Welcome to the
Military Decision Making Process Lesson

Military Decision Making Process

Welcome to the P920 US Army Military Decision Making Process (MDMP) Lesson. This Lesson provides an overview of the US Army's MDMP, an established and proven detailed planning process.

The 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; decide on a course of action 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. This process helps commanders, staffs, and others think critically and creatively while planning.

Three doctrinal references have been selected for this lesson:

✓ADP 3-0, *Unified Land Operations* (Oct 11)

[Supersedes FM 3-0, *Operations, with Change 1,* Feb 11]

✓ATTP 5-0.1, *Commander and Staff Officer Guide* (Sep 11)

✓FM 1-02, *Operational Terms and Graphics* (Sep 04), with Change 1 (20 Feb 10)

Each slide contains a doctrinal reference at the bottom right corner which indicates the FM, date, page, or paragraph number.

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MDMP Key Concepts

This Lesson is designed to provide an overview of the following:

▪ **The Commander's Role in MDMP**. The role of the commander in mission command is to direct and lead from the beginning of planning throughout execution, and to assess continually. To ensure mission accomplishment, the commander understands, visualizes, describes, directs, leads, and assesses operations.

▪ **The Staff's Role in MDMP**. The staff's effort during the MDMP focuses on helping the commander understand the situation, making decisions, and synchronizing those decisions into a fully developed plan or order. The Chief of Staff (COS) or Executive Officer (XO) manages and coordinates the staff's work and provides quality control.

▪ **Commander, Staff, and Subordinate Interaction**. The MDMP is designed to facilitate interaction between the commander, staff, and subordinate headquarters throughout planning.

▪ **Performing the MDMP**. The MDMP consists of seven steps. The commander and staff generally perform these steps sequentially; however, they may revisit several steps in an iterative fashion as they learn more about the situation before producing the plan or order.

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Military Decision Making Process

This lesson consists of eight sections:

✓ **Introduction to the MDMP**

✓ **Step 1 - Receipt of Mission**

✓ **Step 2 - Mission Analysis**

✓ **Step 3 - Course of Action Development**

✓ **Step 4 - Course of Action Analysis**

✓ **Step 5 - Course of Action Comparison**

✓ **Step 6 - Course of Action Approval**

✓ **Step 7 - Orders Production**

Note: A glossary is provided for newly introduced terms. These terms are identified by underlining and are hyperlinked to the glossary page at the end of each Section.

Military Decision Making Process

This lesson consists of eight sections:

✓ **Introduction to the MDMP**

- **MDMP and Unified Land Operations**
- **The Commander's Role in MDMP**
- **The Staff's Role in MDMP**
- **Army Problem-Solving and the MDMP**

✓ **Step 1 - Receipt of Mission**

✓ **Step 2 - Mission Analysis**

✓ **Step 3 - Course of Action Development**

✓ **Step 4 - Course of Action Analysis**

✓ **Step 5 - Course of Action Comparison**

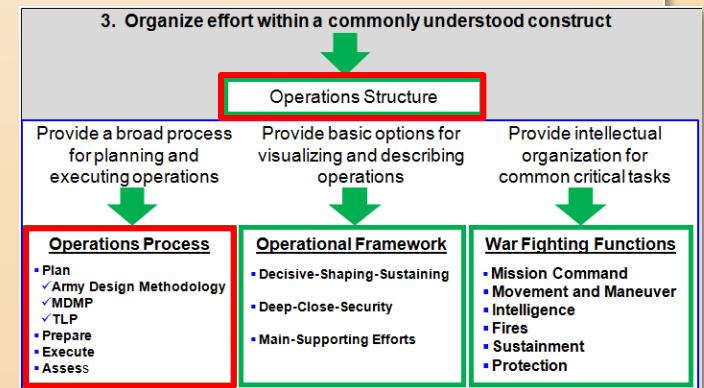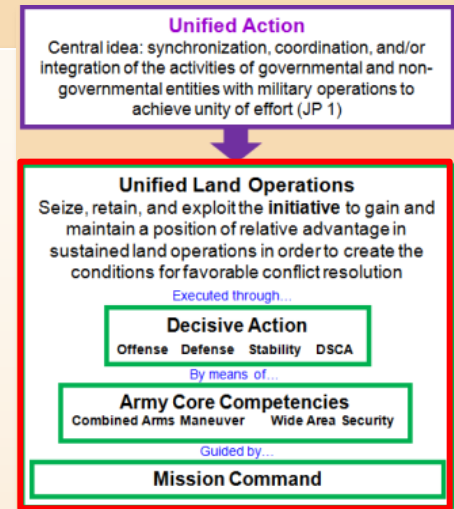✓ **Step 6 - Course of Action Approval**

✓ **Step 7 - Orders Production**

MDMP and Unified Land Operations

Unified Action
Central idea: synchronization, coordination, and/or integration of the activities of governmental and non-governmental entities with military operations to achieve unity of effort (JP 1)

Unified Land Operations
Seize, retain, and exploit the **initiative** to gain and maintain a position of relative advantage in sustained land operations in order to create the conditions for favorable conflict resolution

Executed through...

Decisive Action
Offense   Defense   Stability   DSCA

By means of...

Army Core Competencies
Combined Arms Maneuver   Wide Area Security

Guided by...

Mission Command

▪ **The P920 Doctrine Lesson provided an overview of the foundations of unified land operations as the Army's warfighting doctrine. It is based on the central idea that Army units seize, retain, and exploit the initiative to gain a position of relative advantage over the enemy. This is executed through decisive action, by means of core competencies, and guided by mission command.**

▪ **The philosophy of mission command - the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent - guides leaders in the execution of unified land operations.**

▪ **The operations structure is the Army's construct for operations. Within this construct, the operations process provides a broadly defined approach to developing and conducting operations. This is the context for MDMP.**

3. Organize effort within a commonly understood construct

Operations Structure

Provide a broad process for planning and executing operations	Provide basic options for visualizing and describing operations	Provide intellectual organization for common critical tasks
Operations Process ▪ Plan ✓ Army Design Methodology ✓ MDMP ✓ TLP ▪ Prepare ▪ Execute ▪ Assess	**Operational Framework** ▪ Decisive-Shaping-Sustaining ▪ Deep-Close-Security ▪ Main-Supporting Efforts	**War Fighting Functions** ▪ Mission Command ▪ Movement and Maneuver ▪ Intelligence ▪ Fires ▪ Sustainment ▪ Protection

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MDMP and Unified Land Operations

Operations Process
- Plan
  - ✓ Army Design Methodology
  - ✓ MDMP
  - ✓ TLP
- Prepare
- Execute
- Assess

- **Within the operations process, planning is the art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing about that future. Planning consists of two separate but closely related components: conceptual and detailed. Successful planning requires integrating both components.**

- **Army leaders employ three methodologies for planning after determining the appropriate mix based on the scope of the problem, their familiarity with it, and the time available:**

  - ✓ **The Army design methodology is a used for applying critical and creative thinking to understand, visualize, and describe unfamiliar problems and approaches to solving them. Leaders integrate this aid to *conceptual thinking* methodology with the *detailed planning* associated with the MDMP.**

  - ✓ **The military decisionmaking process (MDMP) is an iterative planning methodology. The MDMP applies *both conceptual and detailed approaches* to thinking but is most closely associated with detailed planning. This detailed planning process is the focus of the MDMP Lesson.**

  - ✓ **Troop leading procedures (TLP) are a dynamic process used by small-unit leaders and typically not employed in organizations with staffs.**

The Commander's Role in MDMP

▪ **The MDMP is an iterative planning methodology. It integrates the activities of the commander, staff, subordinate headquarters, and other partners** to understand the situation and mission; develop, analyze, and compare courses of action; decide on a course of action that best accomplishes the mission; and produce an operation order or order for execution.

▪ **Commanders initiate the MDMP** upon receipt of or in anticipation of a mission. Commanders and staff often begin planning in the absence of a complete and approved higher headquarters' operation plan (OPLAN) or operation order (OPORD).

▪ **The commander is the most important participant in the MDMP.** More than simply decisionmakers in this process, commanders use their experience, knowledge, and judgment to guide staff planning efforts.

▪ While unable to devote all their time to the MDMP, **commanders remain aware** of the current status of the planning effort, **participate** during critical periods of the process, and **make sound decisions** based on the detailed work of the staff.

The Staff's Role in MDMP

- **The chief of staff (COS) or executive officer (XO) is a key participant** in the MDMP. He manages and coordinates the staff's work and provides quality control during the MDMP. He must clearly understand the commander's intent and guidance because he supervises the entire process. He provides time lines, establishes briefing times and locations, and provides any instructions necessary to complete the plan.

- **The staff's effort during the MDMP focuses on helping the commander understand the situation, making decisions, and synchronizing those decisions into a fully developed plan or order.**

- Staff activities during planning initially focus on mission analysis. Mission analysis products help the commander understand the situation and develop the commander's visualization.

- During course of action (COA) development and COA comparison, the staff provides recommendations to support the commander in selecting a COA. After the commander makes a decision, the staff prepares the plan or order, coordinating all necessary details.

Overview of the MDMP

INPUT	STEP	OUTPUT
• HIGHER HQ PLAN or ORDER or NEW MISSION ANTICIPATED by the COMMANDER	**1 - RECEIPT OF MISSION**	• CDR'S INITIAL GUIDANCE • INITIAL ALLOCATION of TIME
	WARNO 1	
• HIGHER HQ PLAN or ORDER • HIGHER HQ KNOWLEDGE and INTEL PRODUCTS • KNOWLEDGE PRODUCTS from OTHER ORGANIZATIONS • DESIGN CONCEPT (if developed)	**2 - MISSION ANALYSIS**	• PROBLEM STATEMENT • MISSION STATEMENT • INITIAL CDR'S INTENT • INITIAL PLANNING GUIDANCE • INITIAL CCIRs and EEFIs • UPDATED IPB and RUNNING ESTIMATES • ASSUMPTIONS
	WARNO 2	
• MISSION STATEMENT • INITIAL CDR'S INTENT, PLANNING GUIDANCE, CCIRs, and EEFIs • UPDATED IPB and RUNNING ESTIMATES • ASSUMPTIONS	**3 - COA DEVELOPMENT**	• COA STATEMENTS and SKETCHES • TENTATIVE TASK ORGANIZATION • BROAD CONCEPT of OPERATIONS • REVISED PLANNING GUIDANCE • UPDATED ASSUMPTIONS
• UPDATED RUNNING ESTIMATES • REVISED PLANNING GUIDANCE • COA STATEMENTS and SKETCHES • UPDATED ASSUMPTIONS	**4 - COA ANALYSIS** **(WAR-GAME)**	• REFINED COAs • POTENTIAL DECISION POINTS • WAR-GAME RESULTS • INITIAL ASSESSMENT MEASURES • UPDATED ASSUMPTIONS
• UPDATED RUNNING ESTIMATES • REFINED COAs • EVALUATION CRITERIA • WAR-GAME RESULTS • UPDATED ASSUMPTIONS	**5 - COA COMPARISON**	• EVALUATED COAs • RECOMMENDED COAs • UPDATED RUNNING ESTIMATES • UPDATED ASSUMPTIONS
• UPDATED RUNNING ESTIMATES • EVALUATED COAs • RECOMMENDED COA • UPDATED ASSUMPTIONS	**6 - COA APPROVAL**	• CDR-SELECTED COA and MODIFICATIONS • REFINED CDR'S INTENT • REFINED CCIRs and EEFIs • UPDATED ASSUMPTIONS
	WARNO 3	
• CDR-SELECTED COA with any MODIFICATIONS • REFINED CDR's INTENT, CCIRs, and EEFIs • UPDATED ASSUMPTIONS	**7 - ORDERS PRODUCTION**	• APPROVED OPERATION PLAN or ORDER

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

| 1 - RECEIPT OF MISSION |
| 2 - MISSION ANALYSIS |
| 3 - COA DEVELOPMENT |
| 4 - COA ANALYSIS (WAR GAME) |
| 5 - COA COMPARISON |
| 6 - COA APPROVAL |
| 7 - ORDERS PRODUCTION |

Step 1 – Receipt of Mission

- **The MDMP begins with receiving or anticipating a new mission.**

- **This mission can come from an order issued by higher headquarters or be derived from an ongoing operation.**

- **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 process actions and produce outputs.**

- **Receipt of mission consists of six tasks, shown in the process and output columns on the next slide. Each task will be described in subsequent slides.** *(Some subjects will be discussed in greater detail during the conduct of CGSS).*

Introduction to Step 1 - Receipt of Mission

INPUT

- **Mission from higher HQ or deduced by the commander and staff.**
- **Higher HQ plan, OPORD, or WARNOs.**

PROCESS

- **Alert the staff and other key participants.**
- **Gather the tools:**
  - ✓ **Higher HQ order**
  - ✓ **Maps**
  - ✓ **SOPs**
  - ✓ **Appropriate FMs**
  - ✓ **Running estimates**
  - ✓ **Other as required**
- **Update running estimates.**
- **Conduct initial assessment.**

OUTPUT

- **Commander's initial guidance.**
- **Initial Warning Order (WARNO) # 1.**

| 1 - RECEIPT OF MISSION |
| 2 - MISSION ANALYSIS |
| 3 - COA DEVELOPMENT |
| 4 - COA ANALYSIS (WAR GAME) |
| 5 - COA COMPARISON |
| 6 - COA APPROVAL |
| 7 - ORDERS PRODUCTION |

Step 1 - Receipt of Mission

▪ **Input:** The MDMP begins with receiving or anticipating a new mission. This can come from an order issued by higher headquarters or be derived from an ongoing operation.

▪ **Process:** Step 1 - Receipt of Mission involves **six tasks**:

✓*Task 1, Alert the staff and other key participants.* As soon as the unit receives a new mission (or when the commander directs), the current operations integration cell (G-3 / S-3) alerts the staff. Unit standing operating procedures (SOPs) should identify who participates in mission analysis.

✓*Task 2, Gather the tools.* These tools include, but not limited to the higher headquarters order or plan and operational graphics; maps and terrain products of the area of operations (AO); SOPs; appropriate field manuals (FMs); current running estimates; any design products; and other materials and products required.

✓*Task 3, Update running estimates.* Each staff section should begin updating its running estimate - especially the status of friendly units and resources and key civil considerations. Updating running estimates is continuous throughout the operations process.

| 1 - RECEIPT OF MISSION |
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| 4 - COA ANALYSIS (WAR GAME) |
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| 6 - COA APPROVAL |
| 7 - ORDERS PRODUCTION |

Step 1 - Receipt of Mission

■ **Input:** The MDMP begins with receiving or anticipating a new mission. This can come from an order issued by higher headquarters or be derived from an ongoing operation.

■ **Process:** Step 1 - Receipt of Mission involves **six tasks**:

✓*Task 4, Conduct initial assessment.* **The commander and staff perform an initial assessment. This includes:**

- The **time needed to plan and prepare for the mission** for both the headquarters and subordinate units. Commanders generally allocate a minimum of **two-thirds** of the available time to subordinate units for planning and preparation. This leaves **one-third** of the time for the commander and staff to do their own planning. The COS / XO then determines the staff planning time line that outlines how long the staff can spend on each MDMP step.

- Guidance on design and abbreviating the MDMP, if required. Time, more than any other factor, determines the detail to which the commander and staff can plan.

- Which outside agencies and organizations to contact and incorporate into the planning process.

- The staff's experience, cohesiveness, and level of rest or stress.

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS
(WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 1 - Receipt of Mission

▪ **Output:** Step 1 - Receipt of Mission consists of:

✓ *Task 5, Issue the commander's initial guidance.* **Once time is allocated, the commander determines whether to initiate design, conduct design and MDMP in parallel, or proceed directly into the MDMP without the benefits of formal design activities. The initial guidance includes:**

- Initial time allocations.

- A decision to initiate design or go straight 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 (IRs).

- Additional staff tasks.

1 - RECEIPT OF MISSION
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7 - ORDERS PRODUCTION

Step 1 - Receipt of Mission

- **Output: Step 1 - Receipt of Mission consists of:**

✓ *Task 6, Issue the initial warning order (WARNO).* **This order includes, as a minimum:**

- **The type of operation.**

- **The general location of the operation.**

- **The initial timeline.**

- **Any movements (such as communications system nodes) or reconnaissance to initiate.**

Glossary for Step 1 - Receipt of Mission

(Click on the arrow at the end of the definition to return to your place)

▪ **Design:** The Army design methodology is a methodology for applying critical and creative thinking to understand, visualize, and describe unfamiliar problems and approaches to solving them. While useful as an aid to conceptual thinking about unfamiliar problems, leaders integrate this methodology with the detailed planning typically associated with the military decisionmaking process to produce executable plans. (ADP 3-0, *Unified Land Operations*, Oct 11, para 41). ◄

▪ **Information requirements (IR):** All information elements the commander and staff require to successfully conduct operations. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-99). ◄

▪ **Running estimate:** 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. Each staff section considers the effects of new information and updates the following: facts, assumptions, friendly force status, enemy activities and capabilities, civil considerations, and conclusions and recommendations. Building and maintaining running estimates is a primary task of each staff section. (ATTP 5-0.1, *Commander and Staff Officer Guide*, Sep 11, paras 6-1 through 6-4). ◄

Summary of Step 1 - Receipt of Mission

INPUT

- **Mission from higher HQ or deduced by the commander and staff.**
- **Higher HQ plan, OPORD, or WARNOs.**

PROCESS

- **Alert the staff and other key participants.**
- **Gather the tools:**
  - ✓ **Higher HQ order**
  - ✓ **Maps**
  - ✓ **SOPs**
  - ✓ **Appropriate FMs**
  - ✓ **Running estimates**
  - ✓ **Other as required**
- **Update running estimates.**
- **Conduct initial assessment.**

OUTPUT

- **Commander's initial guidance.**
- **Initial warning order (WARNO) # 1.**

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

1 - RECEIPT OF MISSION

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7 - ORDERS PRODUCTION

Step 2 – Mission Analysis

▪ **Commanders (supported by their staffs and informed by subordinate and adjacent commanders) gather, analyze, and synthesize information to orient themselves on the current conditions of the operational environment.**

▪ **The commander and staff conduct mission analysis to better understand the situation and problem, and identify what the command must accomplish, when and where it must be done, and most importantly why - the purpose of the operation.**

▪ **Since no amount of subsequent planning can solve a problem insufficiently understood, mission analysis is the most important step in the MDMP.**

▪ **Mission analysis consists of 19 tasks, shown in the process column on the next slide. Each task will be described in subsequent slides. *(Some subjects will be discussed in greater detail during the conduct of CGSS).***

Introduction to Step 2 – Mission Analysis

PROCESS

OUTPUT

INPUT

- Higher HQ plan / order.
- Higher HQ intelligence and knowledge products.
- Knowledge products from other organizations.
- Updated running estimates.
- Initial commander's guidance.
- Design concept (if design precedes mission analysis).

- Analyze higher HQ plan or order.
- Perform initial IPB.
- Determine specified, implied, and essential tasks.
- Review available assets.
- Determine constraints.
- Identify critical facts and develop assumptions.
- Begin composite risk management.
- Develop initial CCIRs and EEFIs.
- Dev initial R&S synchronization tools.
- Develop initial R&S plan.
- Update plan for use of available time.
- Develop initial themes and messages.
- Develop proposed problem statement.
- Develop proposed mission statement.
- Present the mission analysis briefing.
- Develop and issue initial cdr's intent.
- Dev and issue initial planning guidance.
- Develop COA evaluation criteria.
- Issue a warning order (WARNO).

- Approved problem statement.
- Approved mission statement.
- Initial commander's intent.
- Initial CCIRs and EEFIs.
- Initial commander's planning guidance.
- Information themes and messages.
- Updated IPB products.
- Updated running estimates.
- Assumptions.
- Resource shortfalls.
- Updated timeline.
- COA evaluation criteria.
- WARNO # 2.

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS (WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 2 – Mission Analysis

▪ **Input:** Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.

▪ **Process:** Step 2 – Mission analysis involves **19 tasks**:

✓ *Task 1, Analyze the Higher Headquarters Plan or Order.*

Commanders and staffs thoroughly analyze the higher headquarters plan or order to establish where the unit mission fits into the missions of higher and adjacent headquarters.

Their goal (aim) is to determine how their unit, by task and purpose, contributes to the mission, commander's intent, and concept of operations of the higher headquarters.

Liaison officers (LNOs) familiar with the higher headquarters plan can help clarify issues. Staffs may also use requests for information (RFIs) to clarify or obtain additional information from the higher headquarters.

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves** **19 tasks**:

✓ *Task 2, Perform Initial Intelligence Preparation of the Battlefield (IPB).*
IPB is a systematic, continuous process of analyzing the threat and operational environment in a specific geographic area. Most intelligence requirements are generated as a result of the IPB process which consists of four steps:

- **Define the battlefield environment.**

- **Describe the battlefield's effects.**

- **Evaluate the threat.**

- **Determine the threat courses of action.**

The results of the initial IPB include terrain and weather products to include the modified combined obstacle overlay (MCOO), likely enemy COAs, high value target list (HVTL), key civil considerations, and gaps in information used by the commander to establish PIRs and RFIs.

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓*Task 3, Determine Specified, Implied, and Essential Tasks.*
The staff analyzes the higher headquarters order and the higher commander's guidance to determine specified and implied tasks.

Once staff members have identified specified and implied tasks, they ensure they understand each task's requirements and purpose. From the list of specified and implied tasks, the staff determines essential tasks for inclusion in the recommended mission statement.

When analyzing the higher order for specified and implied tasks, the staff also identifies any be-prepared or on-order missions.

These tasks and type of missions are defined on the next slide.

Tasks and Missions Defined

Specified Tasks: Those specifically assigned to a unit by its higher headquarters. Paragraphs 2 and 3 of the higher hq's order state specified tasks, but may be listed in annexes, overlays, directives, and/or assigned verbally during collaborative planning sessions.

Implied Tasks: Those that must be performed to accomplish a specified task or the mission, but are **not** stated in the higher headquarters order. These are derived from a *detailed analysis* of the higher order and *METT-TC factors*.

Essential Tasks: Those **specified and implied tasks** that must be executed to accomplish the mission. *Essential tasks are always included in the unit's mission statement.*

The staff also identifies any be-prepared or on-order missions:

✓**Be-Prepared Mission:** Assigned to a unit that might be executed (generally a contingency mission).
✓**On-order Mission:** A mission to be executed at an unspecified time.

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 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.

They consider relationships among essential, specified, and implied tasks, and between them and available assets. From this analysis, they determine if they have the assets needed to accomplish all tasks. If there are shortages, they identify additional resources needed for mission success.

The staff also identifies any deviations from the normal task organization and provides them to the commander to consider when developing the planning guidance.

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7 - ORDERS PRODUCTION

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 5, Determine Constraints.*

   A higher commander normally places some constraints on subordinates. The commander and staff must identify and understand these constraints.

- **Constraints can take the form of a requirement to do something (for example, "maintain a reserve of one company.")**

- **They can also prohibit action (for example, "no reconnaissance forward of Phase Line Bravo before 1700.")**

- **Constraints may also be issued verbally, in WARNOs, or in policy memoranda.**

▪ **Input:** Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.

▪ **Process:** Step 2 – Mission analysis involves **19 tasks**:

✓ *Task 6, Identify Critical Facts and Develop Assumptions.* **Plans and orders are based on facts and assumptions. Commanders and staffs gather facts and assumptions as they build their plan.**

- **Facts:** Statements are statements of truth or statements thought to be true at the time.

- **Assumptions:** Suppositions 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 course of action.

- Commanders and staffs must **continually attempt to replace those assumptions with facts**.

1 - RECEIPT OF MISSION

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** Step 2 – Mission analysis involves **19 tasks**:

✓ *Task 7, Begin Composite Risk Management (CRM).*
CRM is the Army's primary process of identifying, assessing, and controlling risks arising from operational factors and of making decisions that balance risk costs with mission benefits. CRM consists of five steps. The first four steps are conducted in the MDMP:

- **Step 1,** Identify hazards.

- **Step 2,** Assess hazards to determine risk.

- **Step 3,** Develop controls and make risk decisions.

- **Step 4,** Implement controls.

- Step 5, Supervise and evaluate.

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 8, Develop Initial Commander's Critical Information Requirements (CCIR) and Essential Elements of Friendly Information (EEFI).*

Mission analysis identifies gaps in information required for further planning and decisionmaking. The staff develops information requirements (IR). Some IRs are of such importance to the commander that they are nominated to the commander to become CCIR.

Commanders determine their CCIRs and consider the nominations of the staff. The fewer the CCIRs, the better the staff can focus its efforts and allocate sufficient resources for collecting them.

The staff also identifies and nominates essential elements of friendly information (EEFI). EEFI help the commander understand what enemy commanders want to know about friendly forces and why.

1 - RECEIPT OF MISSION
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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 9, Develop Initial Reconnaissance and Surveillance (R & S) Synchronization Tools.* **Synchronizing includes all assets the commander controls, assets made available from lateral units, higher echelon units and organizations, RFIs, and intelligence reach that answer CCIRs. During R & S synchronization, the G-2 / S-2:**

- **Identifies requirements and intelligence gaps.**

- **Evaluates available assets to collect information.**

- **Determines gaps in the use of those assets.**

- **Recommends those R & S assets controlled by the organization to collect on the IRs.**

- **Submits requests for information (RFIs) for adjacent and higher collection support.**

- **Submits info gathered during R & S synchronization to the G-3 / S-3 for integration and development of the R & S plan.**

| 1 - RECEIPT OF MISSION |
| 2 - MISSION ANALYSIS |
| 3 - COA DEVELOPMENT |
| 4 - COA ANALYSIS (WAR GAME) |
| 5 - COA COMPARISON |
| 6 - COA APPROVAL |
| 7 - ORDERS PRODUCTION |

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves 19 tasks:**

✓*Task 10, Develop Initial Reconnaissance and Surveillance Plan.*
   R & S integration follows R & S synchronization. The G-3 / S-3 leads the staff through R & S integration to task available reconnaissance and surveillance assets to satisfy IRs identified in the initial R & S synchronization matrix. R & S integration consists of the following tasks:

   • **Develop the R & S plan by developing:**

      ✓ **The R & S scheme of support.**

      ✓ **The R & S tasking matrix.**

      ✓ **The R & S overlay.**

   • **Issue order (warning, operation, or fragmentary order). R & S assets are tasked or dispatched as soon as possible. The initial R & S plan sets surveillance and reconnaissance in motion.**

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(WAR GAME)

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 11, Update Plan for the Use of Available Time.*

As more information becomes available, the commander and staff refine their initial plan for the use of available time. They compare the time needed to accomplish tasks to the higher headquarters time line to ensure mission accomplishment is possible in the allotted time. The refined time line includes:

- **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.**

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 12, Develop Initial Information Themes and Messages.* **Commanders identify and engage those actors that matter to their operational success. These actors have behavior that can help solve or complicate the friendly forces' challenges as they strive to accomplish their missions.**

• **An information theme is a unifying or dominant idea or image that expresses the purpose for military action.**

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

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5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 13, Develop a Proposed Problem Statement.*
   A problem is an issue or obstacle that makes it difficult to achieve a desired goal or objective. As such, a problem statement is the description of the primary issue or issues that may impede commanders from achieving their desired end state. To help identify and understand the problem, the staff:

  • **Compares the current situation to the desired end state.**

  • **Brainstorms and lists issues or obstacles that will impede the command from achieving the desired end state.**

  • **Determines the primary obstacles that will impede the command from achieving the desired end state.**

1 - RECEIPT OF MISSION

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6 - COA APPROVAL

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Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 14, Develop a Proposed Mission Statement.* **The COS / XO or G-3 / S-3 prepares a proposed mission statement for the unit based on the mission analysis. The unit's mission statement is presented to the commander for approval normally during the mission analysis brief.**

A mission statement is a short sentence or paragraph describing the unit's essential task(s) and purpose - a clear statement of the action to be taken and reason for doing so. It contains the elements of who, what, when, where, and why, but seldom specifies how.

- **Who will execute the operation (unit/organization)?**

- **What is the unit's essential task or tasks?**

- **When will the operation begin (by time or event) or what is the duration of the operation?**

- **Where will the operation occur (AO, objective, grid coordinates)?**

- **Why will the force conduct the operation (for what purpose)?**

Mission Statement Examples

The *who*, *where*, and *when* of the mission statement are straightforward. The *what* and *why* however, are more challenging to write clearly and can be confusing to subordinates if not written clearly. The *what* is a task and is expressed in terms of action verbs (for example, contain, destroy, isolate, secure). The *why* puts the task into context by describing the reason for performing it. **Example:**

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)*.

The mission statement may have more than one essential task. For example, if the operation is phased, there may be a different essential task for each phase. **Example:**

1-509th Parachute Infantry Regiment *(Who)* seizes *(What/Task)* JACKSON INTERNATIONAL 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 2nd Pandor Guards Brigade from crossing the BLUE RIVER and disrupting operations in AO SPARTAN *(Why/Purpose)*.

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 15, Present the Mission Analysis Briefing.* **This briefing informs the commander of the results of the staff's analysis and help the commander understand, visualize, and describe the operations. The staff briefs 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 one level up.
- A proposed problem statement.
- A proposed mission statement.
- Review of the commander's initial guidance.
- Initial IPB products, including civil considerations that impact 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 R & S plan.
- Recommended timeline.
- Recommended collaborative planning sessions.

ATTP 5-0.1, *Cdr/Staff Officer Guide,* **Sep 11, p. 4-13**

R

1 - RECEIPT OF MISSION
2 - MISSION ANALYSIS
3 - COA DEVELOPMENT
4 - COA ANALYSIS (WAR GAME)
5 - COA COMPARISON
6 - COA APPROVAL
7 - ORDERS PRODUCTION

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 16, Develop and Issue Initial Commander's Intent.*
  Commander's intent is a clear, concise statement of what the force must do and the conditions the force must establish.

  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.

  In the absence of orders, the commander's intent, coupled with the mission statement, directs subordinates toward mission accomplishment. It must be easy to remember and clearly understood by subordinates two echelons down. Typically, the commander's intent statement is three to five sentences long.

Step 2- Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process:** **Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 17, Develop and Issue Initial Planning Guidance.*
   Planning guidance conveys the essence of the commander's visualization. The initial planning guidance outlines an operational approach - the broad general actions that will produce the conditions that define the desired end state.

   It broadly describes when, where, and how the commander intends to employ combat power to accomplish the mission within the higher commander's intent. This broad guidance allows the latitude necessary for the staff to explore different options

   Commanders provide planning guidance by <u>warfighting functions (WFF)</u> tailored to meet specific needs (only on those items appropriate to a particular mission based on the situation). *(Addressed in greater detail in CGSS).*

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 18, Develop Course of Action Evaluation Criteria.* **Evaluation criteria are standards 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 commander's planning guidance helps to eliminate a source of bias prior to COA analysis and comparison.**

Evaluation criteria address factors that affect success and those that can cause failure. They change from mission to mission and must be clearly defined and understood by all staff members before starting the war game to test the proposed COAs.

Normally, the COS / XO initially determines each proposed criterion with weights based on the assessment of its relative importance and the commander's guidance. *(Addressed in greater detail in CGSS).*

Step 2 - Mission Analysis

▪ **Input: Products to begin mission analysis include the higher headquarters plan or order, higher headquarters intelligence and knowledge products, updated running estimates, initial commander's guidance, and design concept.**

▪ **Process: Step 2 – Mission analysis involves 19 tasks:**

✓ *Task 19, Issue a Warning Order (WARNO).* **Immediately after the commander gives the planning guidance, the staff sends subordinate and supporting units a WARNO that contains, as a minimum:**

- • **The approved mission statement.**
- • **The commander's intent.**
- • **Changes to task organization.**
- • **The 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.**

A sample WARNO format is shown on next slide.

Example Warning Order Format

[CLASSIFICATION]

(Change from verbal orders, if any) (Optional)

[Heading data is the same as for OPLAN/OPORD]

WARNING ORDER [number]

(U) References: *Refer to higher headquarters' OPLAN/OPORD and identify map sheets for operation (Optional).*

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

(U) Task Organization: *(Optional).*

1. **(U)** <u>Situation</u>. *The situation paragraph describes the conditions and circumstances of the operational environment that impact operations in the following subparagraphs:*

    a. (U) <u>Area of Interest</u>.

    b. (U) <u>Area of Operations</u>.

    c. (U) <u>Enemy Forces</u>.

    d. (U) <u>Friendly Forces</u>.

    e. (U) <u>Interagency, Intergovernmental, and Nongovernmental Organizations</u>.

    f. (U) <u>Civil Considerations</u>.

    g. (U) <u>Attachments and Detachments</u>. *Provide initial task organization.*

    h. (U) <u>Assumptions</u>. *List any significant assumptions for order development.*

2. **(U)** <u>Mission</u>. *State the issuing headquarters' mission.*

3. **(U)** <u>Execution</u>.

    a. (U) <u>Initial Commander's Intent</u>. *Provide brief commander's intent statement.*

    b. (U) <u>Concept of Operations</u>. *This may be "to be determined" for an initial WARNO.*

    c. (U) <u>Tasks to Subordinate Units</u>. *Include any known tasks at time of issuance of WARNO.*

    d. (U) <u>Coordinating Instructions</u>.

4. **(U)** <u>Sustainment</u>. *Include any known logistics, personnel, or Army health system preparation tasks.*

5. **(U)** <u>Command and Signal</u>. *Include any changes to the existing order or state "no change."*

[page number]

[CLASSIFICATION]

[CLASSIFICATION]

(Change from verbal orders, if any) (Optional)

[Heading data is the same as for OPLAN/OPORD]

WARNING ORDER [number]

ACKNOWLEDGE:

[Commander's last name]
[Commander's rank]

OFFICIAL:

[Authenticator's name]
[Authenticator's position]

ANNEXES:

DISTRIBUTION:

[page number]

[CLASSIFICATION]

Glossary for Step 2 - Mission Analysis
(Click on the arrow at the end of the definition to return to your place)

▪ **Commander's critical information requirement (CCIR):** A comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision making process that affect successful mission accomplishment. The two key elements are critical friendly force information requirements (FFIR) and priority intelligence requirements (PIR). (ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, para 4-46). ◄

▪ **Constraint:** A restriction placed on the command by a higher command. A constraint dictates an action or inaction, thus restricting the freedom of action a subordinate commander has for planning. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-43 and ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, para 4-37). ◄

▪ **High value target list (HVTL):** A list on which targets are compiled. HVT is a target the enemy commander requires for the successful completion of the mission. The loss of high-value targets would be expected to seriously degrade important enemy functions throughout the friendly commander's area of interest. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-93). ◄

▪ **Liaison Officers (LNOs):** Officer with assigned mission to maintain contact or intercommunication between element of military forces or other agencies. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-112). ◄

▪ **Modified combined obstacle overlay (MCOO):** A product used to depict the battlefield's effects on military operations. It integrates into one overlay all obstacles to movement, including but not limited to, built-up areas, slope, soil, vegetation, and transportation systems (bridge classification and road characteristics). It is a collaborative effort involving input from the entire staff. The MCOO depicts the terrain according to mobility classification: severely restricted, restricted, and unrestricted. (FM 2-01.3, *Intelligence Preparation of the Battlefield*, Oct 09, paragraphs 3-28 to 3-32). ◄

▪ **Warfighting functions (WFF):** A group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions. The WFFs are Movement and Maneuver, Intelligence, Fires, Sustainment, Mission Command, and Protection. (ADP 3-0, *Unified Land Operations*, Oct 11, paras 61 to 67). ◄

R

Summary of Step 2 – Mission Analysis

PROCESS

INPUT

OUTPUT

INPUT
- Higher HQ plan / order.
- Higher HQ intelligence and knowledge products.
- Knowledge products from other organizations.
- Updated running estimates.
- Initial commander's guidance.
- Design concept (if design precedes mission analysis).

PROCESS
- Analyze higher HQ plan or order.
- Perform initial IPB.
- Determine specified, implied, and essential tasks.
- Review available assets.
- Determine constraints.
- Identify critical facts and develop assumptions.
- Begin composite risk management.
- Develop initial CCIRs and EEFIs.
- Dev initial R&S synchronization tools.
- Develop initial R&S plan.
- Update plan for use of available time.
- Develop initial themes and messages.
- Develop proposed problem statement.
- Develop proposed mission statement.
- Present the mission analysis briefing.
- Develop and issue initial cdr's intent.
- Dev and issue initial planning guidance.
- Develop COA evaluation criteria.
- Issue a warning order (WARNO).

OUTPUT
- Approved problem statement.
- Approved mission statement.
- Initial commander's intent.
- Initial CCIRs and EEFIs.
- Initial commander's planning guidance.
- Information themes and messages.
- Updated IPB products.
- Updated running estimates.
- Assumptions.
- Resource shortfalls.
- Updated timeline.
- COA evaluation criteria.
- WARNO # 2.

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

1 - RECEIPT OF MISSION

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Step 3 – COA Development

■ **A course of action (COA) is a broad potential solution to an identified problem. During COA development, planners use the problem statement, mission statement, commander's intent, planning guidance, and the various knowledge products developed during mission analysis.**

■ **Each prospective COA is examined 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 of maneuver, lines of effort, phasing, day or night operations, use of the reserve, and task organization).**

- **Complete: Each COA must show how the decisive operation accomplishes the mission, how shaping operations create and preserve conditions for success, how sustaining operations enable shaping and decisive operations, how to account for decisive action tasks, and tasks to be performed and conditions to be achieved.**

■ **COA development consists of eight tasks, shown in the process column on the next slide. Each task will be described in subsequent slides.**

Introduction to Step 3 – COA Development

INPUT	PROCESS	OUTPUT

INPUT

- Approved problem statement.
- Approved mission statement.
- Initial commander's intent and planning guidance.
- Design concept (if developed).
- Specified and implied tasks.
- Assumptions.
- Updated running estimates and IPB products.
- COA evaluation criteria.

PROCESS

- Assess relative combat power.
- Generate options.
- Array forces.
- Develop a broad concept.
- Assign headquarters.
- Prepare COA statements and sketches.
- Conduct COA briefing.
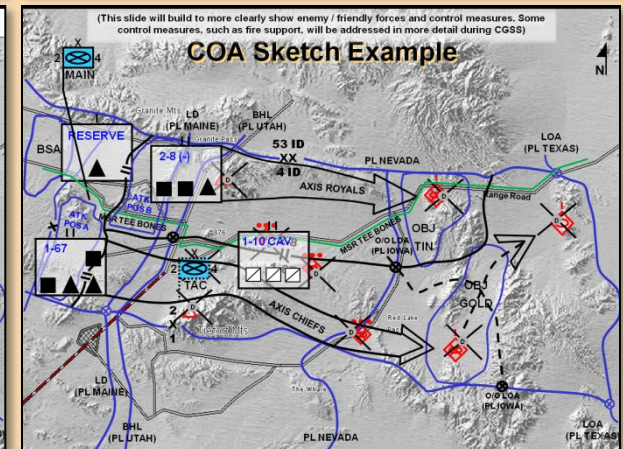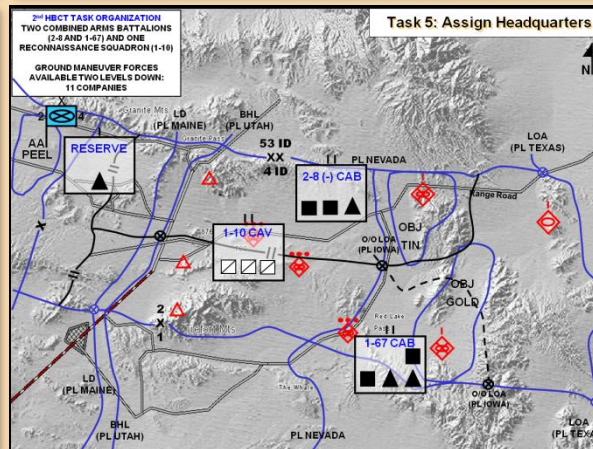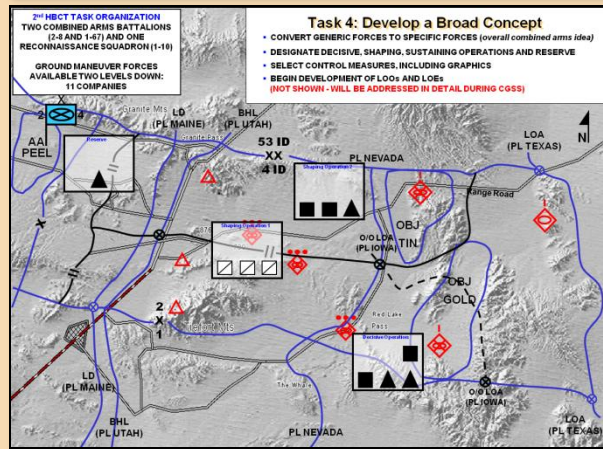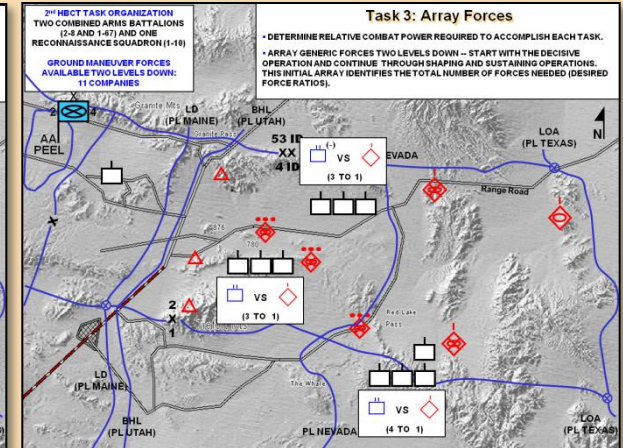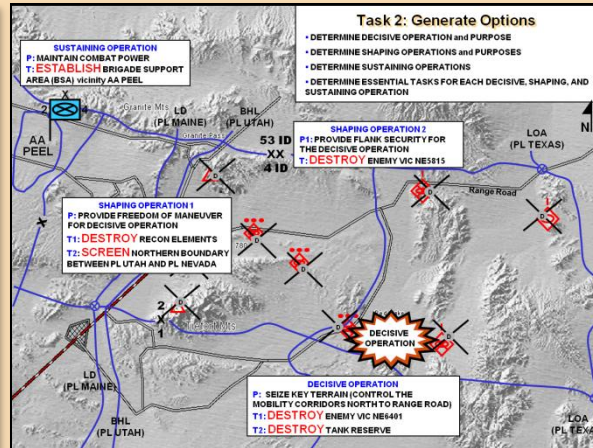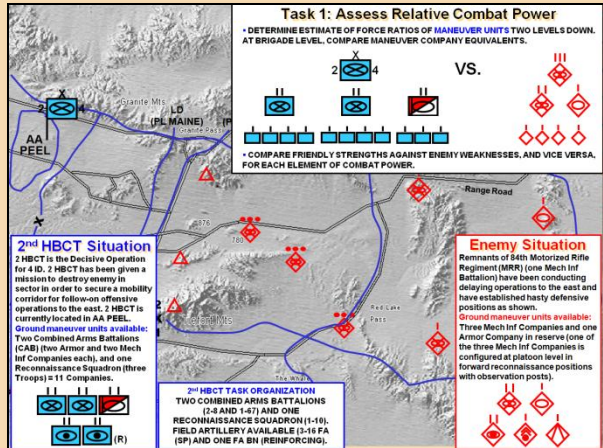- Select or modify COAs for continued analysis.

OUTPUT

- Commander's selected COAs for war-gaming with COA statements and sketches.
- Commander's refined planning guidance to include:
  - ✓ War-gaming guidance
  - ✓ Evaluation criteria
- Updated running estimates and IPB products.
- Updated assumptions.

(Some subjects will be discussed in greater detail during the conduct of CGSS).

COA Development Illustrations

Sketches are included throughout this section and are intended to provide examples of each COA development task. Only the major actions in each task are included for clarity and illustration purposes. A complete COA Sketch example from ATTP 5-0.1, *Commander and Staff Officer Guide*, Sep 11, p. 4-21 is included near the end of the COA Development Section.

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Step 3 – COA Development

▪ **Input:** Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.

▪ **Process:** Step 3 – COA development involves **eight tasks**:

✓*Task 1, Assess Relative Combat Power.* Combat power is the total means of destructive, constructive, and information capabilities that a military unit can apply at a given time. **Combat power** 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**. For example, at division level, planners compare all types of maneuver battalions with enemy maneuver battalion equivalents. Planners then compare friendly strengths against enemy weaknesses, and vice versa, for each element of combat power. *(Continued)*

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Step 3 – COA Development

▪ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

▪ **Process:** Step 3 – COA development involves **eight tasks:**

✓ *Task 1, Assess Relative Combat Power (continued).* **By analyzing** **force ratios** **and determining / comparing each force's** **strengths and weaknesses** **as a function of combat power, planners gain insight into:**

- **Friendly capabilities that pertain to the operation.**

- **The types of operations possible from both friendly and enemy perspectives.**

- **How and where the enemy and friendly forces may be vulnerable.**

- **Additional resources that may be required to execute the mission.**

- **How to allocate existing resources.**

Planners must not develop and recommend COAs based solely on mathematical analysis of force ratios. Assessing combat power requires assessing **both tangible and intangible factors**, **such as morale and levels of training.**

Assessing Strengths and Weaknesses

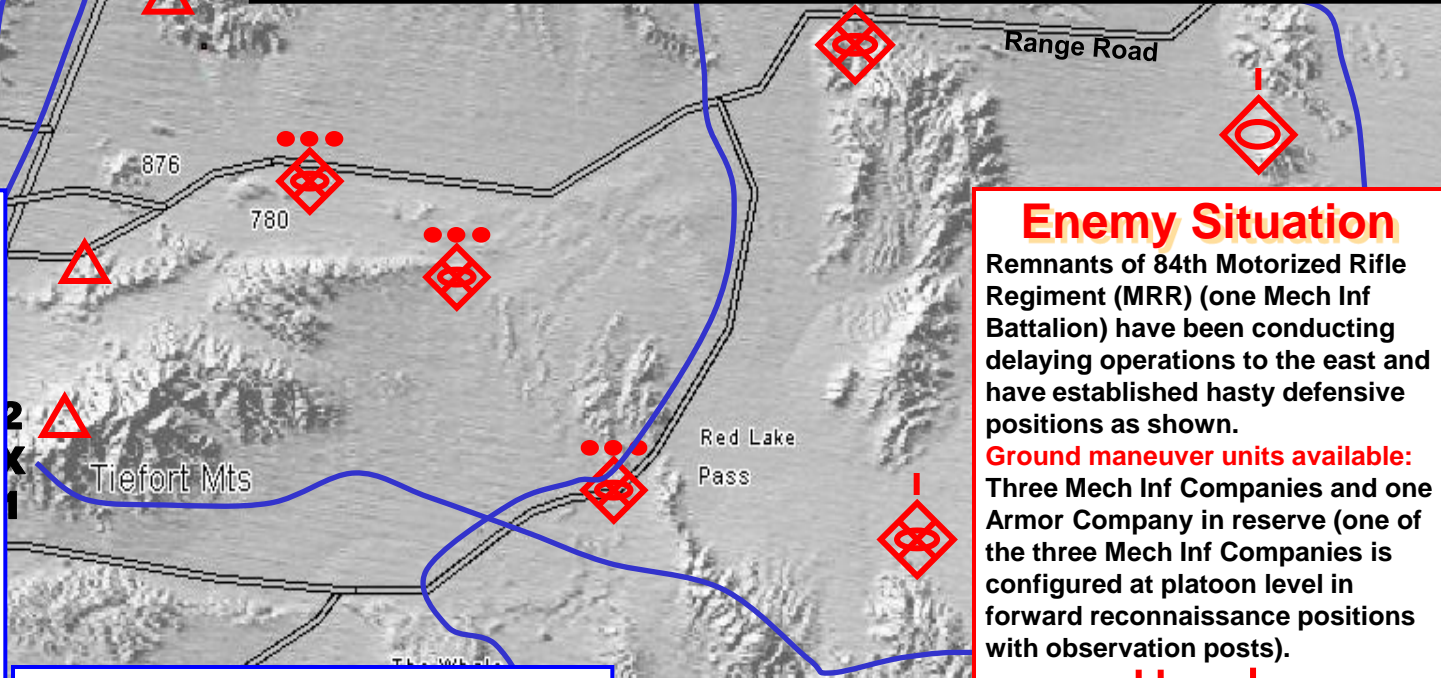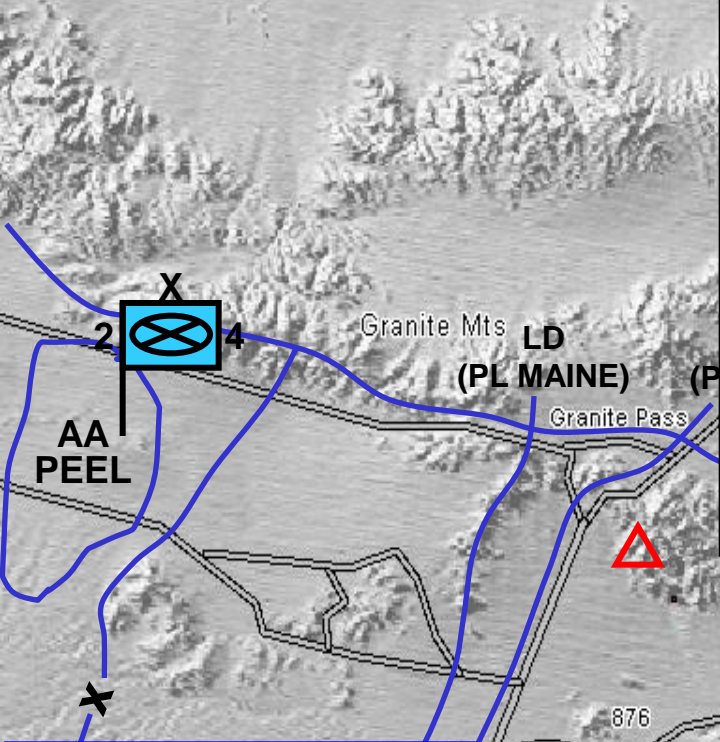**Planners then compare enemy and friendly strengths and weaknesses for each element of combat power.**

Elements of Combat Power	Enemy Strengths and Weaknesses	Friendly Strengths and Weaknesses	Advantage	
			Friendly	**Enemy**
Intelligence	Strength: Weakness:	Strength: Weakness:		
Movement and Maneuver	**Strength:** Infantry has numerous anti-tank wpns. **Weakness:** Poorly maintained.	**Strength:** 3 X M1A2 equipped combined arms task forces. **Weakness:**	X	
Fires	Strength: **Weakness:** Limited to mortar	Strength: Weakness:	X	
Protection	Strength: Weakness:	Strength: Weakness:		
Sustainment	Strength: **Weakness: Extended LOCs**	**Strength:** LOOs secured and maintained. Weakness:	X	
Mission Command	Strength: Weakness:	Strength: Weakness:		
Leadership	**Strength:** Elite unit very disciplined. **Weakness:** Lack of initiative by subordinates.	**Strength:** Combat tested unit. Aggressive and offensive oriented command climate. **Weakness:**	X	
Information	**Strength:** Full backing of local population and regional press **Weakness:** C2 acceptable to jamming and interception	**Strength:** Secure and reliable C2 systems **Weakness:** Seen as invaders and occupiers		X

(ATTP 5-0.1 does not provide an example for this comparison-the table shown is provided only as a recording technique) 53

Task 1: Assess Relative Combat Power

- **DETERMINE ESTIMATE OF FORCE RATIOS OF MANEUVER UNITS TWO LEVELS DOWN. AT BRIGADE LEVEL, COMPARE MANEUVER COMPANY EQUIVALENTS.**
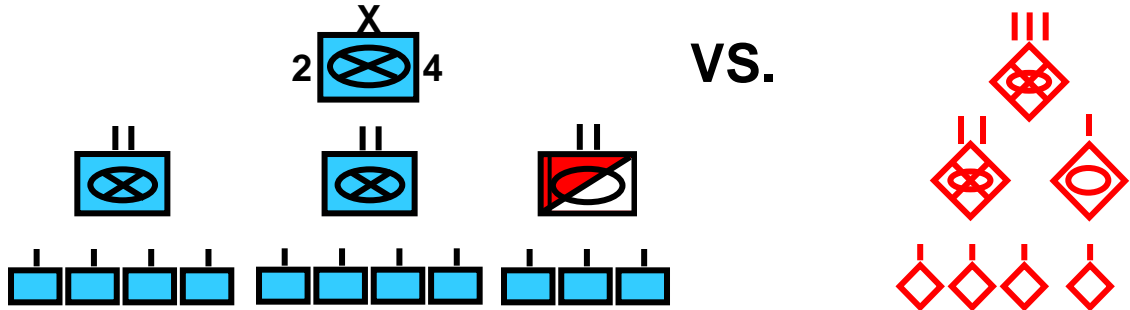
VS.

- **COMPARE FRIENDLY STRENGTHS AGAINST ENEMY WEAKNESSES, AND VICE VERSA, FOR EACH ELEMENT OF COMBAT POWER.**

Granite Mts

LD (PL MAINE)

Granite Pass

AA PEEL

Range Road

876

780

Red Lake Pass

Tiefort Mts

The Whale

2nd HBCT Situation

2 HBCT is the Decisive Operation for 4 ID. 2 HBCT has been given a mission to destroy enemy in sector in order to secure a mobility corridor for follow-on offensive operations to the east. 2 HBCT is currently located in AA PEEL.

Ground maneuver units available: Two Combined Arms Battalions (CAB) (two Armor and two Mech Inf Companies each), and one Reconnaissance Squadron (three Troops) = 11 Companies.
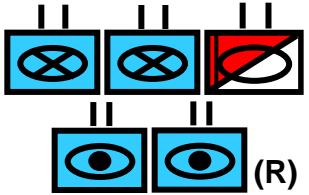
Enemy Situation

Remnants of 84th Motorized Rifle Regiment (MRR) (one Mech Inf Battalion) have been conducting delaying operations to the east and have established hasty defensive positions as shown.

Ground maneuver units available:
Three Mech Inf Companies and one Armor Company in reserve (one of the three Mech Inf Companies is configured at platoon level in forward reconnaissance positions with observation posts).
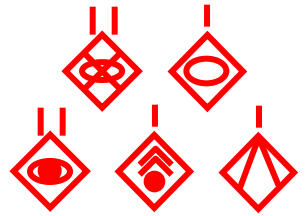
2nd HBCT TASK ORGANIZATION

TWO COMBINED ARMS BATTALIONS (2-8 AND 1-67) AND ONE RECONNAISSANCE SQUADRON (1-10). FIELD ARTILLERY AVAILABLE (3-16 FA (SP) AND ONE FA BN (REINFORCING).

1 - RECEIPT OF MISSION

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7 - ORDERS PRODUCTION

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

■ **Process:** Step 3 – COA development involves **eight tasks:**

✓ *Task 2, Generate Options.* **Brainstorming is the preferred technique for generating options. A good COA can defeat all feasible enemy COAs. In developing COAs, the staff determines the doctrinal requirements for each type of operation being considered, including doctrinal tasks for subordinate units.**

- **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 and considers ways to mass *lethal and nonlethal* effects of overwhelming combat power to achieve it.**

- **Next, the staff considers shaping operations. The staff establishes a purpose for each shaping operation that is tied to creating or preserving a condition for the decisive operation's success.**

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

- **Finally, the staff examines each COA to determine if it satisfies the screening criteria (feasible, acceptable, suitable, distinguishable, and complete).**

Task 2: Generate Options

- **DETERMINE DECISIVE OPERATION and PURPOSE**
- **DETERMINE SHAPING OPERATIONS and PURPOSES**
- **DETERMINE SUSTAINING OPERATIONS**
- **DETERMINE ESSENTIAL TASKS FOR EACH DECISIVE, SHAPING, AND SUSTAINING OPERATION**

SUSTAINING OPERATION
P: MAINTAIN COMBAT POWER
T: **ESTABLISH** BRIGADE SUPPORT AREA (BSA) vicinity AA PEEL

Granite Mts
LD (PL MAINE)
Granite Pass

BHL (PL UTAH)

2 ⊗ 4

AA PEEL

53 ID
XX
4 ID

SHAPING OPERATION 2
P: PROVIDE FLANK SECURITY FOR THE DECISIVE OPERATION
T: **DESTROY** ENEMY VIC NE5815

LOA (PL TEXAS)

N

Range Road

SHAPING OPERATION 1
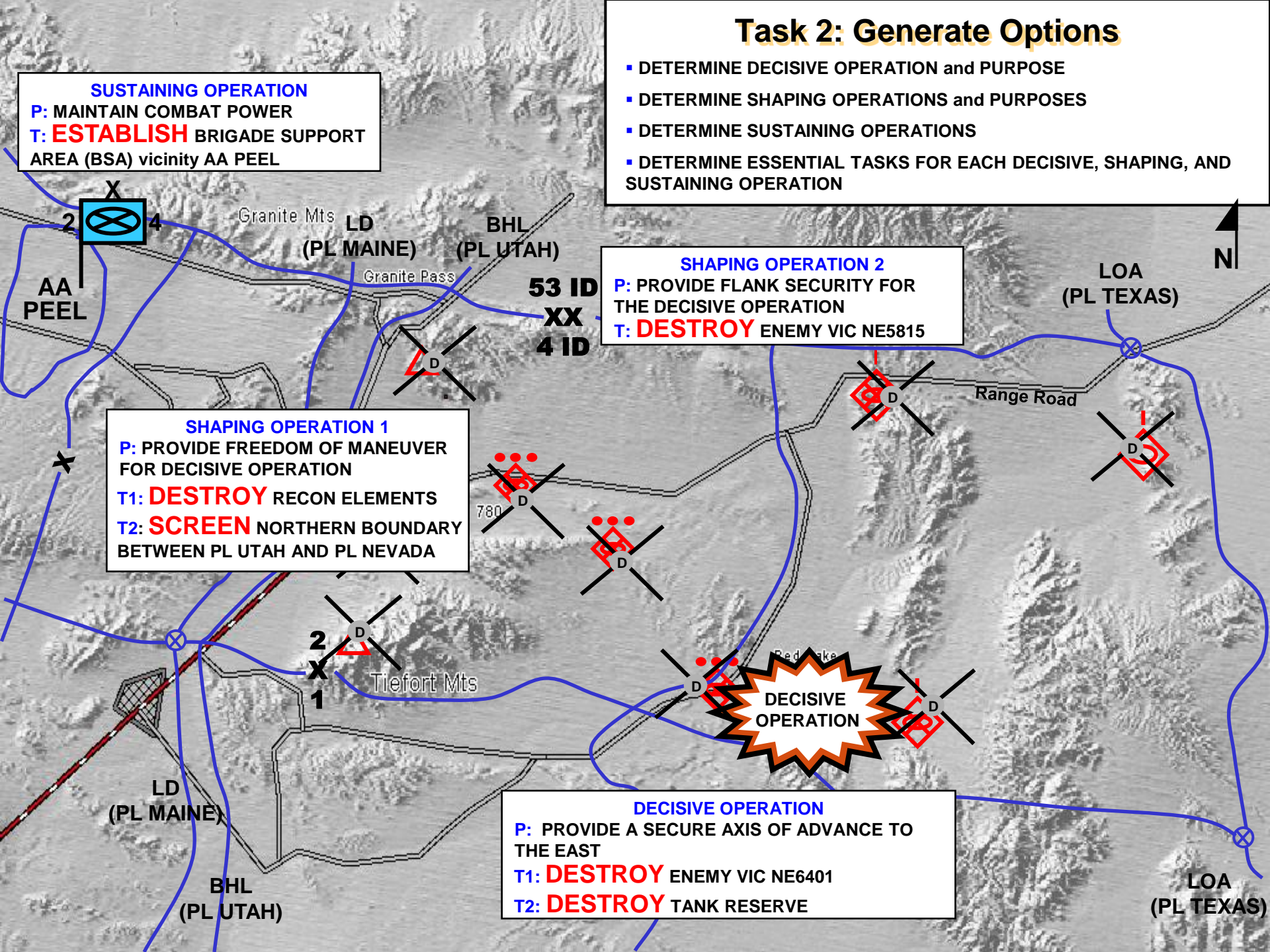P: PROVIDE FREEDOM OF MANEUVER FOR DECISIVE OPERATION
T1: **DESTROY** RECON ELEMENTS
T2: **SCREEN** NORTHERN BOUNDARY BETWEEN PL UTAH AND PL NEVADA

780

2
X
1

Tiefort Mts

Red Lake

DECISIVE OPERATION

LD (PL MAINE)

BHL (PL UTAH)

DECISIVE OPERATION
P: PROVIDE A SECURE AXIS OF ADVANCE TO THE EAST
T1: **DESTROY** ENEMY VIC NE6401
T2: **DESTROY** TANK RESERVE

LOA (PL TEXAS)

| 1 - RECEIPT OF MISSION |
| 2 - MISSION ANALYSIS |
| 3 - COA DEVELOPMENT |
| 4 - COA ANALYSIS (WAR GAME) |
| 5 - COA COMPARISON |
| 6 - COA APPROVAL |
| 7 - ORDERS PRODUCTION |

Step 3 – COA Development

▪ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

▪ **Process: Step 3 – COA development involves eight tasks:**

✓ *Task 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 using minimum historical planning ratios as a starting point.**

Planners also determine relative combat power with regard to civilian requirements and conditions that require attention and then array forces and capabilities for stability tasks.

In counterinsurgency 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 AO. *(continued)*

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Step 3 – COA Development

▪ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

▪ **Process: Step 3 – COA development involves eight tasks:**

✓ *Task 3, Array Forces (continued).*

Planners then proceed to initially array friendly forces starting with the decisive operation and continuing with all shaping and sustaining operations. The initial array of ground forces is normally two levels down (at brigade level, planners array companies).

This 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 its task. In this step, planners also array assets to accomplish essential stability tasks.

Determining Relative Combat Power

Planners initially make a rough estimate of force ratios of maneuver units two levels down. The numbers shown depict minimum historical minimum planning ratios required to accomplish a specific task.

For example, a friendly unit would require a three-to-one ratio to conduct an attack against an enemy prepared or fortified position.

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

ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, Modified from Table 4-2, p. 4-18

Counter - insurgency Operations	Security Forces	Residents in AO
	20-25	1000

ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, p. 4-18, para 4-97

2nd HBCT TASK ORGANIZATION

TWO COMBINED ARMS BATTALIONS (2-8 AND 1-67) AND ONE RECONNAISSANCE SQUADRON (1-10)

GROUND MANEUVER FORCES AVAILABLE TWO LEVELS DOWN: 11 COMPANIES

- DETERMINE RELATIVE COMBAT POWER REQUIRED TO ACCOMPLISH EACH TASK.

- ARRAY GENERIC FORCES TWO LEVELS DOWN -- START WITH THE DECISIVE OPERATION AND CONTINUE THROUGH SHAPING AND SUSTAINING OPERATIONS. THIS INITIAL ARRAY IDENTIFIES THE TOTAL NUMBER OF FORCES NEEDED (DESIRED FORCE RATIOS).
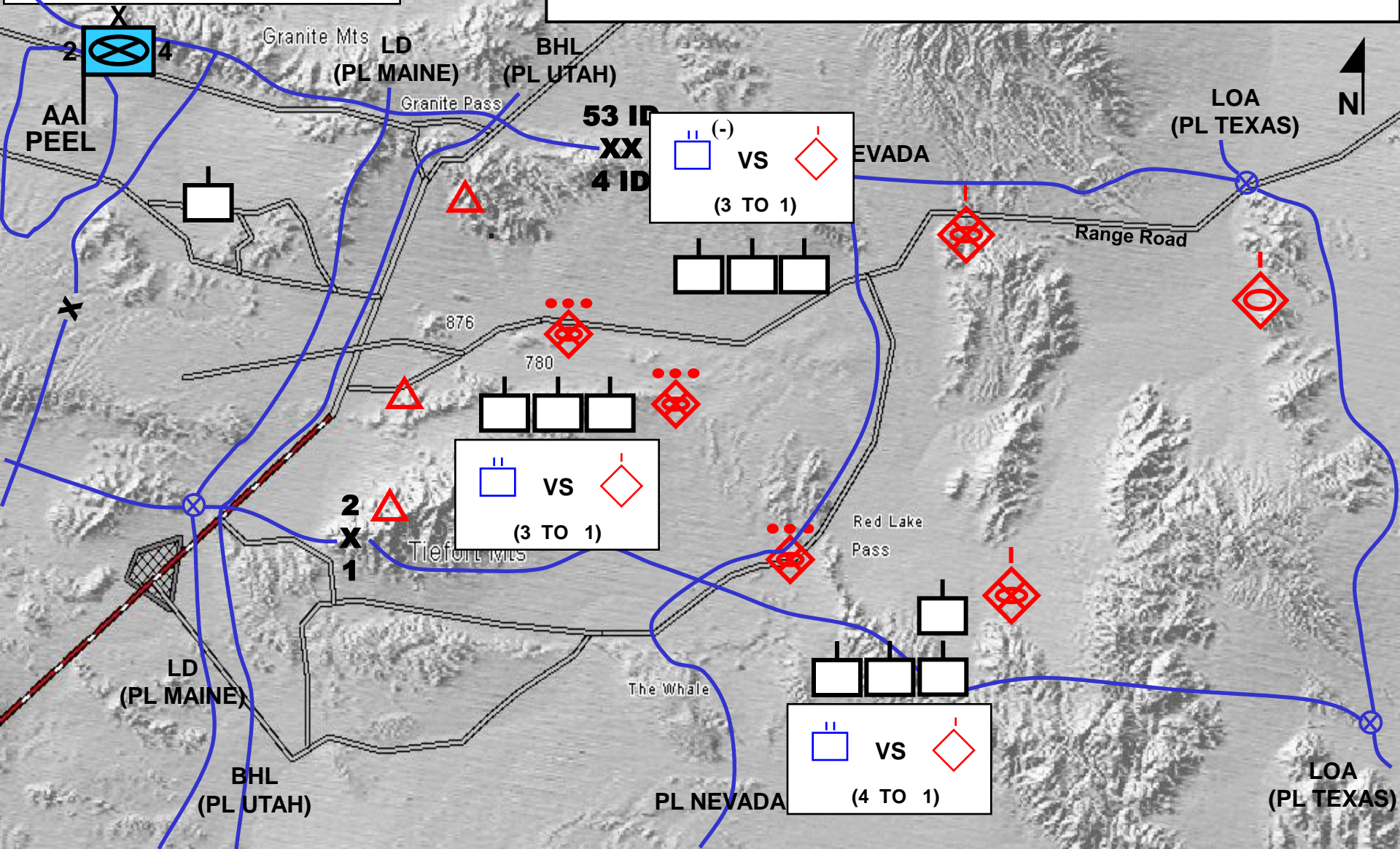
Granite Mts

LD (PL MAINE)

BHL (PL UTAH)

Granite Pass

LOA (PL TEXAS)

N

AA PEEL

53 ID

XX

4 ID

(-) VS (3 TO 1) NEVADA

Range Road

876

780

VS (3 TO 1)

2

X

1

Tiefort Mts

Red Lake Pass

LD (PL MAINE)

BHL (PL UTAH)

The Whale

PL NEVADA

VS (4 TO 1)

LOA (PL TEXAS)

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS (WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

■ **Process: Step 3 – COA development involves eight tasks:**

✓*Task 4, Develop a Broad Concept.* **The broad concept describes how arrayed forces will accomplish the mission within the commander's intent and will eventually provide the framework for the concept of operations. The broad concept summarizes the contributions of all warfighting functions and presents an overall combined arms idea that will accomplish the mission. The broad concept includes the following:**

(only major points are shown - see ATTP 5-0.1, para 4-101 for complete list)

• **The purpose of the operation.**

• **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, including its location and composition**
(continued)

ATTP 5-0.1, *Cdr/Staff Officer Guide*, Sep 11, pp. 4-19 to 4-20

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5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 3 – COA Development

▪ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

▪ **Process:** **Step 3 – COA development involves eight tasks:**

✓ *Task 4, Develop a Broad Concept (continued).* **Planners select** <u>control measures</u>**, including graphics, to control subordinate units during the operation. These establish responsibilities and limits that prevent subordinate units' actions from impeding one another. Good control measures foster freedom of action, decisionmaking, and individual initiative.**

Planners may use both <u>lines of operations (LOO)</u> **and** <u>lines of effort (LOE)</u> **to build their broad concept. However, during COA development, LOE are general and lack specifics. They are developed and refined during war-gaming. Commanders develop and modify lines of effort to focus operations on achieving the end state, even as the situation evolves.**

Task 4: Develop a Broad Concept

- CONVERT GENERIC FORCES TO SPECIFIC FORCES (*overall combined arms idea*)
- DESIGNATE DECISIVE, SHAPING, SUSTAINING OPERATIONS AND RESERVE
- SELECT CONTROL MEASURES, INCLUDING GRAPHICS
- BEGIN DEVELOPMENT OF LOOs AND LOEs
  (NOT SHOWN - WILL BE ADDRESSED IN DETAIL DURING CGSS)

2nd HBCT TASK ORGANIZATION
TWO COMBINED ARMS BATTALIONS
(2-8 AND 1-67) AND ONE
RECONNAISSANCE SQUADRON (1-10)

GROUND MANEUVER FORCES
AVAILABLE TWO LEVELS DOWN:
11 COMPANIES

AA PEEL

Reserve

Granite Mts

LD (PL MAINE)

BHL (PL UTAH)

Granite Pass

53 ID

XX

4 ID

PL NEVADA

Shaping Operation 2

Shaping Operation 1

876

780

LOA (PL TEXAS)

N

Range Road

OBJ TIN

O/O LOA (PL IOWA)

OBJ GOLD

2 X 1

Tiefort Mts

Red Lake Pass

Decisive Operation

The Whale

LD (PL MAINE)

BHL (PL UTAH)

PL NEVADA

O/O LOA (PL IOWA)

LOA (PL TEXAS)

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

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5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

■ **Process: Step 3 – COA development involves eight tasks:**

✓ *Task 5, Assign Headquarters.* **After determining the concept of operations, planners create a task organization by assigning headquarters to groupings of forces. They consider the types of units to be assigned 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.**

In the example shown on the next slide, the southern organization is named 1-67 combined arms battalion (CAB). The center organization is named 1-10 reconnaissance squadron. The northern organization is named 2-8 CAB (-) to denote an armor company has been detached as the brigade reserve, which is named reserve.

For illustration purposes and clarity, no other 2nd HBCT assigned or attached organizations are shown.
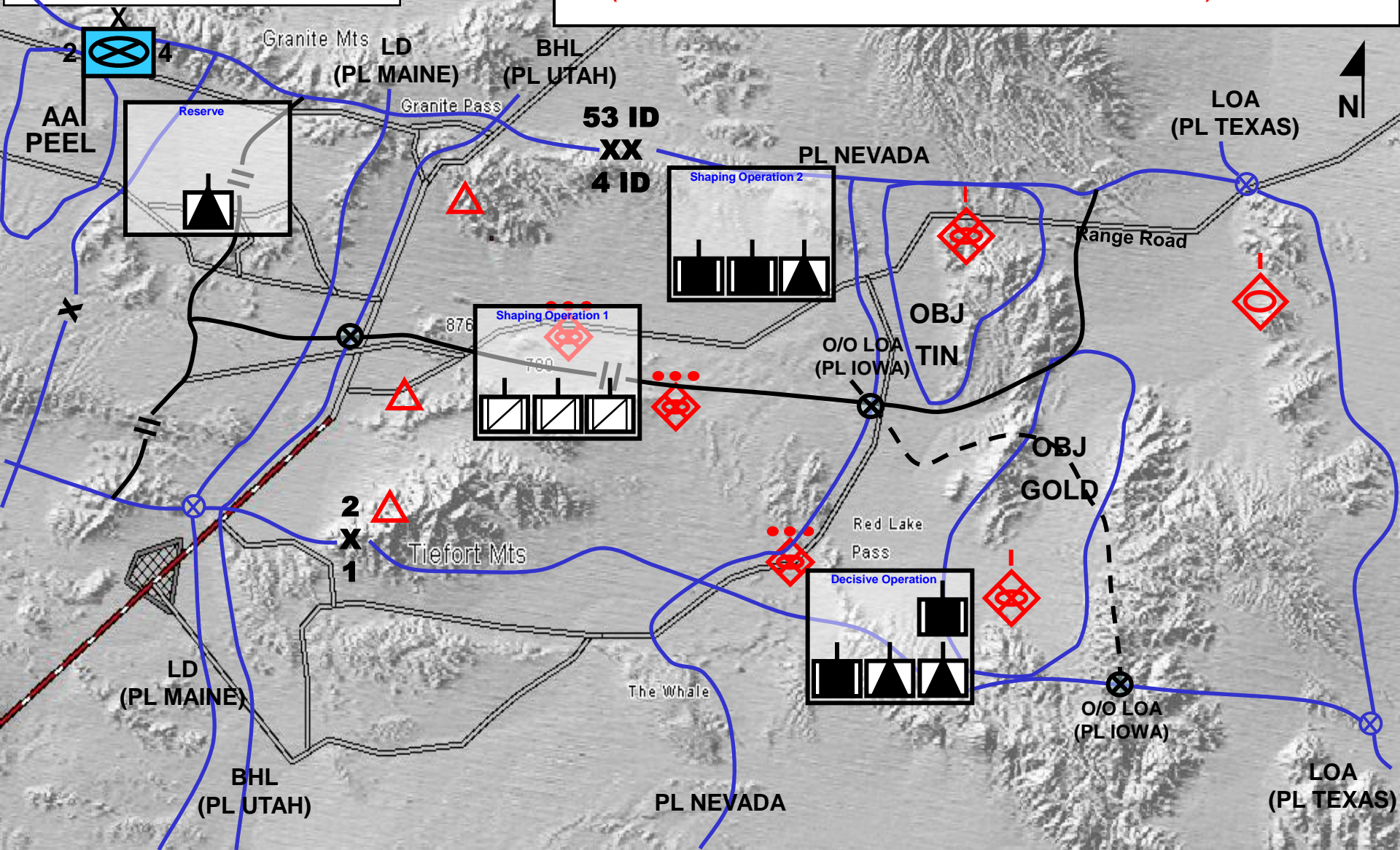
Task 5: Assign Headquarters

2nd HBCT TASK ORGANIZATION
TWO COMBINED ARMS BATTALIONS
(2-8 AND 1-67) AND ONE
RECONNAISSANCE SQUADRON (1-10)

GROUND MANEUVER FORCES
AVAILABLE TWO LEVELS DOWN:
11 COMPANIES

2   4

AA
PEEL

RESERVE

Granite Mts

LD
(PL MAINE)

Granite Pass

BHL
(PL UTAH)

53 ID
XX
4 ID

PL NEVADA

2-8 (-) CAB

LOA
(PL TEXAS)

Range Road

OBJ
TIN

O/O LOA
(PL IOWA)

1-10 CAV

876

2
X
1

Tiefort Mts

OBJ
GOLD

Red Lake
Pass

1-67 CAB

The Whale

LD
(PL MAINE)

BHL
(PL UTAH)

PL NEVADA

O/O LOA
(PL IOWA)

LOA
(PL TEXAS)

N

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS (WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

■ **Process: Step 3 – COA development involves eight tasks:**
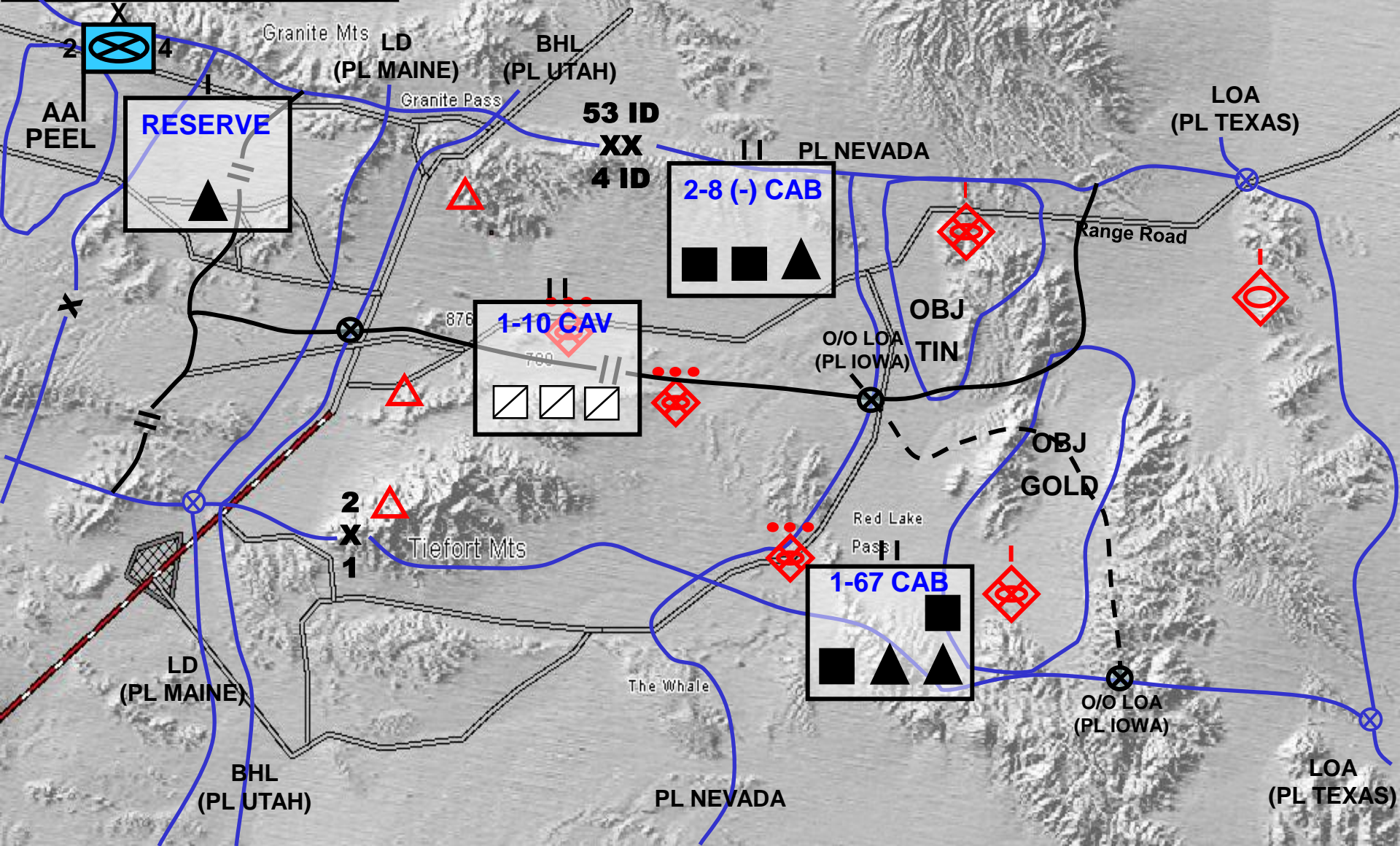
✓ *Task 6, Prepare COA Statements and Sketches.*

   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 and is a brief expression of how the combined arms concept will be conducted.

   The sketch provides a picture of the movement and maneuver aspects of the concept, including the positioning of forces. Together, the statement and sketch cover the who (generic task organization), what (tasks), when, where, and why (purpose) for each subordinate unit. *(continued)*

   (Additional details and depth of the topic will be addressed in CGSS).

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

▪ **Process:** Step 3 – COA development involves **eight tasks:**

✓ *Task 6, Prepare COA Statements and Sketches.* **At a minimum, the COA sketch includes the array of generic forces and control measures, such as:**

- The unit and subordinate unit boundaries.
- Unit movement formations (but not subordinate unit formations).
- The line of departure (LD), or line of contact (LC) and phase lines (PL), 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 measure.
- Main effort.
- Location of command posts and critical information systems nodes.
- Enemy known or template locations.
- Population concentrations.

COA Sketch Example

(This slide will build to more clearly show enemy / friendly forces and control measures. Some control measures, such as fire support, will be addressed in more detail during CGSS)
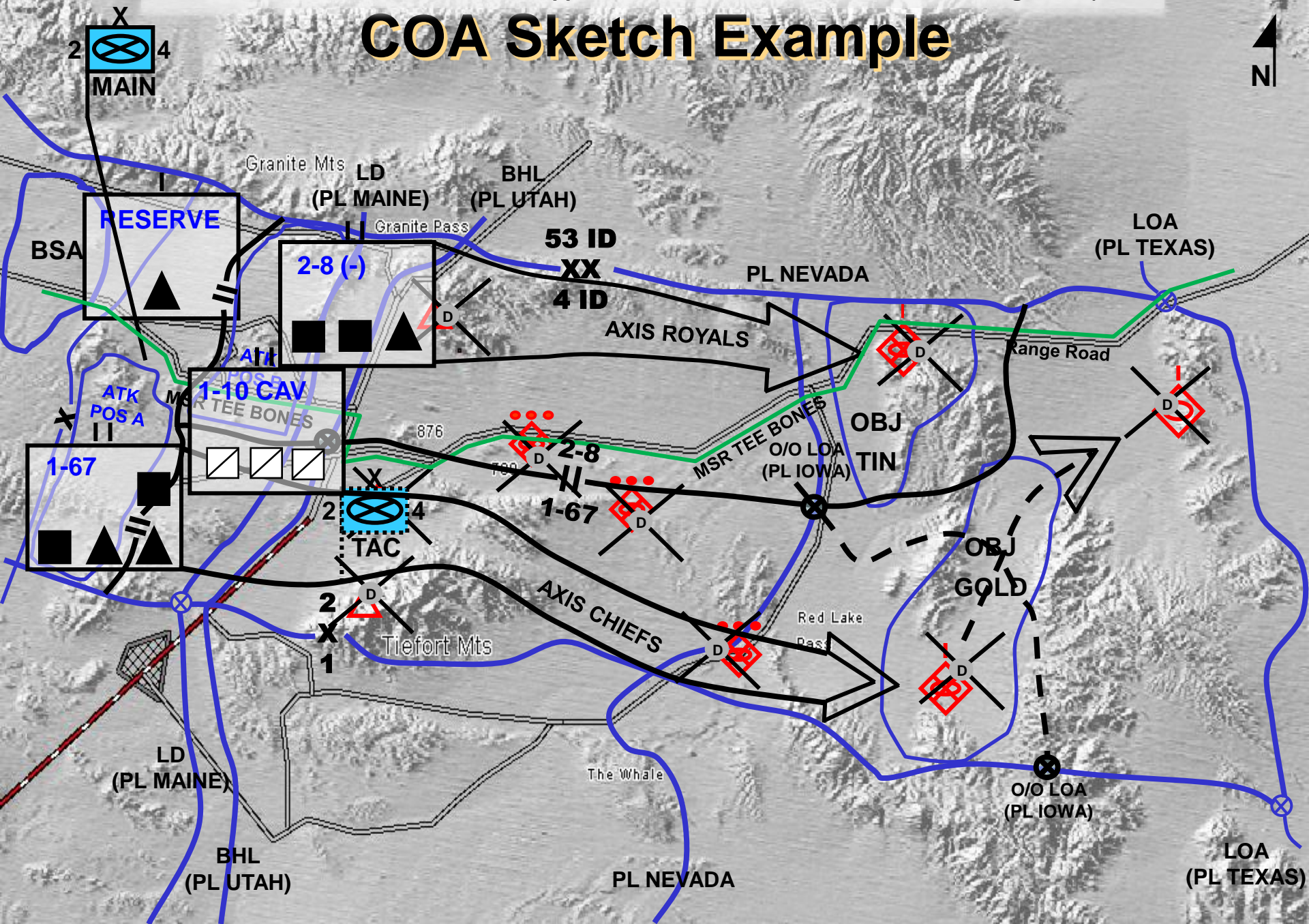
COA Statement Example

MISSION: At 170400 JUL 10, 2nd HBCT attacks to destroy elements of the 84th MRR vicinity OBJ GOLD and OBJ TIN in order to provide a secure axis of advance in sector for follow-on 4th Infantry Division forces to the east.

INTENT: The **purpose** of this attack is to provide a secure axis of advance in sector for follow-on 4th Infantry Division forces to the east to re-establish the International Border (off map to the east). **Conditions the force must establish:** Maintain contact with elements of 53rd Infantry Division along northern boundary; secure Range Road and key terrain vicinity OBJ GOLD; destroy 84th MRR Reserve Company west of PL Texas (LOA); and minimize damage to civilian infrastructure. **End State:** Elements of 84th MRR destroyed in sector. 2nd HBCT has secured Range Road, key terrain vicinity OBJ GOLD, and prepared for follow-on forces to continue the attack east of PL TEXAS (LOA). Minimal damage to civilian infrastructure in sector.

DECISIVE OPERATION (DO): 1-67 CAB conducts movement to contact from Attack Position (ATK PSN) A along AXIS CHIEFS to seize OBJ GOLD in order to provide a secure axis of advance to the east. 1-67 CAB is the subsequent main effort after Shaping Operations are complete.

SHAPING OPERATIONS (SO): (Initial events that set conditions for 1-67 CAB to seize OBJ GOLD).

• 1-10 CAV attacks from ATK PSN B to destroy enemy reconnaissance forces west of PL NEVADA to provide freedom of maneuver for 1-67 CAB and is the initial main effort. On order, establishes a screen along northern boundary to maintain contact with 53rd ID between PL UTAH and PL NEVADA (not shown on the sketch to reduce clutter).

• 2-8 CAB conducts a movement to contact from ATK PSN B along AXIS ROYALS to seize OBJ TIN in order to provide flank security for the DO and maintain contact with elements of 53rd ID.

• The BCT Reserve (armor company) locates vic BSA with priority of commitment: (1) OBJ GOLD, (2) MSR TEE BONES security, and (3) security of supply/relief convoys.

SUSTAINING OPERATIONS: The Brigade Support Area (BSA) will establish vicinity AA PEEL with a main supply route (MSR) TEE-BONES (shown in green to enhance location) along Range Road as the primary route to sustain combat power during the attack.

Note: This example is designed to provide a base understanding of the concept of a COA statement. Additional details (Fires, R&S, Risk) and depth of the topic will be addressed in CGSS.

Sample Brigade COA Sketch
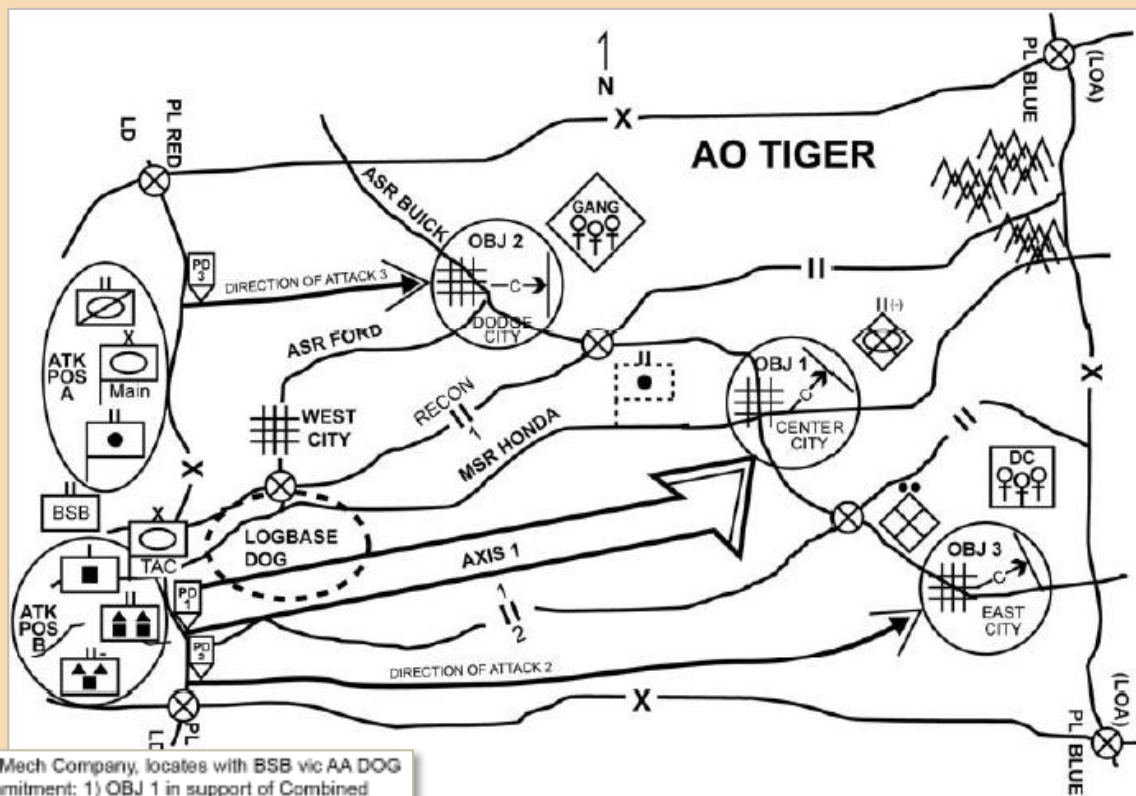
Sample Brigade COA Statement

MISSION: On order, 3d HBCT clears remnants of the 72d Brigade in AO TIGER to establish security and enable the host-nation in reestablishing civil control and governance in the region.

INTENT: The purpose of this operation is to provide a safe and secure environment in AO TIGER that enables the host-nation and other civilian organization to reestablish civil control. restore essential services, and reestablish local governance within the area. At end state, the BCT has cleared remnant enemy forces in AO TIGER, secured population centers, and is prepared to transition responsibility for security to host-nation authority.

DECISIVE OPERATION: Combined Arms BN #1 (two armor/two mech) (ME) begins movement from ATK POS B, crosses LD at PD 1, and attacks along AXIS 1 to clear remnants of the 72d Brigade and secure the population in OBJ 1.

SHAPING OPERATIONS: Combined Arms BN #2 (-) (two armor/one mech) in the SOUTH follows Combined Arms BN #1 from ATK POS B, crosses LD at PD 2, and attacks along DIRECTION OF ATTACK 2 to clear OBJ 3 and provide security to dislocated civilian site vicinity EAST CITY. RECON squadron in the NORTH begins movement from ATK POS A, crosses LD at PD 3, and attacks along DIRECTION OF ATTACK 3 to clear hostile gang vic OBJ 2 and provide security to enable NGO delivery of humanitarian assistance to WEST CITY and DODGE CITY. 3rd HBCT Main CP moves and co-locates with RECON squadron.

The BCT reserve, Mech Company, locates with BSB vic AA DOG with priority of commitment: 1) OBJ 1 in support of Combined Arms BN #1; 2) MSR HONDA security; and 3) Security of supply/relief convoys.

3d HBCT TAC CP moves and co-locates with Combined Arms BN #1 in OBJ 1. HBCT main CP locates in ATK POS A. O/O moves and co-locates with RECON squadron in OBJ 2.

BCT FIRES will disrupt enemy mortars vic OBJ 1 and position to provide responsive precision fires to destroy remnant enemy forces in AO TIGER.

BCT RECONNAISSANCE AND SURVEILLANCE operations focus on: 1) Identifying the location and disposition of enemy forces vic. OBJ 1; 2) Observation of MSR HONDA between PL RED and PL BLUE; and 3) Observation of dislocated civilian traffic from CENTER CITY to EAST CITY.

SUSTAINING OPERATION: The BSB will establish LOGBASE DOG vic WEST CITY with MSR HONDA, ASR FORD, and ASR BUICK as the primary routes used to sustain operations. The BSB coordinates with humanitarian relief agencies to help rapidly restore essential services in AO TIGER.

TACTICAL RISK is assumed in the northeastern portion of AO TIGER by utilizing primarily reconnaissance and surveillance assets to maintain situational awareness of hostile elements that may use mountains to reconstitute forces.

Sample Brigade COA Statement

70

1 - RECEIPT OF MISSION
2 - MISSION ANALYSIS
3 - COA DEVELOPMENT
4 - COA ANALYSIS (WAR GAME)
5 - COA COMPARISON
6 - COA APPROVAL
7 - ORDERS PRODUCTION

Step 3 – COA Development

■ **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

■ **Process: Step 3 – COA development involves eight tasks:**

• *Task 7, Conduct COA Briefing.* **After developing COAs, the staff briefs them to the commander. A collaborative session my facilitate subordinate planning. The COA briefing includes:**

- An updated IPB.
- Possible enemy COAs.
- The approved problem statement and mission statement.
- The commander's and higher commander's intent.
- 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.
  - ✓ The reason units are arrayed as shown on the sketch.
  - ✓ The reason the staff used the selected control measures.
  - ✓ The impact on civilians.
  - ✓ How it accounts for minimum essential stability tasks.
  - ✓ Updated facts and assumptions.
  - ✓ Refined COA evaluation criteria.

1 - RECEIPT OF MISSION

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5 - COA COMPARISON

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7 - ORDERS PRODUCTION

Step 3 – COA Development

- **Input: Products to begin COA development include the approved mission statement, initial commander's intent / planning guidance, design concept, specified / implied tasks, assumptions, updated running estimates and IPB products, and COA evaluation criteria.**

- **Process: Step 3 – COA development involves eight tasks:**

  ✓ *Task 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 all COAs are rejected, the staff begins again. If one or more of the COAs are accepted, staff members begin COA analysis.

  The commander may create a new COA by incorporating elements of one or more COAs developed by the staff. The staff then prepares to war-game this new COA. The staff must incorporate those modifications and ensure all staff members understand the changed COA prior to war-gaming.

Glossary for Step 3 - COA Development

(Click on the arrow at the end of the definition to return to your place)

- **Concept of operations:** A statement that directs the manner in which subordinate units cooperate to accomplish the mission and establishes the sequence of actions the force will use to achieve the end state. It is normally expressed in terms of decisive, shaping, and sustaining operations. The concept of operations expands on the mission statement and commander's intent by describing how and in what sequence the commander wants the force to accomplish the mission (ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, p. 12-13). ◄

- **Control measures:** Directives given graphically or orally by a commander to subordinate commands to assign responsibilities, coordinate fires and maneuver, and control combat operations. Each control measure can be portrayed graphically. In general, all control measures should be easily identifiable on the ground. (FM 1-02, *Operational Terms and Graphics*, Sep 04, w/Ch1, Feb 10, p. 1-45). ◄

- **Decisive operation:** The operation that directly accomplishes the mission. Commanders typically identify a single decisive operation, but more than one subordinate unit may play a role in the decisive operation. (ADP 3-0, *Unified Land Operations*, Oct 11, para 55). ◄

- **Lines of Effort (LOE):** A line of effort links multiple tasks using the logic of purpose rather than geographical reference to focus efforts toward establishing operational and strategic conditions. Lines of effort are essential to long-term planning when positional references to an enemy or adversary have little relevance. (ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, para 4-103. Definition will be published in ADRP 3-0 later). ◄

- **Lines of Operation (LOO):** A line of operations is a line that defines the directional orientation of a force in time and space in relation to the enemy and links the force with its base of operations and objectives. Lines of operations connect a series of decisive points that lead to control of a geographic or force-oriented objective. (ATTP 5-0.1, *Cdr and Staff Officer Guide*, Sep 11, para 4-103. Definition will be published in ADRP 3-0 later). ◄

- **Nests:** Nested concept is a planning technique to achieve unity of purpose whereby each succeeding echelon's concept of operations is aligned by purpose with higher echelons' concept of operations. (FM 1-02, *Operational Terms and Graphics*, Sep 04, w/Ch1, Feb 10, p. 1-132). ◄

- **Shaping operations:** A shaping operation is an operation at any echelon that creates and preserves conditions for the success of the decisive operation. (ADP 3-0, *Unified Land Operations*, Oct 11, para 56). ◄

- **Sustaining operations:** A sustaining operation is an operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power. (ADP 3-0, *Unified Land Operations*, Oct 11, para 57). ◄

R

Summary of Step 3 – COA Development

INPUT

- Approved problem statement.
- Approved mission statement.
- Initial commander's intent and planning guidance.
- Design concept (if developed).
- Specified and implied tasks.
- Assumptions.
- Updated running estimates and IPB products.
- COA evaluation criteria.

PROCESS

- Assess relative combat power.
- Generate options.
- Array forces.
- Develop a broad concept.
- Assign headquarters.
- Prepare COA statements and sketches.
- Conduct COA briefing.
- Select or modify COAs for continued analysis.

OUTPUT

- Commander's selected COAs for war-gaming with COA statements and sketches.
- Commander's refined planning guidance to include:
  - ✓ War-gaming guidance
  - ✓ Evaluation criteria
- Updated running estimates and IPB products.
- Updated assumptions.

(Some subjects will be discussed in greater detail during the conduct of CGSS).

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS
(WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 4 Course of Action Analysis

▪ **COA analysis enables commanders and staffs to identify difficulties or coordination problems as well as probable consequences of planned actions for each COA being considered.**

▪ **COA analysis (war-gaming) is a disciplined process. It includes rules and steps that help commanders and staffs 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 AO, and other aspects of the situation. War-gaming focuses the staff's attention on each phase of the operation in a logical sequence. It is an iterative process of action, reaction, and counteraction.**

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

▪ **COA analysis consists of eight tasks, shown in the process column on the next slide. Each task will be described in subsequent slides. *(Some subjects will be discussed in greater detail during the conduct of CGSS).***

Introduction to Step 4 – COA Analysis

INPUT

- Updated IPB products.
- Updated running estimates.
- Updated commander's planning guidance.
- COA statements and sketches.
- Updated assumptions.

PROCESS

- Gather the tools.
- List all friendly forces.
- List assumptions.
- List known critical events and decision points.
- Select the war-gaming method.
- Select a technique to record and display results.
- War-game the operation and assess the results.
- Conduct a war-game briefing (optional).

OUTPUT

- Refined courses of action.
- Decision support templates (DST) and matrixes (DSM).
- Synchronization matrixes.
- Potential branches and sequels.
- Updated running estimates.
- Updated assumptions.

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS
(WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 4 – COA Analysis

▪ **Input:** Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.

▪ **Process:** Step 4 – COA analysis involves **eight tasks**:

✓ *Task 1, Gather the Tools.* **The COS / XO directs the staff to gather the tools, materials, and data for the war-game. Units war-game with maps, sand tables, computer simulations, or other tools that accurately reflect the terrain. The staff posts the COA on a map displaying the AO. Tools required include, but are not limited to:**

- **Running estimates.**

- **Event templates.**

- **A recording method (synchronization matrix or sketch note - will be addressed at** *Task 6, Select a Method to Record and Display Results***).**

- **Completed COAs, including graphics.**

- **Means to post or display enemy and friendly unit symbols and other organizations.**

- **A map of the AO.**

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Step 4 – COA Analysis

■ **Input: Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.**

■ **Process: Step 4 – COA analysis involves eight tasks:**

✓*Task 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. The friendly force list remains constant for all COAs.**

✓*Task 3, List Assumptions.* **The commander and staff review previous assumptions for continued validity and necessity. During the course of mission analysis and COA development, the commander and staff may have obtained updated or additional information that may confirm or deny initial assumptions.**

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Step 4 – COA Analysis

■ **Input: Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.**

■ **Process: Step 4 – COA analysis involves eight tasks:**

✓ *Task 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* <u>passage of lines)</u>**, and the essential tasks. The list of critical events includes major events from the unit's current position through mission accomplishment.**

Decision points **are those points in space and time when the commander or staff anticipates making a key decision concerning a specific course of action. A decision point may be associated with CCIRs that describe what information the commander needs to make the anticipated decision. A decision point does not dictate what the decision is, only that the commander must make one.**

Step 4 – COA Analysis

■ **Input: Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.**

■ **Process: Step 4 – COA analysis involves eight tasks:**

✓*Task 5, Select the War-Gaming Method.* **There are three recommended war-gaming methods: belt, avenue-in-depth, and box. Each considers the** <u>area of interest (AI)</u> **and all enemy forces that can affect the outcome of the operation. A summary of each is provided here but** *illustrated in more detail in subsequent slides.*

- **Belt method: Divides the AO into belts (areas) running the width of the AO. The shape of each belt is based on the factors of** <u>METT-TC</u>**. This method is based on a sequential analysis of events in each belt.** *It is preferred* **because it focuses simultaneously on all forces affecting a particular event.**

- **Avenue-in-depth method: Focuses on one avenue of approach at a time, beginning with the decisive operation.**

- **Box method: Detailed analysis of a critical area, such as an engagement area, a river crossing site, or a landing zone. It is appropriate when time is constrained, as in a hasty attack.**

Belt Method Example

Divides the AO into belts (areas) running the width of the AO.

Belt 1 (BSA to LD) | Belt 2 (LD to PL Nevada) | Belt 3 (PL Nevada to LOA)
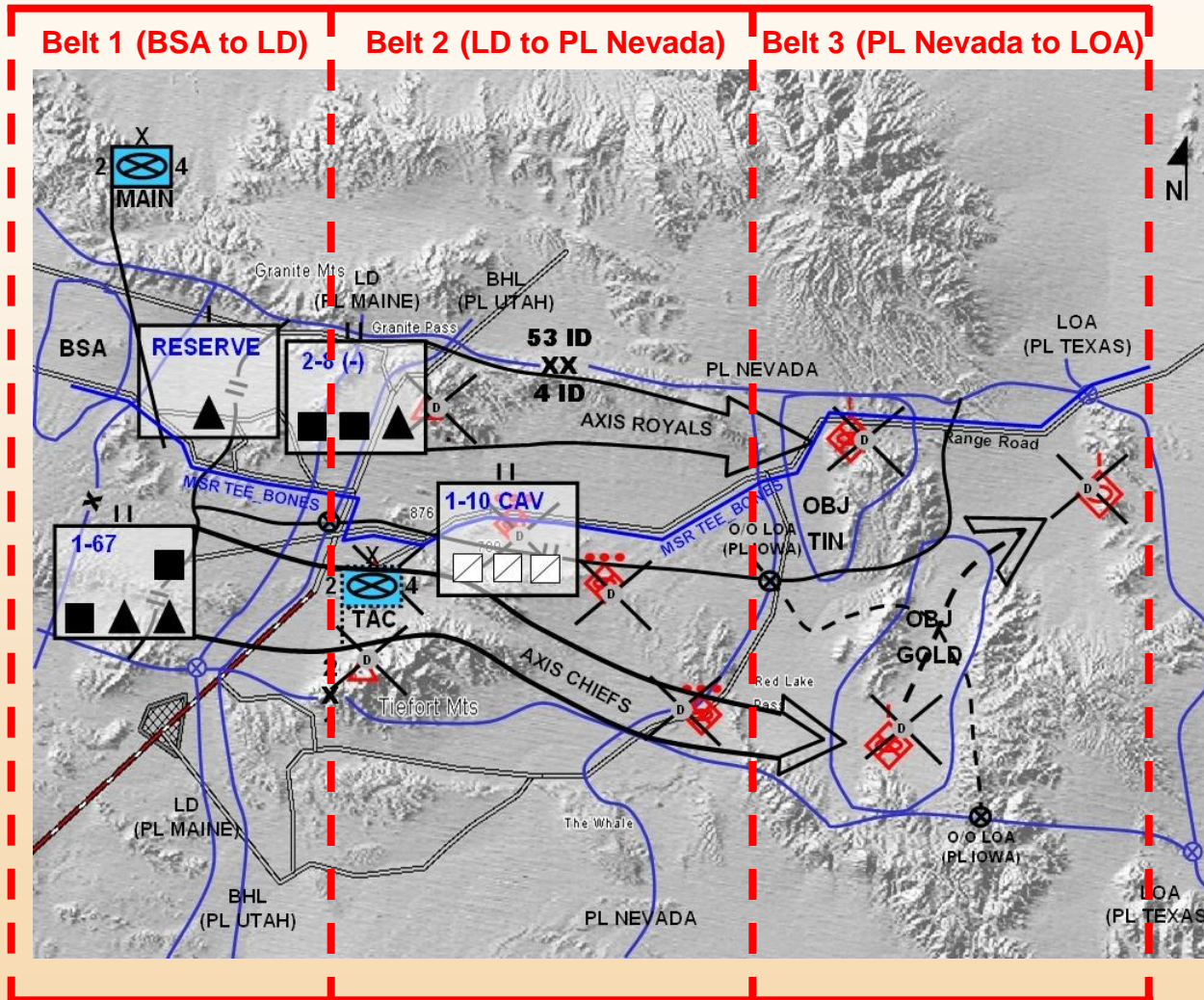
Modified Belt Method Example

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**. It consists of war-gaming relationships among events or objectives on all lines of effort in the belt.

LOE	Belt 1	Belt 2	End State
Civil Security	OBJ — OBJ — OBJ	OBJ →	**Civil Security Condition**
Essential Services	OBJ — OBJ	OBJ →	**Essential Services Condition**
Governance	OBJ — OBJ	OBJ →	**Governance Condition**
Economic	OBJ — OBJ — OBJ	OBJ →	**Economic Condition**
Civil Control	OBJ	OBJ →	**Civil Control Condition**

Avenue-in-Depth Method Example

Focuses on one avenue of approach at a time, beginning with the decisive operation (illustrated within the red dashed line area).

Modified Avenue-in-Depth Method Example

In **Stability Operations**, the **avenue-in-depth method** can be modified. 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.

LOE		End State
Civil Security	OBJ — OBJ — OBJ — OBJ →	**Civil Security Condition**
Essential Services	OBJ — OBJ — OBJ →	**Essential Services Condition**
Governance	OBJ — OBJ — OBJ →	**Governance Condition**
Economics	OBJ — OBJ — OBJ — OBJ →	**Economics Condition**
Civil Control	OBJ — OBJ →	**Civil Control Condition**

LOE 1
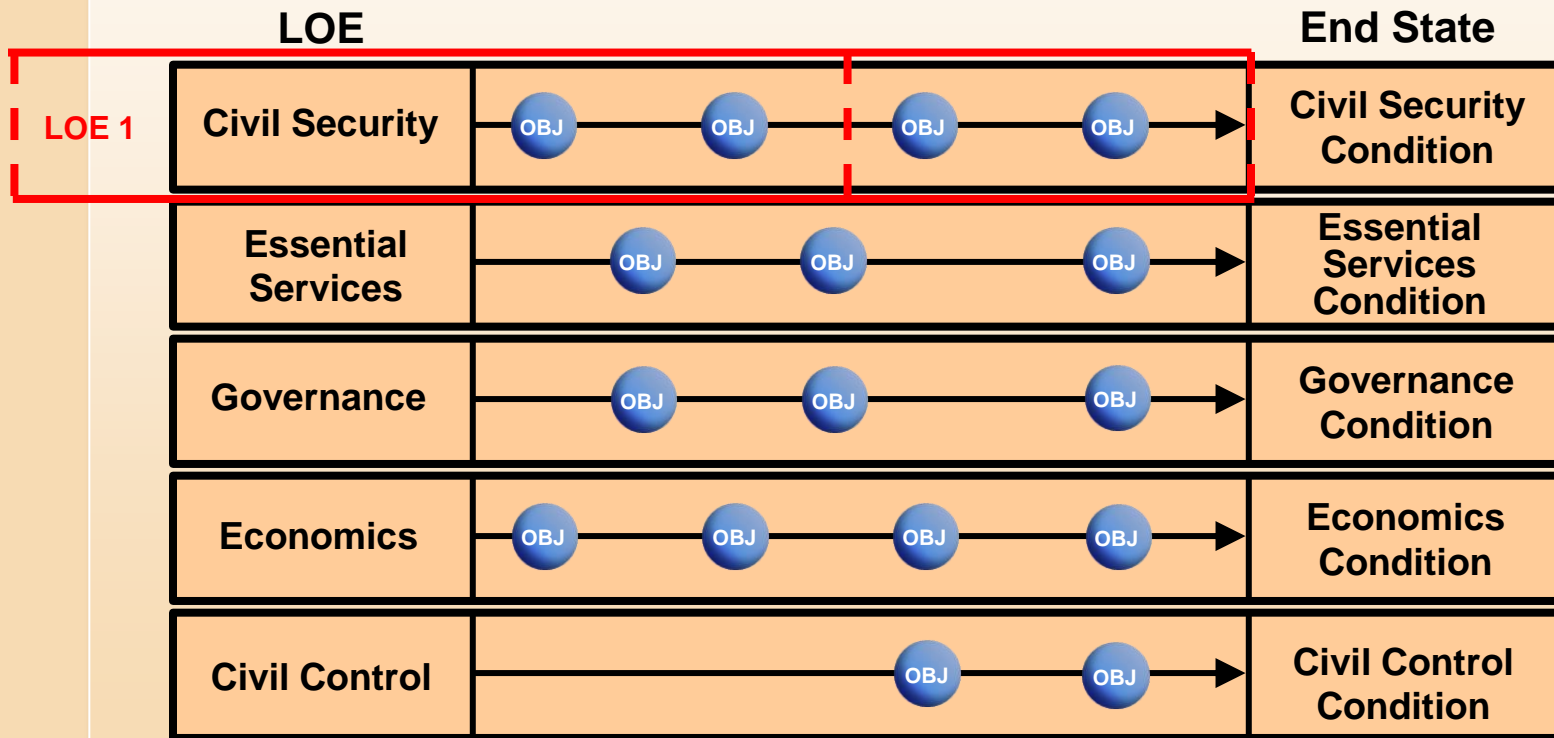
Box Method Example

Detailed analysis of a critical area, such as an engagement area, a river-crossing site, or a landing zone (illustrated within the red dashed line area).
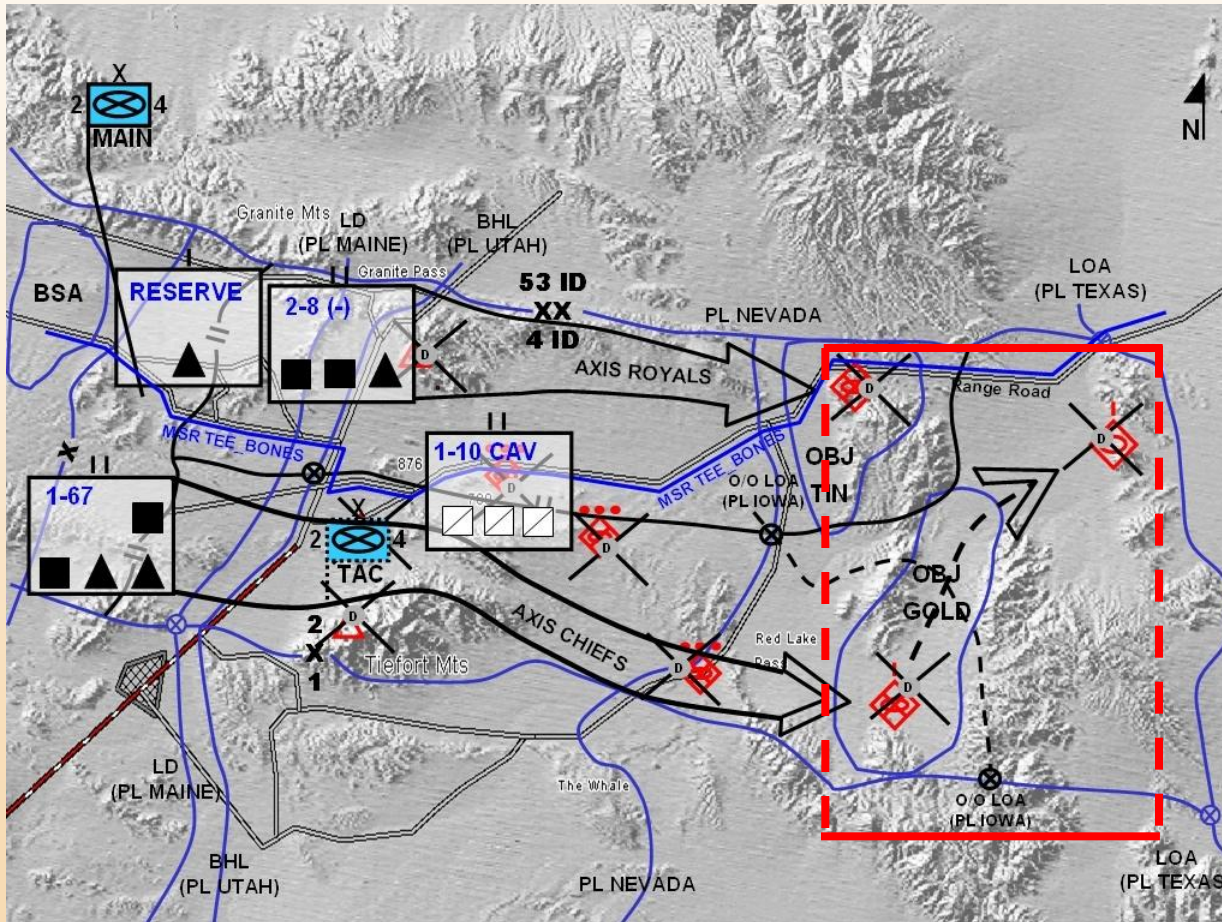
Modified Box Method Example

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.
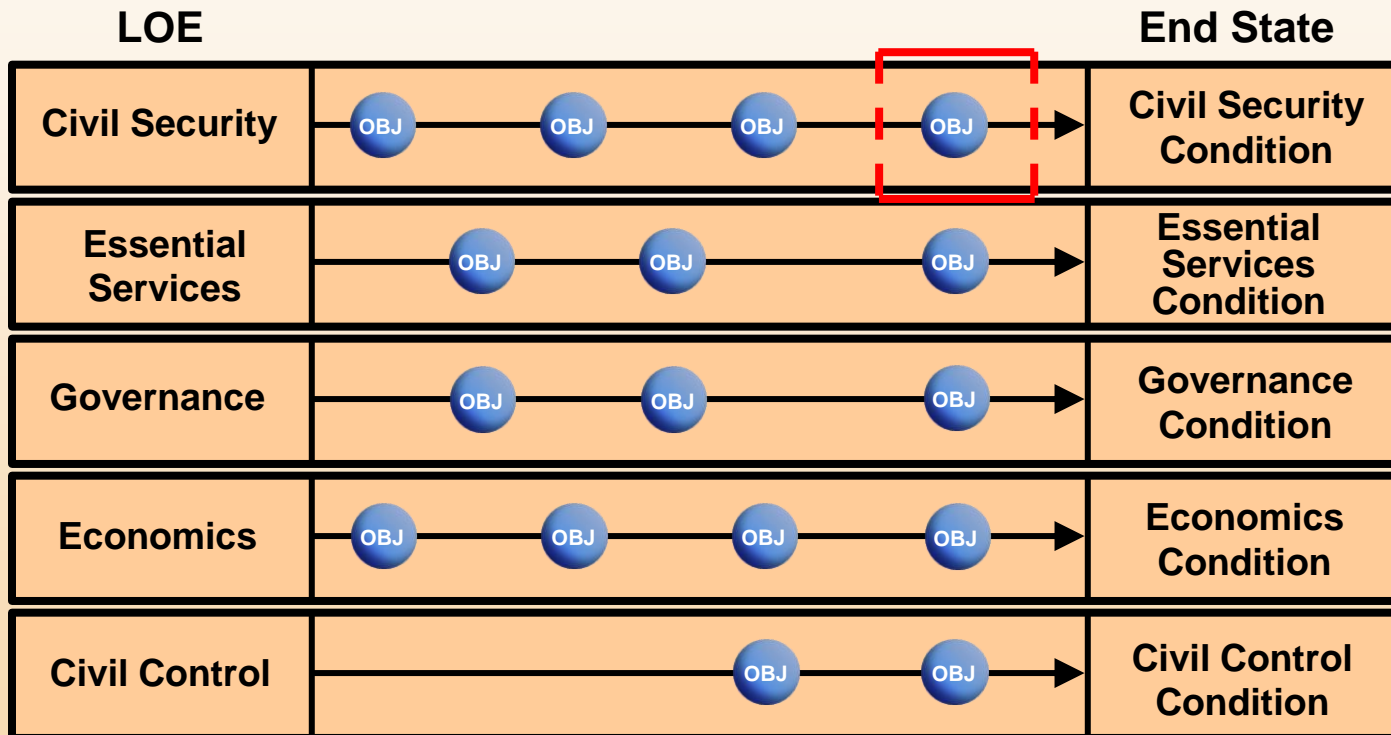
LOE		End State
Civil Security	OBJ — OBJ — OBJ — OBJ →	**Civil Security Condition**
Essential Services	OBJ — OBJ — OBJ →	**Essential Services Condition**
Governance	OBJ — OBJ — OBJ →	**Governance Condition**
Economics	OBJ — OBJ — OBJ — OBJ →	**Economics Condition**
Civil Control	OBJ — OBJ →	**Civil Control Condition**

1 - RECEIPT OF MISSION
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Step 4 – COA Analysis

■ **Input: Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.**

■ **Process: Step 4 – COA analysis involves eight tasks:**

✓ *Task 6, Select a Technique to Record and Display Results.* **The war-game results provide a record from which to build task organizations, synchronize activities, develop <u>decision support templates</u>, confirm and refine <u>event templates</u>, prepare plans or orders, and compare COAs. Two techniques are commonly used and summaries are provided here but** *illustrated in more detail in subsequent slides:*

• **Synchronization matrix (synch matrix): Allows the staff to synchronize the COA across time, space, and purpose in relationship to potential enemy and civil actions. Entries include time or phases of the operation, the most likely enemy action, the most likely civilian action, and decision points for the friendly COA. The remainder of the matrix is developed around selected WFFs and their subordinate tasks and the unit's major subordinate commands.** *The matrix may be modified to fit unit needs.* **An example is shown next slide.**

• **Sketch note: Uses brief notes concerning critical locations or tasks and purposes. The commander and staff note locations on the map and on a separate war-game work sheet using sequence numbers to link notes to corresponding locations on the map or overlay.**

Synchronization Matrix Example

In this example, the warfighting functions are listed vertically on the left with subordinate units and subordinate tasks

COA Name:		ACTION	REACTION	COUNTER ACTION			
Phase / Time							
Critical Event							
Enemy Action							
Populace Action							
Weather Effects							
Decision Points							
Branch / Sequel							
Intelligence	COLTS						
	UAS						
	GSR						
	Recon Assets						
	NAIs						
	PIRs						
Movement and Maneuver	5-1 Cav						
	1-5 IN						
	1-24 IN						
	3-21 IN						
	2-8 FA						
Fires	Priority						
	FA (DS)						
	FA (R)						
	TGT Groups						
	TAIs						
	Engagement Area						
	Q36						
	Q37						
	LCMR						
	CAS						
Protection	Force Protection						
	CBRNE						
	Engineer						
	MP						
	AMD						
Sustainment	Maintenance						
	Medical						
	Fuel						
	Ammo						
	Transportation						
	Supply						
Mission Command	Main CP						
	TAC						
	Civil Affairs						
	IO						
Changes to Graphics							
Changes to CCIR							
Risk and Mitigation							
Request for Forces							
Request for Information							

Sketch Note Example

CRITICAL EVENT:	Destroy 84th MRR Reserve Company
Sequence #	11
Action	1-67 CAB attacks to destroy MRR Res Co west of PL TEXAS
Reaction	MRR Reserve Company counterattacks
Counteraction	2-8 CAB vic OBJ TIN provides suppressive fire
Assets	2-8 CAB, 3-16 FA
Time	H + 12 to H + 16
Decision Point	DP 11 ☆
CCIR	Location of enemy armor reserve company west of PL TEXAS
Control Measures	No axis designated to allow freedom of maneuver
Remarks	Enemy armor reserve may withdraw east of PL TEXAS (LOA)

Explanation for column headings:

- **Expected actions, reactions, and counteractions.**
- **Total assets needed for the task.**
- **Estimated time to accomplish the task.**
- **The decision point tied to executing the task.**
- **CCIRs.**
- **Control measures.**
- **Remarks.**

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Step 4 – COA Analysis

■ **Input:** Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.

■ **Process:** Step 4 – COA analysis involves **eight tasks:**

✓ *Task 7, War-Game the Operation and Assess the Results.* **During the war-game, the commander and staff try to foresee the actions, reactions, and counteractions of all participants to include civilians.**

• **Actions** **are those events initiated by the side with the initiative.**

• **Reactions** **are the opposing side's actions in response. With regard to stability operations, the war-game tests the effects of action, including intended and unintended effects, as they stimulate anticipated responses from civilians and civil institutions.**

• **Counteractions** **are the first side's responses to reactions.**

This sequence of action-reaction-counteraction continues until the critical event is completed or until the commander decides to use another COA to accomplish the mission.

(Additional details and depth of the topic will be addressed in CGSS).

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Step 4 – COA Analysis

■ **Input: Products to begin COA analysis include updated IPB products, running estimates, commander's planning guidance, COA statements and sketches, and updated assumptions.**

■ **Process: Step 4 – COA analysis involves eight tasks:**

✓ *Task 8, Conduct a War-Game Briefing (Optional).* **Time permitting, the staff delivers a briefing to all affected elements to ensure everyone understands the results of the war-game. 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.

Glossary for Step 4 - COA Analysis

(Click on the arrow at the end of the definition to return to your place)

▪ **Area of Interest (AI):** That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-12 and ADP 3-0, *Unified Land Operations*, Oct 11, para 49). ◄

▪ **Decision Support Template (DST):** The decision support template depicts decision points, timelines associated with the movement of forces and the flow of the operation, and other key items of information required to execute a specific friendly course of action. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-53). ◄

▪ **Event Template:** A model against which enemy activity can be recorded and compared. It represents a sequential projection of events that relate to space and time on the battlefield and indicate the enemy's ability to adopt a particular course of action. The event template is a guide for collection and reconnaissance and surveillance planning. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-75). ◄

▪ **METT-TC:** A memory aid using the first letter of the following words or phrases: <u>m</u>ission, <u>e</u>nemy, <u>t</u>errain and weather, <u>t</u>roops and support available, <u>t</u>ime available, and <u>c</u>ivil considerations. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-123 and ADP 3-0, *Unified Land Operations*, Oct 11, para 7). ◄

▪ **Passage of Lines:** A tactical enabling operation in which one unit moves through another unit's positions with the intent of moving into or out of enemy contact. (FM 1-02, *Operational Terms and Graphics*, Sep 04, p. 1-142). ◄

Summary of Step 4 – COA Analysis

INPUT

- Updated IPB products.
- Updated running estimates.
- Updated commander's planning guidance.
- COA statements and sketches.
- Updated assumptions.

PROCESS

- Gather the tools.
- List all friendly forces.
- List assumptions.
- List known critical events and decision points.
- Select the war-gaming method.
- Select a technique to record and display results.
- War-game the operation and assess the results.
- Conduct a war-game briefing (optional).

OUTPUT

- Refined courses of action.
- Decision support templates (DST) and matrixes (DSM).
- Synchronization matrixes.
- Potential branches and sequels.
- Updated running estimates.
- Updated assumptions.

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

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Step 5 COA Comparison

- **COA comparison is critical. The staff may use any technique that facilitates developing those key outputs and recommendations and helping the commander making the best decision. A common technique is the decision matrix. This matrix uses evaluation criteria developed during mission analysis and refined during COA development.**

- **The decision matrix is a highly structured and effective method used to compare COAs against criteria that, when met, suggest a great likelihood of producing success. 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 AO.**
  - **Best facilitate initial information themes and messages.**

COA analysis consists of three tasks, shown in the process column on the next slide. Each task will be described in subsequent slides.

(Some subjects will be discussed in greater detail during the conduct of CGSS).

Introduction to Step 5 – COA Comparison

INPUT	PROCESS	OUTPUT
▪ War-game results.	▪ Conduct advantages and disadvantages analysis.	▪ Evaluated COAs.
▪ Evaluation criteria.	▪ Compare COAs.	▪ Recommended COA.
▪ Updated running estimates.	▪ Conduct a COA decision briefing.	▪ COA selection rationale.
▪ Updated assumptions.		▪ Updated running estimates.
		▪ Updated assumptions.

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Step 5 – COA Comparison

▪ **Input:** Products to begin COA comparison include wargame results, evaluation criteria, updated running estimates, and updated assumptions.

▪ **Process:** Step 5 – COA comparison involves **three tasks**:

✓ *Task 1, Conduct Advantages and Disadvantages Analysis.*

The COA comparison starts will **all staff members** analyzing and evaluating the advantages and disadvantages of each COA **from their perspectives**.

Staff members each present their findings for the others' consideration. **Using the evaluation criteria developed before the war-game**, the staff outlines each COA, highlighting its advantages and disadvantages.

A **sample format** is shown on the next slide.

Example Advantages and Disadvantages Analysis Chart

COURSE OF ACTION	ADVANTAGES	DISADVANTAGES
COA 1	Decisive operation avoids major terrain obstacles. Adequate maneuver space available for units conducting the decisive operation and the reserve.	Units conducting the decisive operation face stronger resistance at the start of the operation. Limited resources available to establishing civil control to Town X.
COA 2	Shaping operations provide excellent flank protection of the decisive operation. Upon completion of decisive operation, units conducting shaping operations can quickly transition to establish civil control and provide civil security to the population in Town X.	Operation may require the early employment of the division's reserve.
Additional COAs as needed		
DISCUSSION		

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Step 5 – COA Comparison

▪ **Input: Products to begin COA comparison include wargame results, evaluation criteria, updated running estimates, and updated assumptions.**

▪ **Process: Step 5 – COA comparison involves three tasks:**

✓*Task 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.**

The most common technique is the decision matrix (illustrated on next slide), which uses evaluation criteria to assess the effectiveness and efficiency of each COA.

Decision matrices alone cannot provide a total basis for decision solutions. Their greatest value is providing a method to compare COAs against criteria that, when met, suggest a great likelihood of producing success. They are analytical tools that staff officers use to prepare recommendations.

Example Decision Matrix

Criteria are those assigned in Mission Analysis, Task 18. Weights for each criterion are determined by the COS / XO based on a subjective determination of their relative value.

After comparing COAs and assigning values, the unweighted assigned scores in each column are added vertically under each COA and a total for each COA is noted. The same values are then multiplied by the weighted score associated with each criterion, and the product is noted in parenthesis in each appropriate box. The weighted products are then added vertically and noted in parenthesis in the space for weighted total below each COA column.

The totals are then compared to determine the "best" COA based on both criteria alone and then on weighted scores. The lower values signify a more favorable advantage - the lower the number, the more favorable the score.

CRITERIA	WEIGHT	COA 1		COA 2		COA 3	
Maneuver	3	2	(6)	3	(9)	1	(3)
Simplicity	4	3	(12)	1	(4)	2	(8)
Fires	1	2	(2)	1	(1)	3	(3)
Intelligence	1	3	(3)	2	(2)	1	(1)
Civil Control	1	1	(1)	3	(3)	2	(2)
Sustainment	1	3	(3)	2	(2)	1	(1)
Mission Command	1	1	(1)	1	(1)	3	(3)
Tactical Risk	2	2	(4)	2	(4)	3	(6)
Future Opns Posture	1	1	(1)	1	(1)	3	(3)
TOTAL Weighted TOTAL		18	(33)	16	(27)	19	(30)

Conclusions from the Decision Matrix

Planners use special care to avoid reaching conclusions from mainly subjective judgments as the result of purely quantifiable analysis. Comparing and evaluating COAs by category of criterion is probably more useful than merely comparing total scores.

Upon review and consideration, the commander – based on personal judgment – may elect to change either the value for the basic criterion or the weighted value.

Although the lowest value denotes a "best" solution, the process for estimating relative values assigned to criterion and weighting is highly subjective. One result may be that the "best" COA may not be supportable without additional resources. This would enable the decisionmaker to decide whether to pursue additional support, alter the COA in some way, or determine that it is not feasible.

CRITERIA	WEIGHT	COA 1		COA 2		COA 3	
Maneuver	3	2	(6)	3	(9)	1	(3)
Simplicity	4	3	(12)	1	(4)	2	(8)
Fires	1	2	(2)	1	(1)	3	(3)
Intelligence	1	3	(3)	2	(2)	1	(1)
Civil Control	1	1	(1)	3	(3)	2	(2)
Sustainment	1	3	(3)	2	(2)	1	(1)
Mission Command	1	1	(1)	1	(1)	3	(3)
Tactical Risk	2	2	(4)	2	(4)	3	(6)
Future Opns Posture	1	1	(1)	1	(1)	3	(3)
TOTAL Weighted TOTAL		18	(33)	16	(27)	19	(30)

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Step 5 – COA Comparison

▪ **Input: Products to begin COA comparison include wargame results, evaluation criteria, updated running estimates, and updated assumptions.**

▪ **Process: Step 5 – COA comparison involves three tasks:**

✓ *Task 3, Conduct a COA Decision Briefing.* **After completing its analysis and comparison, the staff identifies its preferred COA and makes a recommendation. The staff then delivers a decision briefing to the commander. The COS / XO highlights any changes to each COA resulting from the war-game. The decision briefing includes:**

- **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.**

Summary of Step 5 – COA Comparison

INPUT

- War-game results.
- Evaluation criteria.
- Updated running estimates.
- Updated assumptions.

PROCESS

- Conduct advantages and disadvantages analysis.
- Compare COAs.
- Conduct a COA decision briefing.

OUTPUT

- Evaluated COAs.
- Recommended COA.
- COA selection rationale.
- Updated running estimates.
- Updated assumptions.

Military Decision Making Process

This lesson consists of eight sections:

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✓ Step 3 - Course of Action Development

✓ Step 4 - Course of Action Analysis

✓ Step 5 - Course of Action Comparison

✓ **Step 6 - Course of Action Approval**

✓ Step 7 - Orders Production

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(WAR GAME)

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Step 6 - COA Approval

- **After evaluating products from the decision briefing, the commander selects the COA to best accomplish the mission.**

- **The commander has the following options:**

  ✓ **Select the COA to best accomplish the mission.**

  ✓ **Reject all COAs - the staff must begin COA development again.**

  ✓ **Modify a COA.**

  ✓ **Provide an entirely new COA.**

- **If the commander modifies a proposed COA or gives the staff an entirely different one, the staff must incorporate those modifications and ensure all staff members understand the changed COA prior to war-gaming.**

- **The staff then war-games the new COA and presents the results to the commander with a recommendation.**

Introduction to Step 6 – COA Approval

INPUT

- Updated running estimates.
- Evaluated COAs.
- Recommended COA.
- Updated assumptions.

PROCESS

- Commander selects COA. The commander's options include:
  - ✓ Select best COA.
  - ✓ Reject COA.
  - ✓ Modify COA.
  - ✓ Provide new COA.

OUTPUT

- Commander-selected COA and any modifications.
- Commander issues the final planning guidance.
- Updated assumptions.
- WARNO # 3.

1 - RECEIPT OF MISSION

2 - MISSION ANALYSIS

3 - COA DEVELOPMENT

4 - COA ANALYSIS (WAR GAME)

5 - COA COMPARISON

6 - COA APPROVAL

7 - ORDERS PRODUCTION

Step 6 - COA Approval

- **After selecting a COA, the commander issues the final planning guidance. The final planning guidance includes:**
    - ✓ A refined commander's intent (if necessary).
    - ✓ New CCIRs to support execution.
    - ✓ Any additional guidance on:
        - Priorities for the warfighting functions.
        - Orders preparation.
        - Rehearsal.
        - Preparation.
        - Priorities for resources needed to preserve freedom of action and ensure continuous sustainment.
        - Risk.

- **Based on the commander's decision and final planning guidance, the staff issues a WARNO to subordinate headquarters which includes:**
    - ✓ Mission.
    - ✓ Commander's intent.
    - ✓ Updated CCIRs and EEFIs.
    - ✓ Concept of operations.
    - ✓ The AO.
    - ✓ Principal tasks assigned to subordinate units.
    - ✓ Preparation and rehearsal instructions not included in SOPs.
    - ✓ A final timeline for the operations.

Summary of Step 6 – COA Approval

INPUT

- Updated running estimates.
- Evaluated COAs.
- Recommended COA.
- Updated assumptions.

PROCESS

- Commander selects COA. The commander's options include:
  - ✓ Select best COA.
  - ✓ Reject COA.
  - ✓ Modify COA.
  - ✓ Provide new COA.

OUTPUT

- Commander-selected COA and any modifications.
- Commander issues the final planning guidance.
- Updated assumptions.
- WARNO # 3.

Military Decision Making Process

This lesson consists of eight sections:

✓**Introduction to the MDMP**

✓**Step 1 - Receipt of Mission**

✓**Step 2 - Mission Analysis**

✓**Step 3 - Course of Action Development**

✓**Step 4 - Course of Action Analysis**

✓**Step 5 - Course of Action Comparison**

✓**Step 6 - Course of Action Approval**

✓**Step 7 - Orders Production**

Step 7 - Orders Production

▪ **The staff prepares the order or plan by turning the selected COA into a clear, concise concept of operations and required supporting information.**

▪ **The COA statement becomes the concept of operations for the plan. The COA sketch becomes the basis for the operation overlay.**

▪ **Orders and plans provide all the information subordinates need for execution. Commanders review and approve orders before the staff reproduces and disseminates them unless they have delegated that authority. Subordinates immediately acknowledge receipt of the higher order.**

▪ **If possible, the order is briefed to subordinate commanders face-to-face by the higher commander and staff. The commander and staff conduct confirmation briefings with subordinates immediately afterwards.**

(*Specific orders format will be covered in greater detail during CGSS*).

MDMP Summary

INPUT		OUTPUT

INPUT

- **HIGHER HQ PLAN or ORDER or NEW MISSION ANTICIPATED by the COMMANDER**

- **HIGHER HQ PLAN or ORDER**
- **HIGHER HQ KNOWLEDGE and INTEL PRODUCTS**
- **KNOWLEDGE PRODUCTS from OTHER ORGANIZATIONS**
- **DESIGN CONCEPT (if developed)**

- **MISSION STATEMENT**
- **INITIAL CDR'S INTENT, PLANNING GUIDANCE, CCIRs, and EEFIs**
- **UPDATED IPB and RUNNING ESTIMATES**
- **ASSUMPTIONS**

- **UPDATED RUNNING ESTIMATES**
- **REVISED PLANNING GUIDANCE**
- **COA STATEMENTS and SKETCHES**
- **UPDATED ASSUMPTIONS**

- **UPDATED RUNNING ESTIMATES**
- **REFINED COAs**
- **EVALUATION CRITERIA**
- **WAR-GAME RESULTS**
- **UPDATED ASSUMPTIONS**

- **UPDATED RUNNING ESTIMATES**
- **EVALUATED COAs**
- **RECOMMENDED COA**
- **UPDATED ASSUMPTIONS**

- **CDR-SELECTED COA with any MODIFICATIONS**
- **REFINED CDR's INTENT, CCIRs, and EEFIs**
- **UPDATED ASSUMPTIONS**

STEPS

1 - RECEIPT OF MISSION

WARNO 1

2 - MISSION ANALYSIS

WARNO 2

3 - COA DEVELOPMENT

4 - COA ANALYSIS
(WAR-GAME)

5 - COA COMPARISON

6 - COA APPROVAL

WARNO 3

7 - ORDERS PRODUCTION

OUTPUT

- **CDR'S INITIAL GUIDANCE**
- **INITIAL ALLOCATION of TIME**

- **PROBLEM STATEMENT**
- **MISSION STATEMENT**
- **INITIAL CDR'S INTENT**
- **INITIAL PLANNING GUIDANCE**
- **INITIAL CCIRs and EEFIs**
- **UPDATED IPB and RUNNING ESTIMATES**
- **ASSUMPTIONS**

- **COA STATEMENTS and SKETCHES**
- **TENTATIVE TASK ORGANIZATION**
- **BROAD CONCEPT of OPERATIONS**
- **REVISED PLANNING GUIDANCE**
- **UPDATED ASSUMPTIONS**

- **REFINED COAs**
- **POTENTIAL DECISION POINTS**
- **WAR-GAME RESULTS**
- **INITIAL ASSESSMENT MEASURES**
- **UPDATED ASSUMPTIONS**

- **EVALUATED COAs**
- **RECOMMENDED COAs**
- **UPDATED RUNNING ESTIMATES**
- **UPDATED ASSUMPTIONS**

- **CDR-SELECTED COA and MODIFICATIONS**
- **REFINED CDR'S INTENT**
- **REFINED CCIRs and EEFIs**
- **UPDATED ASSUMPTIONS**

- **APPROVED OPERATION PLAN or ORDER**

MDMP Review

  This lesson addressed the following **Key Concepts** in order to provide an overview of the Military Decision Making Process:

▪ **The Commander's Role in MDMP**. The role of the commander in mission command is to direct and lead from the beginning of planning throughout execution, and to assess continually. To ensure mission accomplishment, the commander understands, visualizes, describes, directs, leads, and assesses operations.

▪ **The Staff's Role in MDMP**. The staff's effort during the MDMP focuses on helping the commander understand the situation, making decisions, and synchronizing those decisions into a fully developed plan or order. The Chief of Staff (COS) or Executive Officer (XO) manages and coordinates the staff's work and provides quality control.

▪ **Commander, Staff, and Subordinate Interaction**. The MDMP is designed to facilitate interaction between the commander, staff, and subordinate headquarters throughout planning.

▪ **Performing the MDMP**. The MDMP consists of seven steps. The commander and staff perform these steps sequentially; however, there may not be distinct points at which one step ends and another begins.

An exam is provided at the end of this lesson to assess your learning.