX S – SPECIAL TECHNICAL OPERATIONS

ANNEX T – Not Used

ANNEX U – INSPECTOR GENERAL

ANNEX V – INTERAGENCY COORDINATION (S-3)

ANNEX W – Not Used

ANNEX X – Not Used

ANNEX Y – Not Used

ANNEX Z – DISTRIBUTION (S-3)

Chapter 10

Rehearsals

Note: Field Manual (FM) 5-0, *The Operations Process,* removes the confirmation brief as a form of rehearsal.

Subordinate leaders give a confirmation brief to the commander immediately after receiving the operation order (OPORD). A confirmation brief ensures the commander that subordinate leaders understand the following:

- The commander's intent, mission, and concept of operations.
- Their unit's tasks and associated purposes.
- The relationship between their unit's mission and those of other units in the operation.

A rehearsal is a session in which a staff or unit practices expected actions to improve performance during execution. The four types of rehearsals are:

- Backbrief.
- Combined arms.
- Support.
- Battle drill or standing operating procedures (SOP).

The backbrief is a briefing by subordinates to the commander to review how subordinates intend to accomplish their mission. Normally, subordinates perform backbriefs throughout preparation. These briefs allow commanders to clarify the commander's intent early in subordinate planning.

Commanders use the backbrief to identify any problems in the concept of operations. The backbrief differs from the confirmation brief (a briefing subordinates give their higher commander immediately following receipt of an order) in that subordinate leaders are given time to complete their plan.

A combined arms rehearsal is where subordinate units synchronize their plans with each other. A maneuver unit headquarters normally executes a combined arms rehearsal after subordinate units issue their operation order. This rehearsal type helps ensure that subordinate commanders' plans achieve the higher commander's intent.

The support rehearsal helps synchronize each warfighting function with the overall operation. This rehearsal supports the operation so units can accomplish their missions. These rehearsals typically involve coordination

and procedure drills for aviation, fires, engineer support, or casualty evacuation.

A battle drill or SOP rehearsal ensures that all participants understand a technique or a specific set of procedures. Throughout preparation, units and staffs rehearse battle drills and SOPs. These rehearsals do not need a completed order from higher headquarters. Leaders place priority on those drills or actions they anticipate occurring during the operation. All echelons use these rehearsal types; however, they are most common for platoons, squads, and sections. They can rehearse such actions as a command post shift change, an obstacle breach lane-marking SOP, or a refuel-on-the-move site operation.

Before the Rehearsal

Before the rehearsal, the rehearsal director (typically the executive officer [XO]) calls the roll and briefs participants on information needed for execution. The briefing begins with an introduction, overview, and orientation. It includes a discussion of the rehearsal script and ground rules. The detail of this discussion depends on the participants' familiarity with the rehearsal SOP.

Introduction and overview

The director gives an overview of the briefing topics, rehearsal subjects and sequence, and timeline, specifying the no-later-than ending time. The director explains any constraints, such as pyrotechnics use, light discipline, weapons firing, or radio silence. For safety, the rehearsal director ensures all participants understand safety precautions and enforces their use. Last, the director emphasizes results and states the commander's standard for a successful rehearsal. Subordinate leaders state any results of planning or preparation (including rehearsals) they have already conducted. If a subordinate recommends a change to the OPORD, the rehearsal director acts on the recommendation before the rehearsal begins, if possible. If not, the commander resolves the recommendation with a decision before the rehearsal ends.

Orientation

The rehearsal director orients the participants to the terrain or rehearsal medium. Orientation is achieved using magnetic north on the rehearsal medium and symbols representing actual terrain features. The director explains any graphic control measures, obstacles, and targets and then issues supplemental materials, if needed.

Rehearsal script

The rehearsal script is an effective technique for controlling rehearsals. The script provides a checklist so the organization addresses all warfighting functions and outstanding issues. It has two major parts: the agenda and the response sequence.

- Agenda: An effective rehearsal follows a prescribed agenda that everyone knows and understands. An effective rehearsal includes the following:
    - ○ Roll call.
    - ○ Participant orientation to the terrain and environmental conditions.
    - ○ Location of local civilians (key elements of area structures, capabilities, organizations, people and events [ASCOPE]; key civilian times [e.g., prayer, market, and school]; and key leaders).
    - ○ Enemy situation brief.
    - ○ Friendly situation brief.
    - ○ Description of expected adversary actions.
    - ○ Discussion of friendly unit actions.
    - ○ Discussion of local populace action.
    - ○ Review of notes made by the recorder.
- Response sequence: Participants respond in sequence, either by warfighting function or by each unit, as deployed, from front to rear. The commander determines the sequence before the rehearsal.

Combined arms rehearsal agenda (an example):

To ensure an efficient rehearsal, all participants need to be prepared, know what they are expected to say, and focus only on those points.

- Roll call (XO).
- Introduction and overview (XO):
    - ○ Critical events to rehearse.
    - ○ Status of subordinate unit military decisionmaking process.
- Orientation to terrain board (XO/S-3): North, key terrain, consolidated graphic control measures, obstacles, and targets.

- Overview of operational environment (S-9/S-2):
    - Civil considerations (S-9).
- Population densities.
- Demographic areas (religious, ethnic, etc.).
- Key infrastructure.
- Key government facilities/centers.
- Key personalities:
    - Environmental impact (S-2).
- Initial enemy situation (S-2).
- Initial friendly situation (S-3):
    - Higher headquarters' mission and intent.
    - All higher headquarters' shaping operations prior to critical event (CE) 1.
    - Interagency, intergovernmental, and nongovernmental organizations (NGOs).
    - Mission and intent.
    - Description of phases.
    - Rules of engagement (staff judge advocate/S-3).
- Initiate actions – CE 1:
    - CE 1 beginning time (S-3).
    - Relevant priority information requirements (PIRs) (S-2/S-3).
    - Enemy actions (S-2).
    - Friendly actions.
- Movement and maneuver (S-3).
- Fires (fire support coordinator).
- Information engagement (S-7).
- Sustainment (S-4/S-1).

- Command and control (S-3/S-6):
  - Actions by local populace – "voice of the people" (S-9).
  - Consequence management considerations (S-3/S-9/XO).
  - PIRs answered/decisions made (S-2/S-3).
  - Issues or concerns.
  - CE 1 ending time (S-3). (**Note:** Repeat as required for each CE.)
- Review issues and due outs (XO).
- Timeline (XO).
- Closing commander's guidance.

Note: This rehearsal agenda format, organized for a brigade-level staff, may require modification for other echelons.

Rehearse actions on the following:

- Direct contact.
- Obstacle contact.
- Indigenous defense forces from urban area.
- Mass casualty event.
- Downed aircraft.
- Detainees.
- Blue-on-green event.

Staff/warfighting function representatives brief the following:

- Higher headquarters' assets and capabilities in support.
- Priority of support.
- Critical actions or tasks with associated purposes.
- Issues or concerns.

Maneuver units brief the following:

- Task organization.
- Scheme of maneuver.
- Task and purpose of subordinate units.
- Named areas of interest (NAIs) observed (what observing, time observing, and associated PIR and decisions).
- Issues or concerns.

Note: This is a rehearsal, not a war game. The rehearsal director keeps the rehearsal focused on synchronization and on task.

Note: The S-2 or S-9 should begin with an overview of the operational environment to include human terrain (the "C" in mission, enemy, terrain and weather, troops and support available, time available, civil considerations [METT-TC]) and environmental conditions prior to discussing the enemy situation. At a minimum, include population densities, demographic areas (ethnic, religious, etc.), civilian lines of communication, key government/commercial centers, key infrastructure, key personalities, etc. Use ASCOPE as a basis.

The following paragraphs outline a generic set of rehearsal steps for combined arms rehearsals. However, with a few modifications, these steps support any rehearsal technique. The products depend on the rehearsal type.

Step 1: Enemy forces deployed.

The S-2 briefs the current enemy situation and operational environment and places markers on the map or terrain board (as applicable) indicating where enemy forces and other operationally significant groups or activities would be before the first rehearsal event. The S-2 then briefs the most likely enemy course of action (COA) and operational context. The S-2 also briefs the status of reconnaissance and surveillance operations (for example, citing any patrols still out or any observation post positions).

Step 2: Friendly forces deployed.

The S-3 briefs friendly maneuver unit dispositions, including security forces, of the rehearsal starting time. Subordinate commanders and other staff officers brief their unit positions at the starting time and any particular points of emphasis. Other participants place markers for friendly forces, including adjacent units, at the positions they will occupy at the rehearsal starting time. As participants place markers, they state their task and purpose, task organization, and strength.

Sustainment and protection units brief positions, plans, and actions at the starting time and at points of emphasis the rehearsal director designates.

Step 3: Initiate action.

The rehearsal director states the first event on the execution matrix. Normally this involves the S-2 moving enemy markers, based on this event from the execution matrix, according to the most likely enemy COA. The depiction must tie enemy actions to specific terrain or to friendly unit actions. The S-2 portrays enemy actions based on the situational template developed for staff war-gaming. The enemy is portrayed as uncooperative but not invincible.

As the rehearsal proceeds, the S-2 portrays the enemy and other operational factors and walks through the most likely enemy COA (per the situational template). The S-2 stresses reconnaissance routes, objectives, security force composition and locations, initial contact, initial fires (artillery, air, and attack helicopters), probable main force objectives or engagement areas, and likely commitment of reserve forces. The S-2 is specific, tying enemy actions to specific terrain or friendly unit actions. The walk-through should accurately portray the event template.

The final discussion should be of the impact on the local population and any additional synchronization required with host-nation security forces, local government, key leaders, NGOs, etc.

Step 4: Decision point.

When the enemy movement and operational context is complete, the commander assesses the situation to determine if the unit has reached a decision point. The commander uses decision points taken directly from the decision support template.

- Not at a decision point. If the organization is not at a decision point and not at the end state, the rehearsal director continues the rehearsal by stating the next event on the execution matrix.
- At a decision point. When reaching conditions that establish a decision point, the commander decides whether to continue with the current COA or to select a branch. If electing the current COA, the commander states the next event from the execution matrix and directs movement of friendly units. If selecting a branch, the commander states why that branch was selected, states the first event of that branch, and continues the rehearsal until the organization has rehearsed all events of that branch. As the unit reaches decisive points, the rehearsal director states the conditions required for success.

Step 5: End state reached.

Achieving the desired end state completes that phase of the rehearsal. In an attack, this will usually be when the unit is on the objective and has finished consolidation and casualty evacuation. In the defense, this will usually be after the decisive action (such as committing the reserve or striking force), the final destruction, or withdrawal of the enemy, and casualty evacuation is complete. In a stability operation, this occurs when the targeted progress within a designated line of effort, the desired end state, is achieved.

Step 6: Reset.

At this point, the commander states the next branch to rehearse. The rehearsal director resets the situation to the decision point where that branch begins and states the criteria for a decision to execute that branch. Participants assume meeting criteria and they then refight the operation along that branch until they attain the desired end state. This rehearsal continues until the commander has addressed all the decision points and branches he wants to rehearse.

After the Rehearsal

After the rehearsal, the commander leads an after-action review. The commander reviews lessons learned and makes the minimum required modifications to the existing plan. (Normally, a fragmentary order [FRAGO] effects these changes.) Changes should be refinements to the OPORD; they should not be radical or significant.

A rehearsal is the final opportunity for subordinates to identify and fix unresolved issues. An effective staff ensures that all participants understand any changes to the OPORD and that the recorder captures all coordination done at the rehearsal. All changes to the published OPORD are, in effect, verbal FRAGOs. As soon as possible, the staff publishes these verbal FRAGOs as a written FRAGO that changes the OPORD.

Chapter 11

Terminology

Four Forms of Reconnaissance

The S-3 assigns **zone reconnaissance** when the enemy situation is vague or when he needs information concerning cross-country trafficability. It is appropriate when previous knowledge of the terrain is limited or when combat operations have altered the terrain. The reconnaissance may be threat-oriented, terrain-oriented, society-oriented, infrastructure-oriented, or a combination. Additionally, the squadron commander may focus the reconnaissance effort on a specific force, such as the enemy's reserve. A terrain-focused zone reconnaissance must include the identification of obstacles, both existing and reinforcing, as well as areas of chemical, biological, radiological, and nuclear (CBRN) contamination.

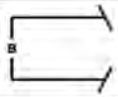
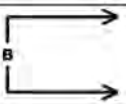
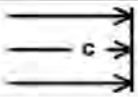
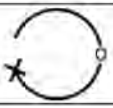
A single continuous line enclosing the reconnaissance area, such as an objective, defines the "area" for an **area reconnaissance.** A named area of interest, when focusing on a relatively small area such as a building, bridge, or key piece of terrain, can also define the reconnaissance area. Area reconnaissance enables the squadron to conduct decentralized reconnaissance in multiple areas simultaneously.

Route reconnaissance is conducted to determine whether the route is clear of obstacles and/or threat forces and how well or how poorly it will support the planned movement. The route is a prescribed course from a start point to a specific destination (release point). It can be a road or an axis of advance. At the squadron level, route reconnaissance is often a task performed during zone or area reconnaissance. If enemy contact is expected, it is normal to assign a unit one major route. If enemy contact is unlikely, it is normal to assign a unit two routes.

The normal conduct of a **zone, area,** and **route reconnaissance** with a multidimensional focus includes such factors as society and infrastructure as well as the threat and terrain.

Conduct a **reconnaissance in force** when the enemy is operating within an area and it is not possible to obtain adequate intelligence by other means. It is an aggressive reconnaissance, conducted as an offensive operation, to answer clearly stated commander's critical information requirements (CCIRs). It differs from other reconnaissance operations because the normal conduct is only to gain information about the enemy and not the terrain. The end state of a reconnaissance in force is to determine enemy weaknesses that higher headquarters can exploit terminology.

ACTIONS BY FRIENDLY FORCE

Attack-by-fire is a tactical mission task in which a commander uses direct fires, supported by indirect fires, to engage an enemy without closing with him to destroy, suppress, fix, or deceive him.	
Breach is a tactical mission task in which the unit employs all available means to break through or secure a passage through an enemy defense, obstacle, minefield, or fortification.	
Bypass is a tactical mission task in which the commander directs his unit to maneuver around an obstacle, position, or enemy force to maintain the momentum of the operation while deliberately avoiding combat with an enemy force.	
Clear tactical mission task that requires the commander to remove all enemy forces and eliminate organized resistance within an assigned area.	
Control is a tactical mission task that requires the commander to maintain physical influence over a specified area to prevent its use by an enemy or to create conditions necessary for successful friendly operations.	No designated graphic
Counter reconnaissance is a tactical mission task that encompasses all measures taken by a commander to counter enemy reconnaissance and surveillance efforts. It is not a distinct mission, but a component of all forms of security operations.	No designated graphic
Disengage is a tactical mission task where a commander has his unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement.	No designated graphic
Exfiltrate is a tactical mission task where a commander removes soldiers or units from areas under enemy control by stealth, deception, surprise, or clandestine means.	No designated graphic
Follow and assume is a tactical mission task in which a second committed force follows a force conducting an offensive operation and is prepared to continue the mission if the lead force is fixed, attritted, or unable to continue.	
Follow and support is a tactical mission task in which a committed force follows and supports a lead force conducting an offensive operation.	
Occupy is a tactical mission task that involves moving a friendly force into an area so that it can control that area. Both the force's movement to and occupation of the area occur without enemy opposition.	
Reduce is a tactical mission task that involves the destruction of an encircled or bypassed enemy force.	No designated graphic

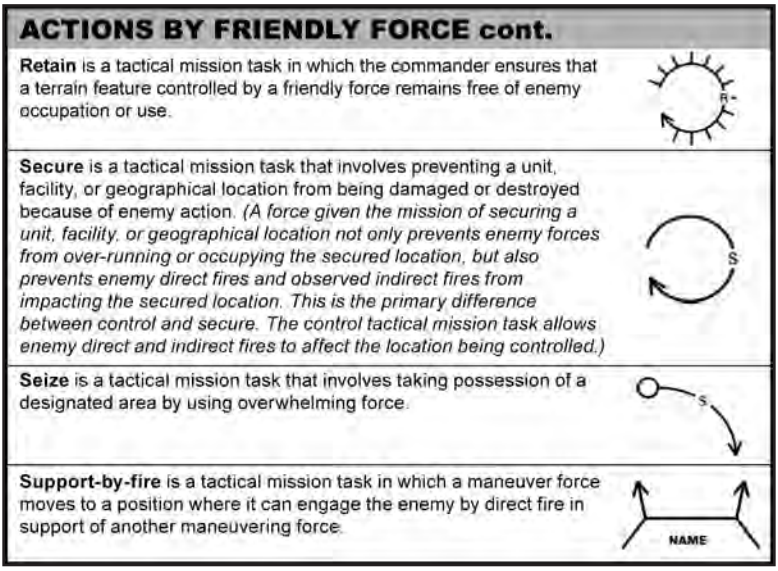
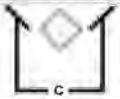
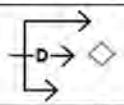
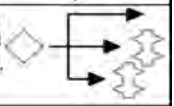
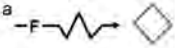


Figure 11-1. Actions by friendly force. (Reference: Field Manual [FM[1-02, *Operational Terms and Graphics*)

EFFECTS ON ENEMY FORCES

Block is a tactical mission task that denies the enemy access to an area or prevents his advance in a direction or along an avenue of approach.	
Canalize is a tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver.	
Contain is a tactical mission task that requires the commander to stop, hold, or surround enemy forces or to cause them to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere.	
Defeat is a tactical mission task that occurs when an enemy force has temporarily or permanently lost the physical means or the will to fight. The defeated force's commander is unwilling or unable to pursue his adopted course of action, thereby yielding to the friendly commanders' will and can no longer interfere to a significant degree with the actions of friendly forces. Defeat can result from the use of force or the threat of its use.	**No designated graphic**
Destroy is a tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform any function or be restored to a usable condition without being entirely rebuilt.	
Disrupt is a tactical mission task in which a commander integrates direct and indirect fires, terrain, and obstacles to upset an enemy's formation or tempo, interrupt his timetable, or cause his forces to commit prematurely or attack in a piecemeal fashion.	
Disrupt is also an engineer obstacle effect that focuses fire planning and obstacle effort to cause the enemy to break up his formation and tempo, interrupt his timetable, commit breaching assets prematurely, and attack in a piecemeal effort.	
Fix is a tactical mission task where a commander prevents the enemy from moving any part of his force from a specific location for a specific period.	
Fix is also an engineer obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area.	
Interdict is a tactical mission task where the commander prevents, disrupts, or delays the enemy's use of an area or route.	
Isolate is a tactical mission task that requires a unit to seal off—both physically and psychologically—an enemy from his sources of support, deny him freedom of movement, and prevent him from having contact with other enemy forces.	

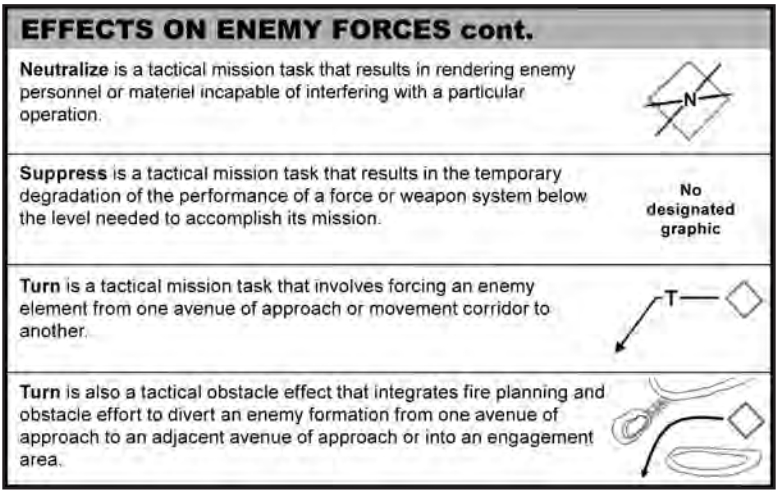


Figure 11-2. Effects on enemy forces

Information Tasks

(**Note:** The following definitions are from FM 1-02.)

Degrade. In information operations, using nonlethal or temporary means to reduce the effectiveness or efficiency of adversary mission command systems and information collection efforts or means.

Deny. In information operations, entails withholding information about Army force capabilities and intentions that adversaries need for effective and timely decision-making.

Disrupt. In information operations, breaking and interrupting the flow of information between selected mission command nodes.

Exploit. In information operations, to gain access to adversary mission command systems to collect information or to plant false or misleading information.

Defeat Mechanisms

(**Note:** The following definitions are from FM 3-0, *Operations*.)

Destroy. To apply lethal combat power on an enemy capability so that it can no longer perform any function and cannot be restored to a usable condition without being entirely rebuilt.

Disintegrate. To disrupt the enemy's mission command system, degrading the ability to conduct operations while leading to a rapid collapse of the enemy's capabilities or will to fight.

Dislocate. To employ forces to obtain significant positional advantage, rendering the enemy's dispositions less valuable, perhaps even irrelevant.

Isolate. To deny an enemy or adversary access to capabilities that enable the exercise of coercion, influence, potential advantage, and freedom of action.

Common Purpose Statements

(**Note:** Although precise with definitions for tactical tasks, current doctrine does not provide definitions for "common purposes" which would provide for a common understanding through consistent terminology. The basis for the following definitions comes from multiple references.)

Allow. To permit; to forbear or neglect to restrain or prevent; to make a possibility.

Cause. Something that brings about an effect or a result.

Create. To bring into existence.

Deceive. To cause to accept as true or valid what is false or invalid.

Deny. Refusing to accept the existence, truth, or validity of; to refuse to grant access.

Divert. To turn aside; to turn from one course or use to another.

Surprise. To strike with wonder or amazement especially because unexpected; to take unawares.

Enable. To provide with the means or opportunity; to make possible, practical, or easy.

Identify. To establish the identity of; to become aware of; to ascertain the origin, nature, or definitive characteristics of.

Influence. To cause adversaries or others to behave in a manner favorable to Army forces. (FM 1-02)

Observe. To watch carefully especially with attention to details or behavior for the purpose of arriving at a judgment; to be or become aware of, especially through careful and directed attention.

Open. Affording unobstructed entrance and exit; to make available for entry or passage by turning back (as a barrier) or removing (as a cover or an obstruction).

Preserve. Keep or maintain in unaltered condition; to keep safe from injury, harm, or destruction; maintain for future use.

Prevent. To keep from happening or existing; to make impossible.

Protect. Shield from danger, injury, loss, destruction, influence, or damage; to foster or shield from infringement or restriction.

Provide. Early warning the ability for detecting an action in time to take defensive or counter measures; advance notice of some impending event or development.

Support. To assist or help; to act with; give physical, psychological, or financial assistance, aid, or courage.

Information Effects

(**Note:** The following are common information "effects" that are not adequately defined in doctrine unless otherwise annotated.)

Co-opt. To choose or elect as a fellow member or colleague; to convince someone to join a group, following, or similar mind set.

Deceive. To cause to accept as true or valid what is false or invalid.

Disorganize. To destroy or interrupt the orderly structure or function of; remove the organization from.

Inform. To impart information or knowledge.

Information fratricide. The results of employing information operations elements in a way that causes effects in the information environment that impede the conduct of friendly operations or cause adverse effects on friendly forces.

Influence. To cause adversaries or others to behave in a manner favorable to Army forces. (FM 1-02)

Influence. To alter the opinions and attitudes of a civilian population through inform and influence activities, presence, and conduct. (FM 3-0, Change 1)

Isolate. A tactical mission task that requires a unit to seal off—both physically and psychologically—an enemy from his sources of support, deny him freedom of movement, and prevent him from having contact with other enemy forces. (FM 1-02)

Organize. To persuade to associate to form into a coherent unity or functioning whole; to persuade to associate in an organization; to arrange by systematic planning and united effort.

Warn. Notify of danger, potential harm, or risk; to give notice to beforehand especially of danger.

Miscellaneous

Civil reconnaissance is a targeted, planned, and coordinated observation and evaluation of those specific civil aspects of the environment. Civil reconnaissance focuses specifically on the civil component, the elements of which are best represented by the mnemonic area structures, capabilities, organizations, people, and events (ASCOPE). Civil affairs or other forces, as required, can conduct civil reconnaissance. (FM 3-05.401, *Civil Affairs Tactics, Techniques, and Procedures*)

Center of gravity is the source of power that provides moral or physical strength, freedom of action, or will to act. (Joint Publication 3-0, *Joint Operations*)

Combat power is the total means of destructive, constructive, and information capabilities that a military unit/formation can apply at a given time. The elements of combat power are movement and maneuver, intelligence, fires, sustainment, protection, mission command, information, and leadership. (FM 3-0, Change 1)

Eight forms of contact include direct, indirect, non-hostile/civilian, obstacle, CBRN, aerial, visual, and electronic. (FM 3-24.2, *Tactics in Counterinsurgency*)

Graphic control measures are "graphic directives given by a commander to subordinate commanders to assign responsibilities, coordinate fire and maneuver, and control combat operations." They are generally developed during course of action development and are used "to convey and enhance the understanding of the concept of operations, prevent fratricide, and clarify the task and purpose of the main effort. (FM 1-02 and FM 5-0, *The Operations Process*)

Intelligence preparation of the battlefield (IPB) is a "systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. (FM 2-01.3, *The Intelligence Preparation of the Battlefield*)

Mission command is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of full spectrum operations. It is commander-led and blends the art of command and the science of control to integrate the warfighting functions to accomplish the mission. (FM 3-0, Change 1)

Running estimate is the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. The commander and each staff section maintain a running estimate. (FM 5-0)

Situational awareness is immediate knowledge of the conditions of the operation, constrained geographically and in time. (FM 3-0)

Situational understanding is the product of applying analysis and judgment to relevant information to determine the relationships among the mission variables to facilitate decision-making. (FM 3-0)

Stability Operations Tasks

(**Note:** The following information is from FM 3-07, *Stability Operations.* The list is not all inclusive.)

Establish civil security:

- Enforce cessation of hostilities, peace agreements, and other arrangements.
- Determine disposition and constitution of national armed and intelligence services.
- Conduct disarmament, demobilization, and reintegration.
- Conduct border control, boundary security, and freedom of movement.
- Support identification.
- Protect key personnel and facilities.
- Clear explosive and CBRN hazards.

Establish civil control:

- Establish public order and safety.
- Establish interim criminal justice system.
- Support law enforcement and police reform.
- Support judicial reform.
- Support property dispute resolution processes.
- Support justice system reform.
- Support corrections reform.

- Support war crimes courts and tribunals.
- Support public outreach and community rebuilding programs.

Restore essential services:

- Provide essential civil services.
- Tasks related to civilian dislocation:
  - Assist dislocated civilians.
  - Support assistance to dislocated civilians.
  - Support security to dislocated civilians camps.
- Support famine prevention and emergency food relief programs.
- Support non-food relief programs.
- Support humanitarian demining.
- Support human rights initiatives.
- Support public health programs.
- Support education programs.

Support to governance:

- Support transitional administrations.
- Support development of local governance.
- Support anti-corruption initiatives.
- Support elections.

Support to economic and infrastructure development:

- Support economic generation and enterprise creation.
- Support monetary institutions and programs.
- Support national treasury operations.
- Support public sector investment programs.
- Support private sector development.
- Protect natural resources and environment.
- Support agricultural development programs.

- Restore transportation infrastructure.
- Restore telecommunications infrastructure.
- Support general infrastructure reconstruction programs.

Chapter 12

Miscellaneous

Commander's Planning Guidance

For the intelligence warfighting function (WFF), planning guidance may include the following:

- Guidance on intelligence, surveillance, and reconnaissance (ISR).
- Gaps in knowledge required to understand the situation.
- Courses of action (COAs) that include:
  - Enemy commander's mission.
  - Enemy commander's concept of operations.
  - Enemy's critical decision points and vulnerabilities.
- Priority intelligence requirements (PIRs).
- High-value targets.
- Desired enemy perception of friendly forces.
- Intelligence focus for each phase of the operation.
- Specific terrain (including identification of key terrain) and weather factors.
- Identification of key aspects of the environment, including civil considerations.
- Guidance on counterintelligence.
- Requests for intelligence support from nonorganic resources and special collection requests.

For movement and maneuver, planning guidance may include the following:

- Initial commander's intent.
- COA development guidance consisting of:
  - Number of friendly COAs to be considered.
  - Enemy COAs to consider or not consider.
  - Critical events.
  - Elements of operational design.

- Decisive, shaping, and sustaining operations.
- Task organization.
- Task and purpose of subordinate units.
- Forms of maneuver.
- Reserve guidance (composition, mission, priorities, and mission command measures).
- Security and counterreconnaissance guidance.
- Friendly decision points.
- Possible branches and sequels.
- ISR integration and priorities.
- Military deception.
- Risk:
  - To friendly forces.
  - Of collateral damage or civilian casualties.
  - Of any condition affecting mission accomplishment or achievement of desired end state.

For fires, planning guidance may include the following:

- Synchronization and focus of fires (lethal and nonlethal) with maneuver.
- Priority of fires.
- High-payoff targets, to include:
  - Methods of engagement.
  - Desired effects.
- An observer plan.
- Requirements, restrictions, and priorities for special munitions.
- Task and purpose of fires.
- Counter fire.
- Target acquisition radar zones consisting of:
  - Critical friendly zones.

  - Call-for-fire zones.
  - Artillery target intelligence zones.
  - Sensor zones.
- Suppression of enemy air defenses.
- Fire support coordination measures.
- Attack guidance.
- A no-strike list, including cultural, religious, historical, and high-density civilian areas.
- Restricted target list.

For protection, planning guidance may include the following:

- Protection priorities.
- Work priorities for survivability assets.
- Guidance on air and missile defense positioning.
- Specific terrain and weather factors.
- Intelligence focus and limitations for security efforts.
- Areas or events where risk is acceptable.
- Protected targets and areas.
- Vehicle and equipment safety or security constraints.
- Guidance on environmental considerations.
- Guidance on unexploded explosive ordnance.
- Operational security risk tolerance.
- Rules of engagement (ROE), standing rules for the use of force, and rules of interaction.
- Guidance on escalation of force (EOF) and nonlethal weapons.

For sustainment, planning guidance may include the following:

- Priorities in terms of tactical sustainment functions (manning, fueling, fixing, arming, and moving the force and sustaining Soldiers and their systems).
- Army health system support.

- Anticipated requirements and prestockage of Class III, IV, and V supplies.
- Controlled supply rates.
- Guidance on construction and provision of facilities and installations.
- Guidance on the movement of detainees and the sustainment of internment and resettlement activities.

For mission command, planning guidance includes the following:

- Friendly forces information requirements.
- ROE.
- Position of the command post.
- Position of the commander.
- Liaison officer guidance.
- Timeline guidance, including timeline for planning and the operational timeline.
- Type of order and rehearsal.
- Specific communications guidance.
- Succession of command.
- Inform and influence activities:
    - Responsibilities.
    - Target audiences.
    - Intended effects.
    - COAs in which inform and influence activities is most likely to play a critical role.
    - Risks commanders are willing to take with respect to inform and influence activities.
    - Decisions with which commanders wish to retain or delegate authority.
    - Guidance regarding specific capabilities (leader and Soldier engagement, public affairs, military information support operations, combat camera, strategic communication, and defense support to public diplomacy).

- Legal considerations.

- Civil affairs operations that consist of:
  - Establishing a civil-military operations center.
  - Establishing liaison with host-nation, interagency, and governmental and nongovernmental organizations (NGOs).
  - Providing resources for humanitarian assistance.
  - Prioritizing allocated funds dedicated to civil affairs operations.
  - Building a relationship between the command and civilian population.

Eight Fundamentals of Counterinsurgency (COIN)

1. Negotiations.
2. Cultural understanding.
3. Language capability.
4. Counter improvised explosive device (CIED).
5. EOF and ROE.
6. Search, detain, and prosecute.
7. Tactical questioning.
8. Every Soldier a sensor and ambassador.

Principles of COIN

1. Legitimacy as the main objective.
2. Unity of effort.
3. Political primacy.
4. Understanding the environment.
5. Intelligence as the driver for operations.
6. Isolating insurgents from their cause and support.
7. Security under the rule of law.
8. Long-term commitment.

Imperatives of COIN

1. Manage information and expectations.
2. Use measured force.
3. Learn and adapt.
4. Empower at the lowest levels.
5. Support the host nation.

Paradoxes of COIN

1. The more you protect your force, the less secure you are.
2. The more force you use, the less effective you are.
3. Sometimes doing nothing is the best reaction.
4. The best weapons for COIN do not fire weapons.
5. Them doing something poorly is sometimes better than us doing it well.
6. If a tactic works this week, it will not work next week; if it works in this province, it will not work in the next.
7. Tactical success guarantees nothing.

Training Guidance for COIN

1. Master the basics.
2. The people are the prize.
3. Driving.
4. EOF.
5. Fire support.
6. Language training.
7. Detainee operations.
8. CIED training.
9. Understand the operational environment (human terrain is key terrain).
10. Local security forces partnership.
11. Know the civilian component to our civil/military team.
12. Learn the integrated/military decision-making structure.
13. Information management centers (fusion cells).
14. Know the enablers.
15. Train decentralized operations to the lowest level.
16. Money as a weapons system: Commander's Emergency Response Program and post-operations emergency relief fund.
17. Develop learning organizations.

Battalion training opportunities for a full-spectrum exercise

Following are steps a battalion should focus on when training for a full-spectrum exercise:

- Validate/refine tactical standing operating procedures (SOPs), tactical operations center (TOC) SOPs, and/or plans SOPs as applicable
- Establish a TOC:
  - Integrate the Army Battle Command System (ABCS) across all warfighting functions.
  - Develop and maintain a common operational picture.
  - Manage information horizontally and vertically (force reporting).
  - Execute battle drills in accordance with SOPs.
- Conduct the military decisionmaking process (MDMP) in accordance with FM 5-0:
  - Develop, update, and use running estimates.
  - Conduct staff-integrated intelligence preparation of the battlefield (IPB), integrating civil considerations.
  - Conduct a mission analysis brief, COA brief, and results of the COA analysis brief.
  - Develop a complete operation order and issue the brief to subordinate units.
- Exercise mission command:
  - Develop and maintain situational awareness and understanding within the TOC.
  - Employ all ABCSs.
  - Develop and use adequate mission command graphics via ABCS.
  - Synchronize and effectively employ all available assets/capabilities.
  - Conduct regular TOC updates, staff updates, and commanders' update briefs.

MDMP

- Develop and adhere to a timeline.
- Use a checklist to conduct the MDMP to standard (FM 5-0 and SOPs).
- Identify what the information expectation is for a running estimate.
- Directed COA is generally best in this time-constrained environment.
- War-gaming is critical (integrate key players when possible; e.g., operations SGM, battle captains, host nation security forces, and provincial reconstruction teams [PRTs]).
- Always brief civil considerations as a component of IPB.
- Identify a staff officer to serve as the "voice of the people" to focus on civil considerations during all steps of the MDMP.
- Ensure civil considerations are integrated into mission analysis, war-gaming, rehearsals, and briefs.
- Integrate all assets and capabilities into planning considerations (e.g., host nation, NGOs, PRTs, and interagency).
- Integrate consequence management into all aspects of planning.
- Consider the "information aspect" of all activities.
- Develop graphic control measures in ABCS from the beginning.
- Plan for controlling the fight in urban terrain when applicable.
- Do not neglect actions on the objective; plan for and war-game.

TOC operations and mission command

- TOC ergonomics are critical to effective mission command.
- Employ an operations schedule; synchronize and effectively employ all available assets and capabilities.
- Brief and ensure understanding of the decision support matrix and associated PIRs and NAIs by radio operators, battle captains, and noncommissioned officers.
- Use graphic control measures to force subordinate units to push information (e.g., phase lines).

- Use this opportunity to exercise/rehearse TOC battle drills. Recommend clearance of fires, duty status whereabouts unknown, mass casualty event, blue-on-green, and downed aircraft; minimum of 2–3 per hour.

Information management

- Use your SOP as the foundation and always build on it. Have a copy in the TOC to annotate changes/updates.
- How do we transfer information between radio operator, Command Post of the Future, and Force XXI battle command—brigade and below (FBCB2)/Blue Force Tracker (BFT)? Generally, will not get to FBCB2/BFT in the fire support exercise, but needs future consideration.
- Conduct a regular (every 2–4 hours) TOC update for all players "fighting the fight" in the TOC.
- Identify specific reporting requirements. Recommend Green 2, personnel status, logistics status, and commander's situation report.

Chapter 13

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