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Development of the COBRAS III Performance Objectives for the Brigade and Battalion Staff Exercise

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This research and development effort, called Combined Arms Operations at Brigade Level, Realistically Achieved Through Simulation III (COBRAS III), designed simulation-based, structured training for the staffs of the conventionally-equipped brigade combat team (BCT). The effort included designing a progressive approach to presenting and utilizing training objectives. The resulting product was a set of "performance objectives" that provides techniques and procedures for command and staff performance. The performance objectives resulted from and support the purpose of the training, which is to facilitate BCT preparation for combat training center rotations and deployment. The performance objective concept was an extension of the task analysis work conducted during the two preceding projects – COBRAS I and COBRAS II.

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FOREWORD

Despite significant budgetary constraints, the U.S. Army faces the challenges of maintaining combat readiness and preparing for the battlefield of the 21st century. In fiscal year 1994, Congress appropriated funding for the Virtual Brigade Training Program (Department of Defense, October 1993). Shortly thereafter, program development was assumed by the Force XXI Training Program that is addressing the training of the modern force, and the program was renamed *Combined Arms Operations at the Brigade Level, Realistically Achieved Through Simulation* (COBRAS).

Several training efforts have been initiated under the COBRAS umbrella, all coordinated with the TRADOC Deputy Chief of Staff for Training (DCST) and the U.S. Army Armor Center's (USAARMC) Directorate of Training and Doctrine Development (DTDD). The U.S. Army Research Institute for the Behavioral and Social Sciences conducted this work under the Memorandum of Agreement entitled "Force XXI Training Program [i.e., Virtual Brigade Training Program]," dated June 1994. The first two projects, COBRAS I and II, developed two types of exercises designed for the staffs of inexperienced, conventionally-equipped brigades: (1) vignettes for segments of the staff and (2) a larger Brigade Staff Exercise focusing on the primary staff members plus the staff responsible for combat support (CS) and combat service support (CSS). Both exercise types offer practice and feedback opportunity in combat fundamentals. Additional training for battalion-level CS and CSS personnel in the context of the full operation was also developed in COBRAS II as an expansion of the Virtual Training Program, using virtual simulation

The current effort (COBRAS III) took the overall COBRAS program to the next level of complexity in two ways. The first was to design, develop, and evaluate a multiechelon exercise for the brigade combat team (BCT), with intensified implementation conditions and integrated performance objectives. This exercise was called the Brigade and Battalion Staff Exercise (BBSE). The second was to design and develop a multiechelon Synthetic Theater of War exercise, and implement the exercise in order to assess specific aspects of the technology, training value, and resource demand.

This Research Product provides the performance objectives of the BBSE and describes their development. Also contained is a description of the purpose of the performance objectives and how the performance objective approach supports the goal of the BBSE – to provide preparation opportunities for BCT deployment and combat training center events. Force XXI policy makers and training developers will find this product useful in the course of continuing steady progress toward Force XXI goals in training development. In addition, BCT leaders will find this product useful as a means of improving the training readiness of their units.

The COBRAS III effort was periodically briefed throughout the developmental phases to the DCST, the USAARMC Commanding General, and the Director of DTDD. The final briefing of the results of the effort and the handoff of the training support package to the Director of DTDD was conducted on 17 August 1998.

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DEVELOPMENT OF THE COBRAS III PERFORMANCE OBJECTIVES FOR THE BRIGADE AND BATTALION STAFF EXERCISE

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Overview

More so than ever before, monetary concerns are influencing how the U.S. Army trains its soldiers. Training dollars are precious, and unit training strategies must stretch their value. For armor brigades, the peak training events are still Combat Training Center (CTC) rotations. These rotations are vital to preparing units for combat, as they provide realistic, multiechelon training. On the downside, CTC rotations are few and far between, and they require a large measure of a unit's training dollars.

To support the balance of their training schedules, units must have access to cost-effective training programs that support preparation for deployment, particularly to CTC events. At the centers, units must be able to focus on refining their performance, not simply on *discovering* effective techniques and procedures (T&P). This idea resonates in one commander's comment during the latter stages of his National Training Center (NTC) rotation: "We should have worked this out before we got to the NTC!" A senior commander of an NTC-bound unit expressed the same idea, stating that, "...we must train to go to the field, not just go to the field to train."

In the past ten years, the Army has gone a long way towards developing cost-effective training that supports preparation for deployment. One of the first steps was the establishment of the Virtual Training Program (VTP) at Fort Knox, KY (Hoffman, Graves, Koger, Flynn, & Sever, 1995). The VTP, originally created to meet the training needs of the Army's Reserve Component, accentuated the value of structured training as a means to achieving training proficiency. "Structured training" refers to systematically designed training that focuses on predetermined objectives (Campbell, Deter, & Quinkert, 1997). In the VTP, the concept of structure was coupled with the use of simulation technologies (e.g., Simulation Networking) to enhance training realism while containing costs.

Following the success of the VTP, the Army has continued to develop and promote structured training programs. The Force XXI Training Program (FXXITP), an effort focused on equipping and training the force of the 21st century (U.S. Army Training and Doctrine Command [TRADOC], 1994), has played a critical role in this development.

Among the many FXXITP initiatives is the effort known as *Combined Arms Operations at Brigade Level, Realistically Achieved through Simulation* (COBRAS). Contracted by the Armored Forces Research Unit of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), FXXITP-COBRAS is a training research and development effort. The intent of the project has been to design and develop structured training packages for elements of the brigade combat team (BCT).

To date, the COBRAS effort has consisted of three major projects. The first two projects (i.e., COBRAS I and COBRAS II) developed training for the brigade commander and selected staff officers at brigade-level[1]. The third and most recent project, COBRAS III, has created

[1] The training developed during the COBRAS I and II projects is described in Graves, Campbell, Deter, and Quinkert (1997) and Campbell, Graves, Deter, and Quinkert (1998), respectively.

multiechelon training for the brigade. The resulting exercise is entitled the *Brigade and Battalion Staff Exercise* (BBSE).[2]

This report deals with one critical component of the BBSE: the exercise's performance objectives. The BBSE and its performance objectives are unique because they are designed to meet the training need indicated above – preparation for deployment, especially to CTCs.

The following sections of this report describe the development of the COBRAS III performance objectives. The first section describes the BBSE, the exercise whose intent prompted the performance objective concept. The second explains the development of the performance objectives themselves, and how some key factors influenced the concept. Included is a discussion of the results of the formative evaluation and the revisions that followed.

A list of acronym definitions is contained in Appendix A, and the complete set of performance objectives and associated training materials is provided as Appendix B.

The Brigade and Battalion Staff Exercise

The BBSE is a multiechelon training exercise that provides structured practice opportunities for the BCT. The exercise was designed as a ramp-up to deployment, predominantly to CTCs. As such, the BBSE is intended for a mature unit that has well defined and practiced staff standing operating procedures. The exercise allows the unit to focus on critical, collective staff skills under conditions similar to those experienced at the CTCs (e.g., an intense battle rhythm, concurrent handling of multiple missions).

Prior to the BBSE, the brigade can use other structured training programs to reach the level of proficiency required by the exercise. The BBSE, however, as demonstrated in Figure 1, can be a unit's final preparation for a CTC experience.

Training Audience

The BBSE's primary training audience includes the brigade and task force (TF) commanders, and their staff personnel who operate out of the brigade main and rear command post (CP) locations and the TF main CP and combat trains command post. These participants are listed in Figure 2.

[2] The COBRAS III project also developed a multiechelon Synthetic Theater of War exercise. This work and the resulting exercise are described in Campbell, et al (1998).

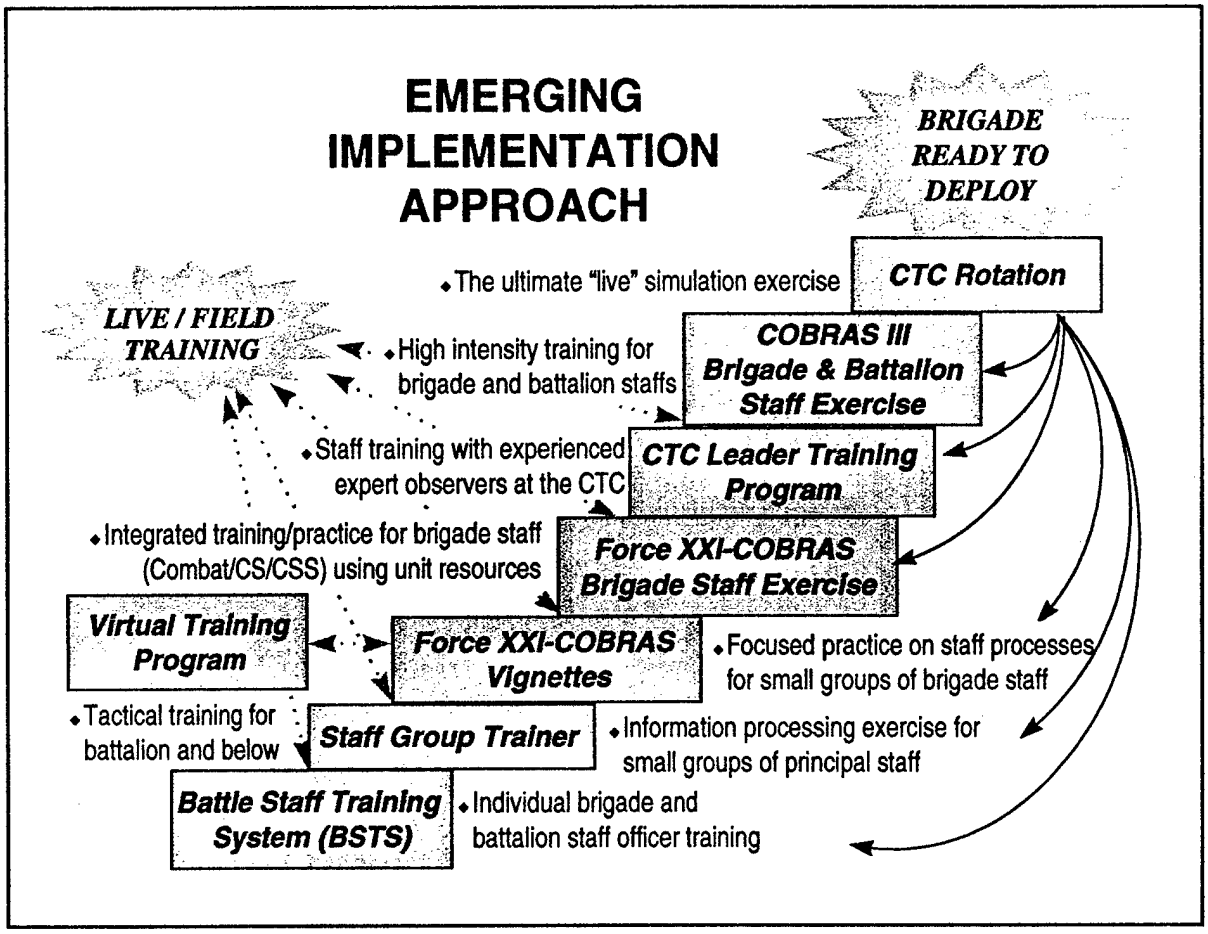

Figure 1. A simulation-based approach to combat training center preparation.

Implementation Design

In structured training, a detailed implementation design, including a tactical scenario, supports the performance and review of defined training objectives under specified battlefield conditions. To drive performance, the scenario sets the mission, enemy, terrain, troops, time, and civilian considerations for the exercise, and provides a story line defining how exercise events are to unfold. To make those events unfold, the implementation design also defines the roles and responsibilities of all persons associated with exercise.

All the information and guidance necessary to conduct an exercise is contained in a training support package (TSP). For the ARI-sponsored projects and as defined in TRADOC Regulation 350-70 (Department of the Army [DA], 1995), TSP materials include: (a) tactical materials, (b) unit preparation materials, (c) guidance for other participants, (d) administrative guidance for managers, and (e) simulation tapes and documentation. The BBSE's TSP is structured accordingly.

In the BBSE, the scenario generates the conditions for planning and executing three missions (i.e., area defense, deliberate attack, movement to contact) under demanding, continuous 24-hour operations. The missions are not linked in a rigid manner where the outcome of one determines the starting location and enemy situation for the next. However, they are

Brigade-Level	
Brigade commander	Brigade fire support coordinator
Brigade executive officer (XO)	Air defense artillery (ADA) coordinator and section
Brigade personnel officer (S1) and section	Forward Support Battalion commander and support operations section
Brigade intelligence officer (S2) and section	Military intelligence company commander and headquarters section
Brigade operations officer (S3) and section	Military police platoon leader
Brigade logistics officer (S4) and section	Army aviation liaison officer
Chemical officer and section	U.S. Air Force air liaison officer
Brigade engineer and section	
Brigade signal officer	
Brigade fire support officer (FSO) and fire support element (FSE)	
Battalion/Task Force (TF)-Level	
TF commander	Chemical officer and section
TF XO	TF Engineer
TF S1 and section	Signal officer
TF S2 and section	TF FSO and FSE
TF S3 and section	TF ADA platoon leader
TF S4 and section	TF liaison officer

Figure 2. Primary training audience members.

based on a singular story line that provides the context for all missions. The unit's combat readiness and operational readiness rates at the end of each mission do determine its status at the start of the next mission.

The BCT and subordinate battalions operate from their CPs, which are linked using tactical communications to the Brigade/Battalion Battle Simulation (BBS). The BBS is the constructive driver of the exercise. Units are encouraged to establish their CPs as they would under field conditions to assist generating an environment that replicates the intensity and rhythm of actual operations. This configuration allows the staffs to train with the assets that are available in the field and determine how their organization and procedures contribute to or detract from staff activities and processes.

To plan, prepare, and execute all three missions requires six training days. This does not include the preparation, set up, and train-the-trainer activities required prior to receipt of the first division order. The exercise may be shortened by stopping after the execution phase of one mission and issuing the order for the subsequent mission; doing this, however, eliminates much of the logistics play.

By emulating these characteristics of CTC rotations, the BBSE provides the BCT an opportunity to practice under CTC-like conditions. But practice does not equal training, especially that of a structured nature. Without structured feedback, the BCT has only half of the necessary prerequisites for training. The performance objectives deliver this component for the BBSE. The performance objectives, along with the associated observation and feedback materials, are described below.

Development of the Performance Objectives

The value of the COBRAS III BBSE is in large part based in the program's focus on critical T&P and the provision of flexibility that allows the brigade commander to tailor the exercise to focus on his unit's training needs. The design of the exercise's performance objectives is integral to meeting these requirements. The major features of the objectives are as follows:

- They focus on true high-payoff performance and procedures.
- They focus on collective behaviors that require interaction and synchronization.
- They support the brigade commander's tailoring of the training emphasis to his priorities for the exercise.

A final characteristic of the objectives is that, while they are consistent with the U.S. Army's doctrinal publications, they include supplemental T&P that are not included in published doctrine. The addition of these T&P was a natural continuance of the task identification work that was conducted during the COBRAS I and II projects and consistent with the research interests of the future-oriented FXXITP.

Background Influences

Even before the initiation of the COBRAS projects, a number of military researchers had recognized that the Army's doctrinal materials are not completely suited for instructional and training purposes. At the core of the problem, there are significant content gaps in the task lists contained in doctrinal publications (Maggart, 1994). Then-Brigadier General Maggart referred to these undocumented tasks as "living tasks," indicating that they are both necessary and frequently performed, but are not captured in doctrine.

In particular, the doctrinal publications have gaps in such areas as specifying the interactions and synchronization necessary for effective functioning. Field Manual (FM) 71-3 (DA, 1996), for example, specifies that staff officers are assigned functional areas-of-interest, and a responsibility to provide information, make estimates, make recommendations, prepare plans and orders, and supervise the execution of decisions. The FM's assignment of responsibilities, however, does not specify how staff members perform, individually and especially collectively, in meeting these responsibilities.

Because the Army's publications lack specificity in addressing collective performance, the materials do not directly aid commanders in the development and utilization of collectively-aimed training objectives. And yet, the more mature BCTs require training that focuses on collective, including multiechelon, performance. Meeting this requirement was one of the catalysts behind the development of the BBSE and its performance objectives.

Purposes of the Performance Objectives

To prepare for a CTC rotation, a unit must identify the areas, or collective activities, on which they most need to focus in order to maximize that CTC experience. The COBRAS III performance objective effort sought to identify an extensive range of these activities and subsequently incorporate them in a pre-deployment structured training program.

The activities, called performance objectives, were to allow assessment and focused practice on high-payoff, collective functions or tasks. This would enable the brigade to transcend focusing solely on individual performance, and achieve a focus on the larger perspective – how individuals contribute to a larger process or activity. Furthermore, these activities would be those that are most critical to success at the CTCs, and thus, theoretically, in combat operations.

The Development Process

In the production of structured training, the processes of developing training objectives (in the case of the BBSE, performance objectives) and developing the rest of the TSP (e.g., scenario, implementation guidance) are mutually supporting activities. Development is not done in a strictly linear fashion, in which one TSP component is completed before work on another component is begun (Campbell, Deter, & Quinkert, 1997). Because this report focuses explicitly on the performance objective component of the BBSE's TSP, only occasional reference will be made to the interface between performance objective development and other developmental activities. For a description of the overall BBSE development effort, see Campbell, et al (in preparation).

The process of developing the performance objectives consisted of 5 steps, including:

- identification of performance objective topics to be addressed,
- development of T&P,
- integration of the performance objectives into the BBSE TSP,
- use and evaluation, and
- review and revision.

Identification of Performance Objective Topics

The topics addressed by the performance objectives would, to a great extent, define the parameters of the exercise's potential emphases. Given this, the background research to identify topics took on a great significance in determining the BBSE's acceptability.

Because the BBSE was to provide preparation for CTC exercises, the primary sources of topics were Center for Army Lessons Learned (CALL) publications and discussions with CTC observer/controllers, units, and proponent staffs. The CALL publications consulted included the *News from the Front*, newsletters, CTC bulletins, and CTC trends. By exploring these sources, developers hoped to gain insight on the most common difficulties experienced by units at CTCs. It was assumed, then, that these same areas would be the ones that would be most problematic in actual combat situations. Other sources included: tactics, techniques, and procedures publications, Battlefield Function analyses, and COBRAS I and II task lists.

The search for topics was initially organized according to battlefield operating systems. Those systems in which topics were to be identified included:

- maneuver,
- command and control,
- intelligence,
- fire support,
- mobility and survivability,
- air defense, and
- combat service support (CSS).

Because of the multiechelon emphasis of the exercise, multiechelon as well as both brigade- and battalion-level objective topics were identified. Once an initial list of topics had been identified, each objective topic was compared to current Mission Training Plan (MTP) tasks. Relationships between objective topics and MTP tasks were documented and the MTP tasks were later used in the development of the objectives.

Proposals were then prepared for each objective. The list of objectives at that point is presented in Figure 3. Each proposal included:

- a descriptive performance objective title,
- the echelon(s) for which the objective was intended,
- the sources from which the objective was identified,
- the COBRAS missions that would support performance and observation, and
- the initiating cues (i.e., what would cause the event/activity related to the objective to occur).

Battlefield Operating System	Performance Objective Topic	Battalion Level	Brigade Level
Maneuver	Develop Engagement Area	✓	
Command & Control	Parallel Planning	✓	✓
	Manage Information Flow (CP operations)		✓
	Manage Information Flow (CP operations)	✓	
	Conduct Back Briefs and Rehearsals	✓	✓
	Employ Decision Points		✓
	Concurrent Planning		✓
	Issue a Fragmentary Order		✓
	Conduct a Shift Change		✓
	Commit the Reserve		✓
	Commit a Following Force		✓
Reconnaissance and Intelligence	Develop and Manage Commander's Critical Information Requirements		✓
	Develop and Execute a Reconnaissance Plan		✓
Fire Support	Shift Fires from Deep to Close		✓
	Clear Fires	✓	✓
Mobility and Survivability	Integrate Obstacles into Engagement Areas	✓	
	Plan and Employ Family Scatterable Mines	✓	✓
	Plan and Coordinate Chemical Unit Employment		✓
	Defend Against Weapons of Mass Destruction	✓	✓
	Use Smoke in Support of Tactical Operations		✓
Air Defense (AD)	Implement AD Early Warning	✓	✓
Combat Service Support (CSS)	Conduct Combat Trains Command Post Operations	✓	
	Conduct Brigade Rear Command Post Operations		✓
	Prepare and Maintain CSS Estimate		✓
	Prepare CSS Estimate	✓	

Figure 3. Initial list of performance objective topics.

Proposals were reviewed by the COBRAS senior training developer and military subject matter expert personnel. Four criteria were used to judge the validity of each objective for inclusion in a set to be reviewed by the Directorate of Training and Doctrine Development. These criteria and some related questions asked were:

- Criticality: Why is it important that brigades and battalions practice this objective over other objectives or existing MTP tasks? Where or how does a unit/staff have problems performing this activity?
- Acceptability: What is the demand for this objective? Is it an attempt to foster an individual doctrinal agenda, or will it be universally held as an appropriate topic? Will the team be writing a whole area of doctrine or T&P, or is there at least some amount of supporting information available in doctrinal or procedural manuals?
- Feasibility: Can this objective be performed? Do the tactical scenarios support it? Does constructive simulation environment support it? Can it be initiated with minimal manipulation and contrivance of the simulated environment?
- Redundancy: Will the content of this objective overlap significantly with that of other objectives?

After evaluating each proposal and manipulating topics according to evaluation results, the team produced a revised list of topics. These topics, listed in Figure 4, underwent further development as described below.

From the refined set of proposals, developers created an outline for each performance objective. The outlines, designed to clarify more completely the intent and focus of the objectives, identified the following information:

- Who: Who are the primary and supporting players?
- When: When within the COBRAS scenarios can the objective be observed?
- What: What information is required to perform and achieve the objective?
- How: What are the critical tasks that must be accomplished to achieve the objective, regardless of the technique or procedure used?
- Why: Why would a brigade or battalion want to train on this objective?

Several factors, or questions, were considered during development of the outlines. These questions included:

- Does the outline clearly define the objective and supporting tasks?
- Does the outline indicate the correct training audience for the objective?
- Can the objective, as described, be observed within the constraints of the constructive simulation?
- Does the outline specify all the required inputs (i.e., performance cues) and how they are transmitted?
- Is the described objective consistent with current doctrine as defined by U.S. Army doctrinal publications?

Battlefield Operating System	Performance Objective Topic	Battalion Level	Brigade Level
Maneuver	Develop Engagement Area	✓	
Command & Control	Parallel Planning	✓	
	Manage Information Flow		✓
	Manage Information Flow	✓	
	Conduct Rehearsals		✓
	Plan and Execute Decision Points		✓
	Accelerated Decision-making Process		✓
	Commit the Reserve		✓
Reconnaissance and Intelligence	Plan and Manage Reconnaissance		✓
Fire Support	Develop, Integrate, and Execute Plan for Fires		✓
	Develop and Execute Plan for Fires	✓	
	Clear Fires Through Brigade		✓
Mobility and Survivability	Develop and Execute Mobility/Survivability Plan		✓
	Develop and Execute Smoke Plan		✓
Air Defense (AD)	Implement Brigade AD Early Warning		✓
Combat Service Support (CSS)	Prepare CSS Estimate	✓	
	Prepare and Maintain CSS Estimate		✓

Figure 4. Refined list of performance objective topics.

After the outlines had been completed, developers began compiling the substance of the objectives: the T&P.

Development of Techniques and Procedures

The T&P for the performance objectives were not intended to be prescriptive; rather, they were to describe to the BCT a way to accomplish the objective and a model against which to compare their own procedures.

Briefly, the T&P for each objective convey information on *how* the objective can be achieved. They have been described as "the methods used by troops and/or commanders to perform assigned missions and functions...the standard and detailed courses of action that describe how to perform a task" (DA, 1997, p. 1-151). Doctrinal and Army Training and Evaluation Program (ARTEP) manuals detail concepts and standards, which represent the "what" of performance. The T&P supplement both doctrine and ARTEPs by providing a "how to" of performance.

Two key activities were used to generate the T&P: literature reviews and roleplay enactments of performance objective activities. In the literature reviews, developers revisited CALL publications, and CTC and leader training program class materials to identify existing T&P. Incorporating the T&P found in CTC materials was expected to make the COBRAS T&P especially useful to units. Because the BBSE would be used to prepare for CTC rotations, units could practice, beforehand, some of the specific T&P taught at the centers.

When gaps in T&P content were still evident, roleplay was utilized. To execute the roleplay, developers worked from the outlines (described above) and within the contexts of the BBSE scenario. Working from existing tasks (e.g., MTP tasks, COBRAS II tasks), developers supplemented this information with more of the "how to" information. Roleplayers recorded their behaviors, as well as the group's behaviors, and discussed this information following roleplay sessions. The T&P information was revised until it was judged to represent acceptable solutions for performance.

Integrating the Performance Objectives into the Training Support Package

In addition to the T&P, the roleplay sessions produced other materials and information. Some of this information was used to refine the scenario story line, tactical products, and other aspects of the exercise's design. Still other information (e.g., performance measures), along with the T&P information, was integrated into the larger BBSE TSP through the creation of *Performance Objective Observation Guides.*

During the roleplay sessions (described earlier), documents called *Event Sheets* were used to identify and record the prompts, cues, messages, and instructions that would have to be included in the exercise's scenario and implementation guidance. The Event Sheets were an internal management tool, never intended to be a part of the final TSP. However, the Event Sheets were used to collect information regarding how the implementation design would support execution of the performance objectives. The sheets detailed activities in the following areas:

- Opposing Force (OPFOR). The activities and timing of OPFOR actions required by the objective and the performance measures. Included limitations on required OPFOR actions and capabilities.
- Scenario. Instructions and information that must be built into the operation orders, Order of Battle, operational readiness rates, and supply levels that support the objective and performance measures.
- Messages. Information and instructions to be included in the scripted messages that cue or influence the objective's performance.
- Exercise Management Instructions. Administrative requirements and instructions to exercise control personnel; this information was to facilitate performance and observation of the objectives.

Again, the performance objectives reside in *Performance Objective Observation Guides.* These guides are specific to each performance objective and are intended for use by both the training audience and observers. The guides define the actual "objective" of each performance objective, describe methods or procedures that could be used to achieve each objective, and provide performance measures. Specifically, each of these guides contains the following:

- Introduction. Uses the concept of *trends and trend reversal* from CALL sources to describe why a unit must be proficient on the performance objective.
- Objective. Describes the purpose and the essential tasks required to achieve the objective. It describes the criteria for success by defining the end-state or desired outcome. The objective allows for the individuality of units and the fact that units may already have some form of standing operating procedures.

- Participants. Identifies the participants (individuals and/or sections) involved in the execution of the performance objective. It inherently identifies horizontal and vertical links within the BCT.
- T&P. Offers "a-way" of executing performance objective activities.
- Assessment Guide for the Commander and Observers. Describes what the observers will be watching for and how they will structure the after action reviews (AARs). A detailed discussion plan, consisting of questions and considerations, is also provided.
- References. Lists specific references, to include chapter, page, task number (if appropriate), that are related to the performance of the objective. References include the initial sources from which the performance objectives were identified.

The *Performance Objective Observation Guides* are perhaps the most critical component of the TSP for the brigade commander and other members of the training audience. The information in these guides can be used to help the commander select those objectives on which to focus. They also help the training audience understand the purpose of the exercise and what they must know and do to prepare for their roles in the exercise.

Use and Evaluation

Approximately midway through the COBRAS III effort, the draft performance objectives were used in a unit trial of the program. An active duty brigade conducted the BBSE (all missions) to provide feedback on the exercise and its supporting products.

The reactions to the performance objectives by the training audience and observers were very favorable. The brigade commander, for instance, endorsed the performance objective concept and the TSP's mechanics for its implementation. He noted specifically that the brigade's focus on the performance objective, "Plan and Manage Reconnaissance," caused the brigade to wrestle with and resolve many procedures. The commander stated that the benefits gained in this area alone justified the expense of the exercise.

In addition, the commander said that selecting a set of performance objectives allowed him to articulate clearly his objectives for the exercise, in a way that he had never before been able to do. He stressed that the performance objectives represented more than just vague topics of stated interest, such as, "improving teamwork," but that they meant something to the training participants.

Other members of the training audience reported that the performance objective concept is very viable as a way of expressing goals, requirements, and performance. Constructive comments regarding potential usage and further development were also provided. Specific comments expressed the following:

- The concept gives the commander flexibility to establish the focus of the training.
- The concept allows the observers to focus on their areas, or topics, during observation.
- The concept is especially viable for fostering the command environment within the brigade and developing the inter-staff relationships vital for operations.

- The concept allows the staff to define and refine their procedures as opposed to more traditional AARs in which the observer works from a checklist of tasks.
- The performance objectives would be useful as a training or discussion tool for officer professional development.
- The performance objectives allow commanders to lay the groundwork for a shared vision for tactical operations and commander's intent.
- The concept helps focus the observers on what the commander wants to evaluate.
- The performance objectives are like a sort of table of organization and equipment for staffs.

The senior observer was "very keen" on the performance objective approach as a means of describing exercise behavior and performance. He compared the objectives to other existing doctrinal performance measures, specifically mentioning ARTEP tasks, and stated that he knew of nothing "comparable or as good out there." The performance objectives caused both the observers and training audience to look at issues in a unified way. He liked the T&P approach, as well as the assessment guide, noting that the instructions were clear and easy to follow; it was "really great to have everything in one package." He stated that "the whole Army needs this badly and quickly" and that they would especially benefit the National Guard -- there is "not a Guard staff out there that would not benefit from the [performance objective] approach."

Review and Revision

Following the trial, developers once again reviewed and revised the performance objectives and the associated materials. The review focused on technical accuracy, but was also conducted to ensure each objective's packaging included all the required information to facilitate use and understanding.

One major revision was a strengthening of the linkage between the "battle command" concept and several of the decision-making performance objectives (numbers one, three, nine, ten, and fifteen in Figure 5). Battle command, as defined by TRADOC Pamphlet 525-200-1 is "... the art of battle decision making, leading, and motivating soldiers and their organizations into action to accomplish missions at least cost to soldiers. It begins in the training a commander provides for his command.... It includes visualizing the current state and desired future states and then deciding how to get from one to the other at least cost to the soldier. These decisions include assigning missions, prioritizing and allocating resources, selecting the critical time and place to act, and knowing how and when to make adjustments during the fight." (DA, 1994, p. 3-1). The purpose of its inclusion was to stimulate awareness, understanding, and practice of the concept, which is currently being stressed at the CTCs.

To stress the concept of battle command, developers modified the objective statements, T&P, and assessment questions contained in the *Performance Objective Observation Guides.* Although no direct reference is made to the term "battle command," the increased focus on the concept draws attention to:

- the commander's development and sharing of his vision for how the fight should unfold and what his brigade/battalion must do to win the fight, and

- the staff's role in supporting the commander's development and achievement of his vision.

In other revisions, developers re-titled, merged, split, and eliminated performance objectives. Many of the performance objective titles were modified to make them more descriptive of the objective content and more consistent with current doctrinal terminology. Performance objectives were split, merged, and eliminated for different reasons. These modifications were as follows:

- The objective, "Parallel Planning," was renamed, "Parallel Planning within the Brigade." The title was changed to describe better the activities of the objective, as other units, in addition to battalions, conduct parallel planning.
- An additional performance objective, "Military Decision-making Process in the Battalion," was created from the original objective, "Parallel Planning." This new performance objective focuses exclusively on the battalion/task force decision-making process.
- The objective, "Clear Fires Through Brigade," was renamed, "Conduct Clearance of Indirect Fires Procedures," in order to describe better the content of the objective.
- The objective, "Plan and Manage Reconnaissance," was renamed, "Plan and Manage Reconnaissance within the Brigade," in order to address more specifically the focus between the brigade and its subordinate units.
- The objectives, "Prepare and Maintain CSS Estimate" and "Prepare CSS Estimate," were merged into a single objective, "Integrate Logistics Estimates in Decision-making." This change was made so that a single objective would address the integration of the CSS estimate into the decision-making process.
- The objective, "Manage Information Flow," at the brigade level, was renamed, "Manage Information within the Brigade Command Posts." The change was made to provide a better description of the objective's content.
- The objective, "Implement Brigade Air Defense (AD) Early Warning," was renamed, "Plan and Implement Brigade Air Defense Early Warning." This change was made as the objective was expanded to include planning as well as implementation.
- The objectives, "Develop, Integrate, and Execute Plan for Fires" and "Develop and Execute Plan for Fires," were merged into the objective, "Develop and Execute the Brigade and Battalion Plan for Fires." The objectives were combined because of the synchronization required between echelons.
- The objective, "Conduct Rehearsals," was revised and renamed, "Conduct a Combat Health Support Rehearsal." The performance objective was modified so that it focused on a single type of rehearsal. The COBRAS vignettes already address a combined arms rehearsal and a CSS rehearsal.
- The objective, "Accelerated Decision-making Process," was renamed, "Decision-making in a Time Constrained Environment." The latter title is more consistent with current doctrinal terminology.

- The objective, "Develop and Execute Mobility/Survivability Plan," was renamed, "Develop and Execute the Brigade Concept of Mobility/Survivability." The new title better describes the content of the objective.
- The objective, "Commit the Reserve," was revised and renamed, "Plan for and Commit a Company-size Reserve." The revised objective focuses specifically on the unique problems encountered when employing a company-size reserve.
- The objective, "Develop and Execute Smoke Plan," was renamed, "Plan, Integrate, and Manage Smoke Assets." The new title provides a better description of the objective's content.
- The battalion-level objective, "Manage Information Flow," was renamed, "Manage Information within the Task Force Command Posts," in order to provide a more descriptive title.
- The objective, "Develop Engagement Area," was eliminated. Certain activities, those that require a presence on real terrain, cannot be performed well, or in detail, in constructive simulation. Performance objectives that focus on such activities are not valid for an exercise such as the BBSE.

Once each objective had been reviewed and revised, the performance objectives were delivered to ARI. The final list of published performance objectives is presented in Figure 5.

The final list of performance objectives includes more objectives than can be focused on during any single BBSE execution. Thus, the brigade must select a set. Even though an objective is not selected as priority, the brigade will still receive practice in that area. Regardless of which objectives are selected, the scenario supports the performance of the entire list. In selecting a *set* of objectives, the brigade commander is simply deciding which objectives they want to have observed and reviewed with the aid of observers.

Similarly, although the developed performance objectives are numerous, it is obvious that many activities and functions of the BCT are not specifically covered; the list is *not* exhaustive. It is possible for a brigade to identify areas that are not covered explicitly by the performance objectives as their training objectives. The BBSE's scenario does not preclude, but rather supports, performance of much more than the developed set of performance objectives. This is part of the flexibility, and thus, the value of the exercise.

1. Parallel Planning within the Brigade
2. Conduct Clearance of Indirect Fires Procedures
3. Plan and Manage Reconnaissance within the Brigade
4. Integrate Logistics Estimates in Decision-making
5. Manage Information within the Brigade Command Posts
6. Plan and Implement Brigade Air Defense Early Warning
7. Develop and Execute the Brigade and Battalion Plan for Fires
8. Conduct a Combat Health Support Rehearsal
9. Decision-making in a Time Constrained Environment
10. Plan and Execute a Decision Point
11. Develop and Execute the Brigade Concept of Mobility/Survivability
12. Plan for and Commit a Company-size Reserve
13. Plan, Integrate, and Manage Smoke Assets
14. Manage Information within the Task Force Command Posts
15. Military Decision-making Process in the Battalion

Figure 5. Final set of COBRAS III Performance Objectives

Summary and Conclusion

The BBSE and its performance objectives were created to meet some very evident and expressed training needs of today's BCTs. The results of the formative evaluation indicate the attainment of this goal: Unit feedback suggests that the performance objective approach supports effective training in preparation for CTC rotations and deployment.

This Research Product has documented the development of the COBRAS performance objectives. It has presented the conceptualization and design of the approach, described the process by which the objectives were developed, and provided the final set of objectives for examination by prospective users and the U.S. Army training development community.

Based on the findings of the formative evaluation, an expanded application of the performance objective approach is warranted. Two recommendations emerge:

- First, the approach should be expanded to training in digital operations. While the specific requirements of this type of expansion are currently undocumented, work in the area is proceeding in an ARI project entitled, *Force XXI Training Program – Digital* (ARI, 1998).
- A second area of expansion lies in the potential development of additional performance objectives that cover topics not presently addressed. Training deficiencies in virtually any area of collective battle staff performance can be addressed by the performance objective approach.

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Appendix A. Acronyms and Abbreviations

AAR	after action review
AD	air defense
ADA	air defense artillery
ARI	Army Research Institute
ARTEP	Army Training and Evaluation Program
BBS	Brigade/Battalion Battle Simulation
BBSE	Brigade and Battalion Staff Exercise
BCT	brigade combat team
BST	Battle Staff Training System
CALL	Center for Army Lessons Learned
COBRAS	Combined Arms Operations at Brigade Level, Realistically Achieved Through Simulation
CP	command post
CS	combat support
CSS	combat service support
CTC	Combat Training Center
DA	Department of the Army
FM	Field Manual
FSE	fire support element
FSO	fire support officer
FXXITP	Force XXI Training Program
MTP	Mission Training Plan
NTC	National Training Center
OPFOR	opposing force
S1	personnel officer
S2	intelligence officer
S3	operations officer
S4	logistics officer
T&P	techniques and procedures
TF	task force
TRADOC	U.S. Army Training and Doctrine Command
TSP	training support package
VTP	Virtual Training Program

XO	executive officer

APPENDIX B.

PERFORMANCE OBJECTIVES

PARALLEL PLANNING WITHIN THE BRIGADE

Parallel planning is a doctrinal procedure which supports and fosters the initiation of planning at subordinate levels before planning and preparations are completed at the higher level. This performance objective addresses the parallel planning process that should exist between the brigade combat team (BCT) staff and the maneuver battalion task force (bn/TF) staffs. Parallel planning for a mission when the BCT is not engaged in active operations is demanding, but certainly possible. When the BCT is engaged in an ongoing mission, the parallel planning which can be done by subordinate bn/TFs must be realistically adjusted to recognize the limited size, depth, and experience of the bn/TF staffs. The staff procedures for this parallel planning between BCT and bn/TF staffs can be practiced and refined during exercises such as this. Repetitively practicing this process under increasingly difficult conditions will enable the BCT to maximize the planning time that is available for any mission.

Objective

The brigade integrates the Military Decision-Making Process (MDMP) at several echelons by involving all subordinate and supporting commands in simultaneous planning activities. Integration requires frequent and timely warning orders (WARNOs) from brigade and the fusion of subordinate liaison officers (LNOs) into decision-making at brigade to maintain a continuous information flow between echelons. Subsequent WARNOs do not include conflicting information, and combined with interaction between the battle staffs, enable the bn/TF to complete course of action (COA) development prior to issue of the brigade operation order (OPORD). OPORDs at both echelons must be in agreement.

Techniques and Procedures

Overview

Parallel planning relies on the timely exchange of information between echelons to integrate brigade and bn/TF planning activities. It requires a trained, experienced staff who are familiar with the MDMP as practiced within their command setting.

For successful parallel planning, units must share information through WARNOs, utilize experienced liaison persons, and maintain awareness at each echelon of the on-going activities and requirements of each other.

This technique and procedure focuses on those activities and interchanges that should facilitate the parallel planing requirement of the MDMP. The information presented is not intended for basic MDMP training; it assumes MDMP expertise on the part of both brigade and battalion staffs. Commanders and staffs must combine the techniques and procedures of this performance objective with their own planning methods and applications.

This technique and procedure is based on a model which utilizes four WARNOs issued from brigade to its subordinate units. This is an optimum application of WARNOs. Specific situations may dictate fewer or more orders.

Brigade and battalion/task force roles

The integration of brigade and battalion activities that will enable parallel planning to be effective requires that all participants be aware of their roles in the process.

Brigade commander

The brigade commander creates the climate where parallel planning can occur. He focuses the staff with clear guidance, involves bn/TF commanders in "playing out" his vision for the fight, and interacts with them continuously as staffs develop the details of the plan. While the brigade commander becomes heavily involved with his staff during the planning process, he maintains regular personal contacts with his subordinate commanders, updating them on his perspective of the upcoming operation.

Continued on next page

Techniques and Procedures, Continued

Brigade executive officer (XO)

The brigade XO adapts established WARNO procedures based on commander's guidance and time analysis. The WARNOs provide information that allows subordinate staffs to complete COA development prior to issue of OPORD. Changes to the preparation timeline should be included with each order.

Brigade staff

The brigade staff adapts the decision-making process specified in the commander's guidance. Separate planning and preparation timelines assist internal decision-making and subordinate parallel planning and preparation. The staff coordinates directly with subordinate counterparts between WARNOs to ensure essential information is disseminated in a timely manner.

The brigade staff integrates bn/TF LNOs into command post operations by providing briefings to familiarize the LNOs with the overall situation of the brigade. They ensure that LNOs have access to the commander for important matters and appropriate access to the staff to remain informed of current estimates and operations. The LNOs' knowledge of their bn/TFs can be key during wargaming. LNOs must be able to communicate with their bn/TFs throughout planning.

Battalion/task force commanders

Each bn/TF commander must maintain commander-to-commander communications with the brigade commander and with the other bn/TF commanders. They are proactive in providing personal situation estimates to brigade commander. Confirmations, briefs, and backbriefs support a shared vision of anticipated schemes of maneuver as early as possible.

Battalion/task force staffs

The bn/TF staffs are responsible for updating estimates and disseminating information (battle staff huddle) after each WARNO. The bn/TF battle staffs will complete their mission analysis upon receipt of the final brigade WARNO, and complete COA development before the brigade OPORD is issued.

The bn/TF staffs continue the decision-making process in the absence of the orders group. They review the brigade OPORD, update estimates, and determine the impact on products developed to date. They brief updated estimates based on the OPORD upon the commander's return.

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Battalion/task force liaison officers

A trained, competent, trusted, and informed LNO is the key to effective liaison. The LNO should be a senior lieutenant or non commissioned officer capable of acting independently. He is the personal representative for the commander and must be able to present his commander's position on tactical matters. The brigade should have standardized liaison procedures in the form of a checklist or handbook. The LNO should have a thorough understanding of the MDMP, standardized procedures within the brigade, and the information requirements that are essential to supporting parallel planning.

The bn/TF LNO represents his commander to the brigade. Therefore, he must understand both the brigade's and bn/TF's decision-making process, troop leading procedures, and tactics, techniques, and procedures. He must also understand thoroughly his commander's mission, intent, concept of the operation, and critical information requirements.

The LNO does not interfere or become involved in the brigade's decision-making, except as requested. He should be proactive in obtaining information requested by all battlefield operating systems (BOS). He provides the brigade with information pertaining to his bn/TF's current situation, and is proactive in resolving issues within the brigade.

The LNO should provide a wide range of information to his bn/TF, including:

- accurate and timely warning of requirements, missions, and tasks
- advance notification of the brigade commander's initial information requirements, intent, and commander's critical information requirements (CCIR)
- additional information to clarify contents of WARNOs.

Continued on next page

Techniques and Procedures, Continued

Procedures for parallel planning

Parallel planning for the brigade and its bn/TFs begins at the receipt of the division mission and continues through the issuance of the brigade order.

Brigade mission analysis

The brigade identifies the mission requirement.

- The brigade commander consults with subordinate commanders to gain a more accurate portrayal of the current friendly and enemy situation.
- The brigade commander issues initial guidance to focus decision-making.
- Issue WARNO # 1 including as a minimum:
  - general enemy situation and divisional enemy courses of action (ECOAs)
  - general friendly situation, including division mission and commander's intent
  - nature of brigade mission
  - brigade area of operations
  - date/time group (DTG) of OPORD and rehearsals
  - priority of support, maintenance, and resupply.

Battalion/task force mission analysis

Bn/TFs commence mission analysis:

- Update and analyze unit status based on knowledge of mission requirement.
- Update intelligence preparation of the battlefield (IPB), refining the battlefield environment and effects.
- Determine priorities and coordinate resupply and consolidation activities.

Continued on next page

Techniques and Procedures, Continued

Brigade mission analysis continues

- the brigade commander issues guidance upon completion of analysis.
- Issue WARNO # 2 including as a minimum:
  - enemy situation including order of battle, brigade ECOAs, and timelines
  - friendly situation including division concept of operation and adjacent units
  - mission statement
  - initial commander's intent
  - security and reconnaissance instructions
  - movement instructions
  - risk guidance
  - priorities and instructions for service support prior to operation
  - attachments: preparation timeline and intelligence estimate.

Battalion/task force mission analysis continues

- Analyze brigade mission.
- Plan use of available time.
- Continue IPB.
- Review available assets.
- Conduct initial risk assessment.
- Initiate reconnaissance planning.
- Coordinate and execute instructions.
- Issue first WARNO.

Continued on next page

Techniques and Procedures, Continued

Brigade COA development

Brigade develops course(s) of action (COAs).

- Issue WARNO # 3 including as a minimum:
  - enemy and friendly situation updates
  - initial attachments and detachments
  - tentative scheme(s) of maneuver
  - tentative bn/TF areas of operation
  - tentative specific tasks
  - updated concept of service support
  - attachments: updated preparation timeline.

Battalion/task forces continue mission analysis

- Review and confirm analysis and actions to date.
- Identify critical facts and assumptions.
- Determine specific and implied tasks.
- Bn/TF commanders develop initial intent and consider tactical options.

Brigade COA analysis and comparison

- Issue WARNO # 4 including as a minimum:
  - enemy and friendly situation updates
  - task organization
  - updated commander's intent
  - concept of operation with bn/TF sectors or zones
  - confirmed specific tasks
  - CCIR
  - concept of service support
  - attachments: operations overlay, decision support matrix (DSM), and updated preparation timeline.

Continued on next page

Techniques and Procedures, Continued

Battalion/task forces mission analysis completion

- Review and confirm analysis and actions to date.
- Determine constraints.
- Identify essential tasks.
- Write restated mission.
- Issue commander's guidance.
- Issue second WARNO.
- Bn/TFs complete COA development.

OPORDs and preparation

Brigade issues the order.

- Bn/TF orders groups attend order brief.

Brigade commander conducts confirmation brief.

- Bn/TF commanders present COA(s) during confirmation brief.

Brigade prepares for mission execution.

- Bn/TFs continue decision-making process to produce OPORD.
    - During orders brief staffs review copy of brigade OPORD and update their estimates.
    - Staffs brief updated estimates to commander.
    - Modify COAs as necessary.
    - Conduct COA analysis, comparison (if required), and approval.
    - Produce orders and conduct order briefs.

WARNO job aid

A sample description of WARNO format and content is included at Attachment 1 to this performance objective. It highlights the content of the four WARNO model described in this performance objective. It is designed to be used as a job aid for the WARNO requirement of the parallel planning process.

Assessment Guide for the Commander and Observers

Observing this performance objective

Observation at brigade should focus on standard procedures for decision-making, the timing and content of WARNOs, and the interaction between the brigade staff and the bn/TFs LNOs. Observation at bn/TFs should focus on how the unit organizes its staff to conduct parallel planning, the interaction between the unit and their liaison at brigade, and how information in WARNOs is used to facilitate parallel planning to meet the objective.

Suggested times for scheduled feedback

This performance objective can best be observed and discussed during the area defense (AD). Because this is the first mission, there are no ongoing missions and the bn/TF staff is available to plan in parallel with the brigade.

The first feedback session can occur at an end-of-day session on the second day of training. Plans for the AD will have been completed.

A second review can be conducted at the end of the deliberate attack (DATK). Parallel planning for the DATK, or the movement to contact (MTC), will be much more difficult because there is an ongoing mission. The adjustments to these more demanding conditions, while not specifically addressed in the performance objective, should stimulate a useful discussion.

Considerations for assessment

The following questions address the techniques and procedures of this performance objective.

1) **What procedures facilitate parallel planning by subordinate units during decision-making within the brigade?**

   Parallel planning is a routine procedure for the decision-making process and is expedited by shared situational awareness between battle staffs. Brigades provide guidance to subordinate units as soon as possible to allow maximum time for their own planning and preparation. They should have formal procedures that dictate the timing and content of information made available to subordinate units.

   In addition, staffs should have battle drills for producing orders under time constraints. Warning orders, situation updates, proactive LNOs, and parallel planning facilitate the transition from planning to execution.

Continued on next page

Considerations for assessment, continued

2) Who was involved in the parallel planning process?

Parallel planning is crucial for subordinate units to maximize their planning and preparation time. All brigade subordinate and supporting units must be included in the process. These include maneuver battalions, artillery battalions, the support battalion, and aviation, air defense, engineer, military intelligence, NBC, signal, civil affairs, and PSYOP units. Every unit should be represented at brigade, either through a liaison or a member of the special staff.

3) How many WARNOs were issued by brigade during their decision-making process?

The number of WARNOs issued will differ by the situation, time available, and changing conditions. Issuance of four WARNOs is advisable under normal conditions. Established procedures dictate the timing and content of WARNOs, and adaptation to decision-making in a time constrained environment.

Additional WARNOs can be used to disseminate essential information to further assist subordinate parallel planning. WARNOS may be written or verbal, depending on the time constraints, but written is preferable. If possible a verbal WARNO should be followed by a written copy.

4) What was the timing and content of the brigade's first WARNO?

The first WARNO should be issued after the brigade identifies the mission requirement and the commander has issued his initial guidance. It should include as a minimum:

- current enemy situation and division ECOAs
- division mission and intent
- nature of the brigade operation
- brigade area of operations
- critical information requirements
- priorities of maintenance and supply.

Continued on next page

Considerations for assessment, continued

5) Describe subordinate unit activities after the receipt of the first WARNO.

The first WARNO should enable subordinate units to initiate troop leading procedures and mission analysis. As a minimum, units should have been able to:

- Update and analyze unit status based on knowledge of mission requirements.
- Initiate (update) IBP defining battlefield environment and effects.
- Determine priorities, and coordinate resupply and consolidation activities.

6) What was the timing and content of the brigade's second WARNO?

The second WARNO should be issued after mission analysis to include issuance of the commander's guidance. It should include as a minimum:

- intelligence estimate:
  - ECOAs and enemy timelines
  - modified combined obstacle overlay (MCOO)
- mission statement
- initial commander's intent
- initial security and recon instructions
- initial movement instructions
- risk guidance
- preparation timeline
- priorities and instructions for service support prior to the operation.

Continued on next page

Considerations for assessment, continued

7) Describe subordinate unit activities after the receipt of the second WARNO.

Subordinate units continue troop leading procedures and mission analysis. This forms the basis for staff estimates and commanders' estimates of the situations. As a minimum, units should have been able to:

- analyze the brigade mission
- plan use of available time
- continue IPB
- review available assets
- conduct initial risk assessment
- initiate reconnaissance planning
- coordinate and execute instructions
- issue first bn/TF WARNOs.

Continued on next page

Considerations for assessment, continued

8) What was the timing and content of the brigade's third WARNO?

The third WARNO should be issued after COA development and the commander has approved the COA(s) for analysis. The information included is influenced by time constraints. It should include as a minimum:

- For normal decision-making (multiple COAs):
  - enemy and friendly situation updates
  - tentative schemes of maneuver
  - updated concept of service support
  - updated preparation timeline.
- For decision-making in a time constrained environment (single COA):
  - enemy and friendly situation updates
  - initial attachments and detachments
  - scheme of maneuver
  - bn/TF areas of operations and tentative specific tasks
  - updated concept of service support
  - updated preparation timeline.

Continued on next page

Considerations for assessment, continued

9) Describe subordinate unit activities after the receipt of the third WARNO.

Subordinate units continue troop leading procedures and mission analysis.

- Commanders should be able to:
  - develop initial intent
  - consider tactical options to develop a tentative plan
  - conduct reconnaissance
  - initiate some movement.
- As a minimum staffs should be able to:
  - review and confirm analysis and actions to date
  - identify critical facts and assumptions
  - determine specific and implied tasks.

10) What was the timing and content of the brigade's fourth WARNO?

The fourth WARNO should be issued after COA approval and is considered a "read ahead" of the OPORD. It should include as a minimum:

- task organization
- enemy and friendly situation updates
- updated commander's intent
- concept of operation with bn/TF sectors or zones
- confirmed specific tasks
- CCIR
- concept of service support
- operations overlay
- updated preparation timeline.

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Considerations for assessment, continued

11) Describe subordinate unit activities after the receipt of the fourth WARNO.

Subordinate units continue troop leading procedures, and complete mission analysis and COA development prior to issue of the OPORD. Subordinate unit commanders and staffs:

- Review and confirm analysis and actions to date.
- Determine constraints.
- Identify essential tasks.
- Write restated mission.
- complete tentative plans (commanders).
- Issue commander's guidance.
- Issue second bn/TF WARNO.
- Complete COA development.

12) Describe the timing and content of any other WARNOs issued by the brigade. Was there information required by subordinate units that was not provided, or that could have been provided earlier?

Additional WARNOs should contain information that is either time sensitive or that significantly alters information provided in previous orders.

13) How accurate were the WARNOs issued?

It is important that information in WARNOs is timely and accurate.

14) What were the qualifications of the liaisons provided to the brigade?

15) What actions did brigade take to integrate LNOs into their decision-making process?

Continued on next page

Considerations for assessment, continued

16) What actions by LNOs facilitated parallel planning?

Each should assist his commander in transmitting critical information without waiting for staffs to act. He should provide accurate and timely warning of requirements, missions, and tasks, and advance notification of brigade commander's initial information requirements, intent, and CCIR. He should track his unit's request for information across the BOS and clarify contents of WARNOs. He provides the brigade with information pertaining to his unit's current situation.

17) When did the battalions complete COA development?

The objective is that the brigade WARNOs allow the battalions to conduct decision-making through COA development, prior to the brigade order being issued. During the confirmation brief (after the brigade order) the battalion commanders' present their COAs to the commander to ensure they meet his intent. The battalion commanders should receive immediate feedback from their commander as to the suitability of their COA.

18) What did the battalion staffs accomplish in the absence of the orders group?

Staffs should continue decision-making under the direction of the XO. They should have a copy of the brigade order, and conduct an analysis of its contents to review and confirm their own preliminary planning, including their estimates.

19) Upon return of the orders groups, how did the battalions complete their decision making process?

Upon return of the orders groups the bn/TFs should present a concise brief to inform their commanders of new information, changes to information or products, and recommendations in resolving discrepancies. The battle staffs modify the COA(s) based on the brigade order and directions received during the confirmation brief. They then complete the order.

Continued on next page

Considerations for assessment, continued

20) Are the brigade and battalion OPORDs in agreement?

The fluid nature of parallel planning can cause discrepancies between brigade and battalion estimates. Staffs must be proactive in resolving requests for information to update estimates and disseminate information. Check:

- CCIR
- commander's intent
- mission statements
- tasks to subordinate units
- mission phases
- graphic control measures.

The brigade staff should verify the subordinate bn/TF orders to ensure they are consistent with the brigade order.

Related Information

References

ARTEP 71-2-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force*, 03 October 1988

- Task 7-1-3901, Command and Control the Battalion Task Force
- Task 7-1-3902, Perform S3 Operations
- Task 7-1-3904, Operate Main Command Post
- Task 7-1-3906, Perform S2 Operations
- Task 7-1-3907, Employ Fire Support
- Task 7-1-3908, Operate Fire Support Section Operations
- Task 7-1-3912, Perform Combat Service Support Operations
- Task 7-1-3915, Operate Personnel Administrative Center

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-3004, Execute Fire Support
- Task 71-6-3005, Analyze Targets
- Task 71-6-2651, Develop the Engineer Estimate
- Task 71-6-0631, Conduct Logistical Planning
- Task 71-6-0023, Conduct Strength Management
- Task 71-6-0001, Direct the Brigade Staff
- Task 71-6-0003, Direct the Brigade Staff Planning Process
- Task 71-6-0006, Establish Liaison

FM 100-5 Initial Draft, *Operations*, 04 April 1997

- Part Three, The Art of Operations, Chapter 2, pp. III-2-23/25

FM 101-5, *Staff Organizations and Operations*, 31 May 1997

- Chapter 5, The Military Decision Making Process
- Appendix H, Plans and Orders
- Appendix L, Liaison

Center for Army Lessons Learned (CALL)

- NTC Trends 3QFY95 and 4QFY95, TA.4 Command and Control BOS, Section II, Engineer Battalion Staff Parallel Planning
- NTC Trends 3QFY96 and 4QFY96, No. 97-9, Section II, TA.4, Parallel Planning Between Task Force and Brigade

ATTACHMENT 1 (Suggested Brigade WARNOs)

WARNING ORDER #

References:

Time Zone Used Throughout Order:

1. SITUATION.

a. Enemy forces.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
• *General situation* • *Divisional ECOAs*	• *Order of battle* • *Bde ECOAs* • *Enemy timeline*	• *Situation update*	• *Situation update*

b. Friendly forces.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
• *Situation update (optional)* • *Division mission* • *Division Cdr intent*	• *Division concept of operation* • *Adjacent units*	• *Situation update*	• *Situation update*

c. Attachments and detachments. *As required with each order.*

2. MISSION.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
Nature of mission	*Mission statement*	*Change only*	*Change only*

3. EXECUTION.

Intent. *Commander's intent included in second warning order and updated if required in fourth warning order.*

a. Concept of operation.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
• *Bde area of operations (maneuver box)*	• *Security instructions* • *Reconnaissance instructions*	• *Bde scheme of maneuver* • *Bn/TF area of operations (maneuver boxes)*	• *Concept of operation* • *Maneuver* • *Bn/TF sectors; BPs; or zones*

b. Tasks to maneuver units.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
• *As required*	• *Based on security / reconnaissance instructions*	• *Tentative specific tasks based on scheme of maneuver*	• *Confirmed specific tasks based on concept of operation*

c. Tasks to combat support units. *As required with each order.*

d. Coordinating instructions.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
• *DTG of Bde OPORD and rehearsals* • *Additional as required*	• *Initial movement instructions* • *Risk guidance* • *Additional as required*	• *Additional based on chosen scheme of maneuver*	• *CCIR* • *Additional based on concept of operation*

4. SERVICE SUPPORT.

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*

• *Priority by unit*
• *Priority of Class resupply*
	• *Concept of support:*
	  • *Before*
		• *Concept of support:*
		  • *Update Before*
			• *Concept of support:*
			  • *Before*
			  • *During*
			  • *After*

5. COMMAND AND SIGNAL. *As required with each order.*

a. Command.

b. Signal.

ACKNOWLEDGE:

NAME (Cdr's last name)
RANK, BRANCH
Commanding

OFFICIAL:

NAME (S3s last name)

ATTACHMENTS:

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
None required	*1. Timeline* *2. Intell Estimate* • *MCOO* • *SIT TEMPs (ECOAs)*	*1. Timeline (updated)*	*1. Timeline (updated)* *2. Bde draft Operations Overlay* *3. Bde Draft DSM*

CONDUCT CLEARANCE OF INDIRECT FIRES PROCEDURES

To achieve the fire support system's full potential to enhance maneuver, brigade combat teams (BCT) must have effective procedures for clearing indirect fires. Timely clearance is essential to allow the BCT to engage critical high priority targets on a rapidly changing battlefield. The commander's desire for timely and responsive fire support must be balanced with the requirement to manage risk and prevent fratricide. Such balance is not easily achieved. Beyond detailed and understood standing operating procedures (SOP), it requires brigade and battalion staffs with extensive practice in all the procedures essential to facilitating effective clearance of fires procedures, from planning through execution.

Objective

The BCT implements clearance procedures that provide for the timely delivery of fires and eliminate fratricide. The BCT responds to conditions that require clearance of fires by implementing positive clearance procedures, down to company level. Fire support personnel will identify fires granted clearance within 600 meters of friendly troops as danger close missions and will warn friendly troops of these fires.

Techniques and Procedures

Overview

It is mandatory that the BCT establish and practice a system for clearing indirect fires. The methods employed must be both quick and effective. While the goal of clearance of fires procedures is to prevent fratricide, it must not be so restrictive, cumbersome, or time consuming that it interferes with the delivery of effective fires on an enemy force.

There are three conditions that affect the clearance of fires procedures and which must be recognized by all participants:

- Situations where a clearance is not required from adjacent or higher units because of the use of maneuver graphic control measures (GCM) and fire support coordination measures (FSCM) (*e.g., fires delivered beyond the coordinated fire line [CFL] within the unit's zone or sector).*
- Those situations where fires are pre-cleared by the commander *(e.g., fires into a planned call for fire zone [CFFZ] resulting from a radar acquisition from that planned CFFZ).*
- All fire missions other than those defined in the previous two situations; these require positive clearance procedures in each fire mission. *(Many fires will be in this category, such as fires beyond unit boundaries, short of the CFL, etc.)*

The techniques and procedures in this performance objective outline requirements for all three conditions. Emphasis is on the staff procedures involved, not the actions involving troops on the ground. Even without that level of detail, enforcement and practice of the staff requirements will enhance later performance under full field conditions.

Effective clearance of fires relies primarily upon a command post battle drill of unit developed procedures for the positive clearance of fires. This battle drill, which involves subordinate units down to company level at the workstations, is effective only when the participants fully understand the employment of maneuver control and FSCM and the pre-clearance of fires situations.

Continued on next page

Techniques and Procedures, Continued

Use boundaries as coordinating measures

Boundaries are the basic maneuver control measures. Whenever possible, use boundaries to allow the unit that owns the ground to quickly engage targets within its zone or sector. Coordination and clearance are required only within that organization, or if fires are delivered beyond a boundary, with the adjacent or higher organizations.

Boundaries affect fire support in that they are both restrictive and permissive.

They are restrictive in that no fire support means may deliver fires across a boundary unless those fires are coordinated with the force that shares that boundary.

They are permissive in that the maneuver commander has complete freedom of fire and maneuver within his boundaries unless specifically restricted by higher headquarters.

Establish fire support coordination measures

FSCMs facilitate the rapid engagement of targets and, at the same time, provide safeguards for friendly forces. During the wargame, the battle staff incorporates FSCMs into the plan to facilitate a changing tactical situation while not being overly restrictive. When emplacing FSCMs, the staff must consider wartime minimum safe distances of the munitions to be fired.

FSCMs may be either restrictive or permissive in the delivery of fires.

Permissive measures facilitate the attack of targets. The only permissive measure normally established at brigade level is the CFL. The CFL is a line beyond which conventional surface-to-surface fires may be delivered within the zone of the establishing headquarters without additional coordination. The CFL should be as close to the forward line of troops (FLOT) or forward edge of the battle area (FEBA) as the BCT can permit, and still be assured that all friendly forces are protected.

Restrictive measures are those that provide safeguards for friendly force, facilities, or terrain. Restrictive measures are:

- no-fire area (NFA)
- airspace coordination area (ACA)
- restrictive fire line (RFL)
- restrictive fire area (RFA)

Continued on next page

Techniques and Procedures, Continued

Establish fire support coordination measures, continued

An NFA is an area into which no fires or their effects are allowed. Two exceptions to the no-fire rule exist:

- when the establishing headquarters allows fires on a mission-to-mission basis
- when a friendly force is engaged by an enemy located within the NFA and the commander returns fire to defend his force.

Use NFAs to protect scouts, COLTs, radar, and other elements forward of the FLOT or FEBA. Establish NFAs on assets even on the friendly side of the CFL if those assets are not task organized to the force in whose zone or sector they are positioned.

An RFL is a line between converging friendly forces that prohibits all fires, or their effects, across the line without coordination with the affected force. If converging forces are a part of the scheme of maneuver, the staff should consider establishing an RFL to prevent fratricide.

An RFA is an area with specific restrictions and in which fires that exceed those restrictions will not be delivered without coordination with the establishing headquarters. *(e.g. dpicm prohibited)*

Pre-clearance of fires

During the planning phase the maneuver commander and staff may identify specific instances where fires can be pre-cleared after the maneuver commander conducts a risk assessment.

Examples Fires into a planned CFFZ as a result of radar acquisition from that planned CFFZ. The CFFZ must be planned in advance and published in the Radar Deployment Order.

A planned target, with a definable trigger, against a specific enemy, and according to the scheme of fire support may be pre-cleared. If the target involves a shift from a known point, it cannot be pre-cleared and must be positively cleared.

The maneuver commander must do a fratricide risk assessment to determine if his unit is trained to a level that allows pre-clearing of fires. Since pre-clearing is not positive clearance of fires, it is vital that the commander make the decision on pre-clearance of fires.

Continued on next page

Techniques and Procedures, Continued

Fires considered as danger close engagements

CPs must have effective procedures to determine if fires will be within 600 meters of friendly troops. Relying on situation maps alone will not be accurate enough. Clearance must be positively received from the maneuver commander or fire support officer on the ground where the fires are delivered.

Clearance of fires battle drill

Command posts must establish procedures to ensure timely and positive clearance of fires when a situation cannot be resolved by the use of either control features or pre-cleared fires. Procedures must rely on radio communications and not on situation maps, since unit locations are not accurate enough nor is the current situation reflected.

Example A brigade COLT wants to fire an unplanned fire mission short of the CFL in task force (TF) 1-7 zone. The call goes out on the brigade O/I and the brigade fire support nets:

"TF 1-7 FSE/TOC [fire support element/tactical operations center], this is Bde FSE/TOC. Request clearance on grid NK395175."

Within TF 1-7, the process is repeated on the TF command or O/I nets and the mortar net:

"Guidons, this is TF 1-7 FSE/TOC. Request clearance on grid NK395175."

This request, received at the companies' command posts and the companies' FIST-Vs, is quickly answered and sent back to the TF FSE/TOC and then back to the brigade as either a cleared or an uncleared fire mission.

Assessment Guide for the Commander and Observers

Observing this performance objective

Observation during planning should focus on the application of control measures during the wargame, pre-clearance of specific targets, and how these may expedite or impede clearance of fire.

Observation of procedures during execution should focus on the interaction among the FSE sections and the operations section, plus brigade and TF interaction between these sections. The observers can retrieve fratricide data after the battle from the higher control (HICON) station by having the operator retrieve it from the Brigade/Battalion Battle Simulation (BBS) system.

Suggested times for scheduled feedback

Informal feedback on selection of control measures should be given following the completion of the wargame. A formal feedback session concentrating on clearance of fires should be done following the post execution after action review (AAR) of the area defense mission. Additional feedback may be included following subsequent mission planning phases and those mission's execution AARs.

Considerations for assessment

In determining the brigade's readiness for performing this task, discuss the following considerations:

1) How did the BCT pre-clear fires?

- Pre-cleared fires can be employed only for specified situations and particular conditions that have been established during planning.
- The maneuver commander must conduct a risk assessment for each pre-cleared situation.
- If any of the conditions specified for the pre-cleared situation change, the mission *cannot* be fired without additional clearance.

2) When did the BCT clear fires?

- Fires into a free fire area (FFA) or beyond the brigade CFL in the brigade zone or sector do not require clearance.
- All other missions require a clearance at the time of the mission request, unless the specific target was identified as pre-cleared during the planning phase.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

3) How did the BCT clear fires during execution?

- Each echelon within the brigade must have an established procedure for clearing fires.
- The clearance must be by communications at the time of the fire request and cannot be conducted by relying upon the accuracy of situation maps.

4) Who issues the actual clearance of fires in the brigade?

- As a minimum, the clearance must be at least down to company level.
- In certain situations, such as when reconnaissance forces are involved, the clearance should be positive down to platoon or lower levels.

5) What procedures does the brigade use to insure clearance requirements do not impede effective fires?

- Authority and responsibility for clearance procedures must be clearly assigned.
- All headquarters must practice clearance procedures drills to ensure timely engagement of targets and safety of friendly forces. The Combat Training Centers (CTCs) suggest that the clearance process should be completed within two minutes.
- Communication channels and standardized clearance phraseology must be established.

6) When were danger close missions conducted in the brigade operation?

- Any mission within 600 meters of friendly positions *must* have been identified as a danger close mission.
- Friendly forces affected by such missions must be warned before the mission is fired.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

7) Review all fire missions conducted within the brigade and apply the following questions.

- Were there any fire missions resulting in fratricides from indirect fire? (ANY fratricide is unacceptable and the circumstances must be examined to determine the cause.)
- Were the missions accurately identified as beyond the CFL and not into an NFA?
- Were there any missions requiring clearance procedures that could have been avoided by having FSCMs?
- Were any missions accurately identified in the planning phase as pre-cleared missions? If these missions were executed, were the conditions unchanged from when they were pre-cleared?
- For missions requiring positive clearance, who cleared the mission? (Identify person and position.)
- What level of command intervention was required for mission clearance?
- Were mission clearances conducted by radio, or were clearances based upon situation maps?
- How long did it take to issue clearance decisions?
- Were any missions danger close situations?
- Were the affected units warned of danger close fires?

Related Information

References

ARTEP 71-3 MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-3001, Establish Fire Support Cell
- Task 71-6-3002, Plan Fire Support
- Task 71-6-3003, Synchronize Fire Support
- Task 71-6-3004, Execute Fire Support
- Task 71-6-3005, Analyze Targets

FM 6-20-40, *Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Heavy)*, 5 January 1990

- Appendix E, Fire Support Coordinating Measures, p. 2/20

Center for Army Lessons Learned (CALL)

- JRTC Priority Trends, 4QFY94 to 3QFY96, Section TA.2 Fire Support BOS, pp. N-18/20
- NTC Priority Trends, 4QFY94 to 3-4QFY95, Section TA.2 Fire Support BOS, p. N-19
- Newsletter 97-11, *Clearance of Fires*, CPT Samuel R. White, April 1997

PLAN AND MANAGE RECONNAISSANCE WITHIN THE BRIGADE

The reconnaissance effort begins almost immediately upon receipt of a new mission and continues throughout planning, preparation, and execution. The staff must quickly focus the reconnaissance assets on the issues that the commander designates as critical to the operation. In addition the staff must ensure that reconnaissance assets are fully supported and managed throughout the effort. This requires practiced staff procedures to receive the commander's guidance, develop a reconnaissance plan that supports his information requirements, issue appropriate orders, and begin immediate and continuous tracking of progress towards satisfying those requirements. Exercises such as this give the commander and the staff an opportunity to practice this entire process. Staff responsibilities and processes to expedite this critical activity can be refined and made part of the unit's tactical standing operating procedures (TACSOP).

Objective

The brigade conducts reconnaissance to gather information that identifies the enemy course of action in time to support the commander's decision requirements. The brigade establishes reconnaissance intent, objectives, information requirements, and means. Reconnaissance is planned, managed, and integrated at brigade level, and is supported and implemented by all staff sections, incorporating all battlefield operating systems (BOS). The subordinate and supporting units integrate their objectives and information requirements into their brigade tasking to develop plans at their level. Reconnaissance management at all levels is reactive to changes in the reconnaissance forces, the enemy, and the information requirements.

Techniques and Procedures

Overview

Recognizing that the reconnaissance effort is critical to the success of the brigade mission has caused increased emphasis on the planning and execution of that effort. As a result, reconnaissance is now treated as a mission, with concentrated management and integration of activities and support throughout.

Reconnaissance management is not limited to planning, but must also include preparation activities, conduct of the reconnaissance, and post-mission requirements. Reconnaissance is the commander's tool for determining the enemy's intent in time to make command decisions. As attention is diverted to pressing operational requirements, the management of the reconnaissance cannot be allowed to lag.

This performance objective covers a method of managing reconnaissance. The method starts with the recognition of a need for a specialized reconnaissance management team, or cell to conduct the planning and preparation, and to continue to function, overseeing reconnaissance until all reconnaissance objectives are met. Much of the emphasis is on the integration of brigade and battalion efforts in the management. The brigade usually has more staff resources for management, but the battalion usually controls most of the reconnaissance tools. This performance objective outlines a method for integrating efforts at both echelons.

A timeline of reconnaissance planning activities for division, brigade, and task force (TF) is attached to this guide (Attachment 2). It is not prescriptive, but it will provide additional information on one way that planning can be conducted.

Continued on next page

Techniques and Procedures, Continued

The reconnaissance cell

The suggested procedure assumes the brigade establishes a reconnaissance cell, which is responsible for both planning and executing the brigade reconnaissance mission. Individuals to consider for the reconnaissance cell include the following:

- Brigade-designated "Chief of Recon" (Assistant S3)
- Assistant S2
- Assistant fire support officer (FSO)
- Assistant S4
- Assistant Engineer officer
- Military intelligence (MI) Co officer
- Liaison officers (LNOs) from subordinate units as needed
- Other staff members as needed.

The individual designated as Chief of Recon is responsible for the entire reconnaissance effort, from conceptualization through execution. At TF level, there may not be sufficient resources for a reconnaissance cell. However, the TF should, at a minimum, establish a "Chief of Recon" within the TF.

The reconnaissance planning cell gathers upon the receipt of the mission.

Reconnaissance planning

Planning is separate but concurrent with mission planning. Planning requirements for reconnaissance include the following:

- Commander gives reconnaissance guidance
- Develop draft concept of reconnaissance
- Wargame the concept of reconnaissance
- Prepare the reconnaissance order.

Commander's reconnaissance guidance

The commander incorporates his mission planning with intelligence preparation of the battlefield (IPB) steps 1-3 to come up with his reconnaissance guidance, which must include the following:

- objective
- intent
- priority information requirements
- concept of reconnaissance
- risk assessment/guidance.

Continued on next page

Techniques and Procedures, Continued

Develop draft concept of reconnaissance

After receiving the commander's guidance, the reconnaissance cell must draft the concept of reconnaissance. It must address the following:

- Task organization of reconnaissance assets. Determine what assets are needed and how they will be supported. Consider the following:
  - TF scouts
  - UAV
  - ground sensors
  - fire support/COLTS
  - engineers
  - nuclear-biological-chemical (NBC) reconnaissance
  - air defense artillery (ADA)
  - combat service support (CSS).
- Special requirements, such as:
  - infiltration forces, routes, and means
  - quick reaction force support
  - flexibility of employment refocus and redirection requirements
  - extraction capabilities.
- Integration of combat support and combat service support, including:
  - fire plans
  - casualty evacuation
  - vehicle recovery
  - resupply
  - communication support (retrans).
- Identification of limitations, constraints and risk.
- Area "limits" of responsibility to deconflict troops and terrain
  - develop graphic control measures
  - establish command and control of different elements operating in same area.
  - establish counter-fratricide procedures
  - establish clearance of fire procedures.

- Identification of named areas of interest (NAIs) for division, brigade, and TF
- Rules of engagement for direct fire, COLTs, ADA, and close air support (CAS).

The first warning order (WARNO) to subordinate units should be issued not later than completion of the draft concept of reconnaissance.

Continued on next page

Techniques and Procedures, Continued

Wargame the concept of reconnaissance

Wargaming should include the following activities:

- Review placement of NAIs; add or delete as necessary.
- Confirm that NAIs support the commanders priority intelligence requirements (PIRs).
- Record information, synthesize information, incorporate BOS support, and synchronize actions to acquire PIRs.
- Finalize event template
- Issue WARNOs as needed

Prepare the brigade reconnaissance order

Because reconnaissance is a complex, integrated tactical mission, it requires preparation of a full five-paragraph military order. (A sample of a complete reconnaissance order is included as Attachment 1 to this performance objective.)

The brigade reconnaissance order must be issued in time to allow subordinate units two-thirds of the available time for their planning.

TF reconnaissance planning

The battalion/task force (Bn/TF) has the option to produce a separate reconnaissance order or annex, but may not always have the time or personnel to plan and produce a separate order.

In the example operation order in FM 71-2, the battalion addresses reconnaissance in its base order in paragraph 3 - a - (3) *Reconnaissance and Surveillance.*

- Subparagraphs address the objective for reconnaissance and the concept for reconnaissance operations.
- Specific tasks for subordinate units may be listed here, or under tasks to subordinate units.
- Service support is covered under paragraph 4.
- An event template and the reconnaissance and surveillance (R&S) collection matrix could be an appendix to the Intelligence annex.

However, time and SOPs will dictate the format of this annex. Many units experiment with different methods. Regardless of the method, if it is not practiced and fully integrated, it will fail.

Continued on next page

Techniques and Procedures, Continued

Manage reconnaissance preparation

Reconnaissance preparation should include the following actions:

- Coordinate task organization and resupply.
- Provide recovery time for assets and units.
- Position and protect forces to support infiltration.
- Conduct confirmation briefs with subordinate and supporting elements.
- Conduct crosswalks between subordinate unit plans and the brigade order. This ensures that the TF has "closed the loop" by providing their reconnaissance plans back to brigade.
- Review TF orders to insure confirmation of reconnaissance planning .
- Issue TF WARNOs. These should include:
    - designation of task organization
    - coordination with supporting units
    - resupply preparations
    - rest plan.
- Conduct rehearsals.

Continued on next page

Techniques and Procedures, Continued

Manage reconnaissance execution

Execution at the brigade level entails close communication with the TF main CPs. The following considerations apply:

- The brigade chief of recon should have communications capability with all subordinate and support elements.
- Accurate battle tracking of reconnaissance effort must be continuous.
- Chief of recon maintains situational awareness.
- Staff and special staff are brought together in huddles as needed.
- S2 performs predictive analysis of information.

As the reconnaissance situation unfolds, make changes and refinements to the plan based on events and information obtained. Changes may include the following:

- redirect forces
- replace losses
- reallocate assets
- replace loses
- reinforce units
- shift coverage
- extend coverage
- reevaluate the objective
- evaluate progress
- modify commander's critical information requirements (CCIR) and PIRs.
- casualty evacuation
- confirm obstacle bypass and FASCAM usage
- confirm chemical use.

Continued on next page

Techniques and Procedures, Continued

Tracking PIR during execution

The reconnaissance plan should identify responsible individuals to track each PIR until confirmation of the PIR, or until the PIR is no longer considered viable. This procedure must provide for:

- continuous matching of PIR and reconnaissance assets
- continuous matching of PIR/specific information requirements (SIR), and impacts to the staff's ability to confirm or deny the enemy courses of action.
- verification of observation (can they see what we want them to see)
- identification of losses or observations failure, and subsequent actions
- collation, analysis, and dissemination of PIR observation data. The processes of PIR development and refinement based on the enemy must be continuous.

Assessment Guide for the Commander and Observers

Observing this performance objective

If you are the observer for this performance objective you are responsible for observing reconnaissance planning within the brigade, as it is being played in the exercise. You should become familiar with the procedures outlined in the performance objective and with the assessment requirements. You should identify when reconnaissance planning is being conducted for the Brigade and Battalion Staff Exercise and who is doing it. Attachment 2 outlines the timeline by echelon when reconnaissance planning occurs. It may be necessary for you to determine when and where it will be best to observe the interaction which will occur between brigade and TF.

The staff is usually able to recount their own reconnaissance planning experiences, including their preparation and rehearsal techniques. However, as an outside observer, you are in a unique position to move between echelons and track the relationship between the different levels of planning and the impacts on one another.

Suggested times for scheduled feedback

Two feedback sessions are recommended for this performance objective. The first should be conducted sometime after the mission analysis brief and the commander's guidance. The second should be conducted sometime after the orders brief.

The first session allows the battle staff to review how well they answered the commander's specific information requirements, and to look at how well the enemy ECOAs were analyzed and initial planning considerations. Including the commander's guidance allows the discussion to include how rapidly the commander was able to develop his vision for the battle and frame it in terms of his guidance.

The second session can occur at any convenient point after the reconnaissance order is issued. This could include delaying unit after mission execution.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

The following questions address the subject of this performance objective:

1) **How was the brigade organized to plan reconnaissance? Who was included in the brigade's reconnaissance cell?**

   While cell make-up will differ by demands and conditions, provision should have been made for including input from at least the following:

   - assistant S3 (Chief of Recon)
   - assistant S2
   - FSO noncommissioned officer (NCO)
   - CSS (maintenance, medical, resupply)
   - MI Co commander
   - unit engineer
   - unit LNOs
   - other staff members as needed.

   The TF does not usually have the resources for a reconnaissance cell. However, at a minimum, it should designate a Chief of Recon to supervise the TF reconnaissance planning and execution, and serve as the primary reconnaissance point of contact with the brigade.

2) **How did the commander drive the reconnaissance planning?**

   The commander is the focal point of the reconnaissance effort, especially during the initial phases of the operation. His ability to issue clear and concise guidance, by BOS, significantly enhances the chances of success.

   This guidance must not be limited to his staff, but must also be provided to his subordinate commanders. Just as he imparts his intent to the brigade staff the TF commanders must impart their intent to the TF staff.

   The TF commanders' objectives and PIRs must support and contribute to answering the higher PIR.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

3) What was the result of the brigade planning effort?

As a minimum, the brigade plan must provide the following guidance:

- limits of reconnaissance
    - brigade area of responsibility for reconnaissance
    - TF area of responsibility for reconnaissance.
- reconnaissance intent
    - objectives of the reconnaissance
    - primary tasks by element
    - purpose of reconnaissance.
- brigade information requirements
    - named areas of reconnaissance.
- reconnaissance assets and support
    - forces available (internal/external).

Review each of these in view of the outcomes of the reconnaissance. Identify insufficiencies and why they occurred.

4) How was the reconnaissance plan disseminated to subordinate units?

During the initial planning process, a series of WARNOs that identifies objectives, support, and taskings is issued. Because reconnaissance normally commences early in the operation, the first WARNO must be issued to the subordinate units no later than the COA development step.

The final reconnaissance plan must be issued in the form of a written five-paragraph order with supporting annexes, as required, and overlays. (See Attachment 1)

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

5) What method did the TF use to issue reconnaissance instructions?

The Bn/TF has the option to produce a separate reconnaissance order or annex.

However, time and SOPs will dictate the method for issuing reconnaissance instructions. Many units experiment with different methods.

"Successful" communication of reconnaissance instructions will result in a reconnaissance plan that is flexible and that identifies the enemy's course of action.

6) As the enemy situation changed, the concept of operation changed, or the commanders information requirements changed, describe how the R&S plan was adjusted.

Reconnaissance may require adjustment to account for changes at any time during its planning and execution. Check for flexibility in the reconnaissance plan by answering the following:

- How did the focus of the assets available change?
- Were changes in the focus disseminated to subordinate units.
- Were PIR canceled or adjusted?
- How were PIR added?
- How were R&S assets reallocated?
- Were reconnaissance changes integrated between brigade and TF?
- Was the R&S execution enemy-focused or plan-focused?

7) Describe the procedure that was used to track the PIR at battalion and brigade level.

A plan must be in place, with responsible individuals identified, that tracks each PIR until confirmation of the PIR or until the PIR is no longer considered viable.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

8) **For each PIR that was identified as a requirement at brigade and battalion level, specify - YES or NO - whether that PIR was accomplished? For each NO, explore the following:**

- Did the PIR fit the reconnaissance capabilities and assets to start with?
- When were problems with the PIR discovered? Who discovered them and who was notified?
- What plans were in place to back-up PIR? What steps were taken?
- Who was tracking that PIR?

9) **Did the brigade and TF reconnaissance efforts accurately identify the enemy course of action? When?**

A reconnaissance effort that did not precisely identify and portray the enemy course of action in time for commanders to make their decisions is NOT successful.

This is the pivotal criterion, no matter what else the reconnaissance might have been able to accomplish.

Related Information

References

ARTEP 71-2-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force*, October 1998 with changes

- Task 7-1-3033, Treat and Evacuate Casualty
- Task 7-1-3905, Perform Intelligence Operations
- Task 7-1-3906, Perform S2 Operations
- Task 7-1-3908, Operate Fire Support Section Operations
- Task 7-1-3911, Perform Air Defense Operations
- Task 7-1-3912 Perform Combat Service Support Operations

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-0001, Direct the Brigade Staff
- Task 71-6-0002, Analyze Mission
- Task 71-6-0003, Direct the Brigade Staff Planning Process
- Task 71-6-0009, Conduct Battle Tracking
- Task 71-6-0015, Issue Commander's Guidance to Staff
- Task 71-6-0050, Develop the Brigade Operations Order
- Task 71-6-0270, Coordinate Communications Support
- Task 71-6-0308, Synchronize Air Defense Artillery
- Task 71-6-0631, Conduct Logistical Planning
- Task 71-6-0632, Monitor Logistics Operations
- Task 71-6-1002, Coordinate the Reconnaissance and Surveillance Plan
- Task 71-6-1003, Produce a Reconnaissance and Surveillance Plan
- Task 71-6-1005, Maintain the Brigade Intelligence Data Base
- Task 71-6-1051, Process Combat Information and Intelligence
- Task 71-6-3002, Plan Fire Support
- Task 71-6-3004, Execute Fire Support
- Task 71-6-3102, Coordinate Air Defense Operations
- Task 71-6-1056, Conduct Intelligence Preparation of the Battlefield (IPB).

Continued on next page

Related Information, Continued

References, continued

FM 34-2, *Collection Management and Synchronization Planning*, 8 March 1994

- Chapter 2, Collection Management Support to Commanders

FM 34-2-1, *Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance*, 19 June 1991

- Chapter 2, Reconnaissance and Surveillance and Intelligence Preparation of the Battlefield

FM 34-130, *Intelligence Preparation of the Battlefield*, 8 July 1994

- Chapter 1, Introduction
- Chapter 2, Conducting Intelligence Preparation of the Battlefield

FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force*, 27 September 1998 with changes

- Chapter 3, Section 3-10, Reconnaissance and Surveillance
- Chapter 4, Section 4-7, Defensive IPB

FM 71-3, *The Armored and Mechanized Infantry*, 8 January 1996

- Chapter 4, Section I, Intelligence
- Chapter 5, Section I, Intelligence

FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces, Armored Brigade, Battalion Task Force, and Company Team*, 30 September 1992

- Chapter 2, Section IV, Reconnaissance and Surveillance.

FM 101-5, *Staff Organization and Operations*, 31 May 1997

- Chapter 5, The Military Decision-Making Process, pp. 5-2, 3, and 8.
- Annex H, Plans and Orders, pp. H-34 and H-60

Center for Army Lessons Learned (CALL):

- Trends 97-16: TA.5 Intelligence, TA.5.1 Develop Tactical Intelligence Requirements
- Newsletter 96-12, Section IV, *IPB and Collection Management*, pp. 3/4
- Trends 97-9: 1QFY96 and 2QFY96, Section II, TA.5 Intelligence BOS, TA 5.1 Develop Tactical Intelligence Requirements

Attachment 1: Sample Reconnaissance Order

RECONNAISSANCE ORDER 96-123 DTG:182300 MAR 9X

References:

a. 3 Bde WARNO 95-33-01 and 95-33-02.

b. 1:50,000 Maps, Series V795; Sheets 2655 III, 2655 II, 2755 III, 2755 II, 2654 IV, 2654 I, 2754 IV, 2754 I; Edition 4.

Time Zone Used Throughout the Order: Local.

1. SITUATION.

a. Enemy forces (as of 182000 MAR 9X). The 231 MRD (-) is arrayed forward of 55 ID (M)'s zone. The latest actions reveal that the 231 MRD has withdrawn its regts (-) to the west to prepare a defense online with 274 TD (in positions to the south). These regts (-) have employed rear guard forces of MRB strength to establish a security zone to protect the move.

The 166 MRR (-), from the 231 MRD (-), is to 3 Bde's front. The 166 MRR is at 65%, with two MRB (+)s reconstituted at 80-90%. One MRB is postured forward as a security zone with co-sized defensive positions in the passes and the wadi system to the south. The remaining MRB has repositioned to the west, well behind this security zone (15-20 km) and is preparing a deliberate defense as part of the 231 MRD's main defensive belt.

To our immediate front, the forward MRB has occupied initial positions in the security zone. The current array postures two MRCs in forward positions vic NJ 3516 and NJ2613, with a third MRC in a final position vic Nelson Lake (NJ1820). A reserve/CAR, consisting of a depleted MRC, is templated in a hide position behind the passes. It will attack in support of either forward positioned MRC (northern pass most likely). As per doctrine, either of these two forward MRCs will reposition to the rear in support of the MRC defending vic Nelson Lake. This repositioning will occur after first contact or upon imminent destruction. Limited attack helicopter and fixed-wing aircraft will attempt to interdict 3 Bde as it approaches the forward positions or to blunt any penetration in zone.

Each security zone MRC position is aggressive in its defensive prep; expect the obstacle belts to be extensive and complex. The objective of this security zone is to allow the remainder of the regt time to complete its defensive preparation.

b. Friendly forces.

(1) 55 ID mission. 55 ID (M) attacks 210300 MAR 9X to penetrate 231 MRD vic OBJ DAYTON (MJ1798). O/O Assists forward passage of 25 AD and 201 ACR on AXIS JAB.

(2) The div focuses its recon effort on enemy and terrain west of PL DAVIS. Bde recon effort will use PL DAVIS as its western limit of advance (LOA) until LD. Div restricts bde use of UAVs to hours of darkness.

(3) 55 Avn provides assets to each lead bde for insertion of its deep recon assets.

(4) 3 Bde restated mission. 3 Bde attacks 210300 MAR 9X to seize OBJ KIOWA (NK1922) and establish blocking positions to protect the div's northern flank. O/O Attacks to complete the defeat of enemy in zone.

c. Attachments and detachments. (See Task Organization, Annex A.) Wheeled ambulance sections attached to TF 1-80 and TF 1-5.

2. RECONNAISSANCE MISSION. 3 Bde conducts recon in zone 190300 MAR 9X in support of a DATK. O/O Recon assets direct precision guided munitions (PGM) and the bde's artillery preparation to attrit high payoff targets prior to lead TFs crossing the LD.

3. EXECUTION.

Commander's intent for reconnaissance. My intent for recon is to identify the weaknesses in the enemy defenses to first determine the point of penetration and then the location of our main effort. I want to verify existing enemy CSOPs, strongpoints, obstacles, and reserves. Our critical maneuver decisions must be based on the outcome of our initial recon leading to whether to place the main effort north or south of the mountain passes and then where the point of penetration will be within that axis. During execution of the recon effort, I will refine and adjust my intelligence requirements based on our developing scheme of maneuver. Success for our recon is confirmation of the point of penetration prior to LD.

a. Concept of the operation (Annex B, Event Template). The bde conducts recon in zone under the cover of darkness for two nights prior to the lead TFs crossing the LD. Bde initially uses its UAV to recon defensive preparations vic OBJ GRANITE, OBJ COPPER, then OBJ KIOWA. The two lead TFs recon their attack axes and initial objectives. The reserve TF infiltrates its scouts west of OBJ GRANITE to locate and target the CAR and RAG. Bde uses the UAV to assist the TF in observing OBJs GRANITE and COPPER and selected targets nominated by the lead TFs. On the second night, the reserve TF's scouts establish OPs to observe OBJ KIOWA; the lead TFs continue their observation of OBJs GRANITE and COPPER, with priority to locating and targeting tank plts for addition to the bde prep target list. 3 Bde conducts these recon operations in two phases. Phase I is the recon operation from 190300-202000 (Night 1). Phase II is the continuation of recon operations until the bde seizes OBJ KIOWA.

(1) Maneuver.

(a) Phase I: The bde's UAV conducts over-flights of the defensive preparations vic OBJs GRANITE, COPPER, then KIOWA. TF 1-80 recon teams infiltrate in zone to conduct recon of AXIS ANVIL and OBJ COPPER. TF 1-5 recon teams infiltrate in zone

to conduct recon of AXIS FORGE and OBJ GRANITE. TF 1-7 recon teams follow TF 1-5's teams and move to locate and target the CAR and RAG.

(b) Phase II: TF 1-7 scouts establish OPs to observe and target enemy positions vic OBJ KIOWA. TF 1-7 has priority for bde's UAV to assist by over-flights in finding secure routes into OPs. TF 1-5 targets enemy forces on AXIS FORGE and any tank plt(s) defending OBJ GRANITE for addition to the bde prep target list. TF 1-80 targets enemy plts on OBJ COPPER for addition to the bde prep target list.

(2) Fires. Bde provides fires in support of TF recon teams as they move throughout the bde's zone. All OPs are designated as no fire areas (NFAs). TFs insert four COLT teams to support targeting and direction of PGMs as part of prep fires. Locations of the CAR, RAG, and tank plts defending vic OBJs GRANITE and COPPER are added to the bde's target list for the prep fires (H-30 minutes). Field artillery preparation fires initially fire PGM for destruction of the enemy tank plt(s) defending OBJ GRANITE and OBJ COPPER. O/O PGMs will be utilized to attack the CAR and RAG. Conventional prep fires mass to destroy plts at the points of penetration prior to TF assaults. Field artillery fires then focus on suppression of remaining direct fire systems adjacent to the penetrations and counterfire to provide force protection. Each TF is allocated one priority target during the recon phase.

(3) Counterair operations. Priority of protection is to COLTs and recon teams. O/O ADA units occupy overwatch positions on AXES FORGE and ANVIL.

(4) Intelligence. Priority Information Requirements (PIR): See Paragraph 3d (Coordinating Instructions).

(5) Electronic warfare. Priority of collection: MRR/MRB C2 and fire support C2.

(6) Engineer. Engrs under TF command and control support recon operations and perform other required obstacle assessment tasks to enable quick breach/bypass operations.

(7) NBC reconnaissance. NBC recon section positions to observe designated NAIs. O/O Moves forward to recon templated persistent agent targets to locate bypass routes. Priority is to protections of the lead TFs' main bodies as they move forward along AXES FORGE and ANVIL.

b. Tasks to subordinate units.

(1) TF 1-80.

(a) Phase I.

1. Conduct recon of AXIS ANVIL.

2. Locate obstacles and bypass routes.

3. Establish OP(s) to observe enemy forces defending passes vic OBJ. COPPER.

4. Insert COLT 3 to direct PGM targeting the tank plt(s) defending the passes vic OBJ COPPER.

(b) Phase II.

1. Locate and target tank plt(s) defending vic OBJ COPPER.

2. Direct attack by PGM to destroy tank plt(s) vic OBJ COPPER.

3. Complete marking of bypass routes through obstacles vic OBJ COPPER.

(2) TF 1-5.

(a) Phase I.

1. Conduct recon of AXIS FORGE.

2. Locate obstacles and bypass routes.

3. Establish OP(s) to observe enemy forces defending passes vic OBJ. GRANITE.

4. Insert COLT 1 to direct PGM targeting the tank plt(s) defending the passes vic OBJ GRANITE.

5. B/p to conduct recon of retrans site #1 vic NK324129.

(b) Phase II.

1. Locate and target tank plt(s) defending vic OBJ GRANITE.

2. Direct attack by PGM to destroy tank plt(s) vic OBJ GRANITE.

3. Complete marking of bypass routes through obstacles vic OBJ GRANITE.

(3) TF 1-7 (bde reserve).

(a) Phase I.

1. Establish OP(s) to observe NAIs west of OBJ GRANITE to locate CAR and RAG.

2. Insert COLT 2 to direct PGM targeting the CAR and RAG.

3. B/p to conduct recon of retrans site #2 vic NK271161.

(b) Phase II.

1. Priority of effort of UAV.

2. Establish OPs observing OBJ KIOWA.

3. Insert COLT 4 to direct PGM targeting tanks and AT-5s vic OBJ KIOWA.

4. Direct attack by PGM to destroy the CAR.

5. O/O Direct PGM to destroy the RAG.

(4) MI (UAV).

(a) Phase I. Conduct over-flight of defensive preparations vic OBJ GRANITE, OBJ COPPER, then OBJ KIOWA.

(b) Phase II. Priority of effort to assist TF 1-7 in locating secure routes into OPs to observe OBJ KIOWA

(5) 2/6/55 CM Co (RCN).

(a) Phase I. Establish OPs to observe templated persistent agent targets IAW Annex B (Event Template).

(b) Phase II.

1. O/O Move forward to locate and mark bypass routes around templated persistent agent targets.

2. Position teams to move forward with lead co/tms of lead TFs.

c. Tasks to combat support units.

(1) Fire support.

(a) Field artillery support. Priority of fires for Phase I is TF 1-5, O/O TF 1-80; Phase II is to TF 1-5, O/O TF 1-7. Copperhead (PGM) priority to tanks and command vehicles (ACRV) vic of OBJ GRANITE, O/O OBJ COPPER, O/O the CAR. Counterfire priorities to indirect fires affecting TF recon and OPs, then to counterbattery fires. Div retains release authority on FASCAM.

(b) Air support. No CAS sorties available for the recon phase. Bde retains all sorties for maneuver phase.

(2) Aviation support. Airspace deconfliction in support of aerial CasEvac is A2C2 responsibility in bde MAIN. UAV launch and recovery zones are in vic of bde MAIN.

(3) 33 Engr Bn. Provide technical recon support as required.

d. Coordinating instructions.

(1) CCIR.

(a) PIR.

1. Location of obstacles along the axes and on the objective.

2. Location of the tank plt(s) defending vic OBJ GRANITE.

3. Location of the CAR.

4. Location of the RAG.

5. Location of the three MRPs defending on OBJ KIOWA.

6. Location of the AT-5 plt supporting the defense of OBJ KIOWA

7. Suitable defensive positions on or west of OBJ KIOWA.

(b) EEFI. Location of recon assets.

(c) FFIR. Loss of UAV.

(2) Task organization to be completed NLT 191000 MAR 9X.

(3) Movement instructions. Each TF is responsible for the insertion plan for its recon assets. Forward insertion plans to bde S3 NLT 191100 MAR 9X.

(4) MOPP 0 in effect.

(5) Weapons control status: WEAPONS HOLD.

(6) Phase lines.

(a) PL MACK is LD/LC.

(b) PL QUINCY is LOA for all TF recon teams until LD.

(c) PL DAVIS is LOA for TF 1-7 during Phase II.

(d) Bde CFL PL QUINCY, O/O PL DAVIS.

(7) Report locations of all recon assets for inclusion as NFAs.

(8) Recon assets conduct immediate decon only until the bde passes their location.

(9) Rehearsal: TF S-3s, scout plt leaders, UAV section leader, NBC recon section leader, COLT plt leader, bde S3, bde S2 at MAIN 191200 MAR 9X.

(10) Limitation on TF recon assets. No tracked/mechanized vehicles/assets may cross the LD/LC unless authorized by the bde cdr.

(11) The bde TAC is the controlling CP for the recon fight. Bde communications will be operational NLT 191600 MAR 9X, with the bde O&I net as primary. Report all crossings of the LD by unit and type. Standard SitReps on progress, status, PIRs are required.

4. SERVICE SUPPORT.

a. Concept of support. 553 FSB supports 3 Bde recon effort with organic support to units in sector. Priority of support initially to scouts, TF 1-5, TF 1-80, TF 1-7, in order. As TFs move to recon insertion points, all vehicles are rearmed/refueled under TF control.

b. Casualty evacuation (CasEvac). Wheeled ambulances, attached to TF 1-5 and TF 1-80, conduct CasEvac forward of the LD/LC under TF control. Deep CasEvac of TF 1-7 scouts is conducted under the cover of darkness with aviation/air ambulances. Deep CasEvac is coordinated and controlled from the bde MAIN. Utilize bde O&I frequency for CasEvac.

c. Vehicle recovery. TF 1-5 and 1-80 conduct vehicle recovery with TF assets at the discretion of the TF cdr. TF 1-7 will attempt self-recovery, prior to abandoning vehicles, until recovery can be made after LD of the bde. Utilize bde O&I frequency for vehicle recovery.

d. Air resupply. Limited air resupply can be conducted under the cover of darkness in emergency situations. Air resupply will be coordinated and controlled from the bde MAIN. Utilize bde O&I frequency for air resupply.

5. COMMAND AND SIGNAL.

a. Command.

(1) Bde TAC locations: TBD.

(2) Bde MAIN locations: TBD.

(3) Bde UAV control cell. Collocated with bde TOC.

b. Signal.

(1) CEOI: Version KTV-1600 (bde O&I).

(2) Bde retrans locations.

(a) Site 1: NK324129.

(b) Site 2: NK271161.

(3) Frequency hopping.

(a) BINGO. Go to alternate Freq #1.

(b) DENVER. Go to alternate Freq #2.

(c) ATLANTIC. Return to Primary Frequency.

ANNEX A (TASK ORGANIZATION) TO RECONNAISSANCE ORDER 96-123

TF 1-80 IN
- 1-80 In (-)
- A/1-5 Ar
- D/1-7 Ar
- 2/C/4-441 ADA (BSFV) (DS) (-)
- 4+5/2/3/C/4-441 ADA (MPDS) (GS)
- A/33 Engr (+)
- COLT 3
- **2/3/4 C/553 FSB (Wheel Ambl)**

TF 1-5 AR
- 1-5 Ar (-)
- A/1-80 In
- 1+2/2/C/4-441 ADA (BSFV) (DS)
- 4+5/1/3/C/4-441 ADA (MPD) (GS)
- C/33 Engr (+)
- COLT 1
- **1/3/4 C/553 FSB (Wheel Ambl)**

TF 1-7 AR
- 1-7 Ar (-)
- D/1-80 In
- 1/C/4-441 ADA (BSFV) (DS)
- B/33 Engr
- COLTs 2 and 4

4-42 FA (155, SP) (DS)
- 3/E/20 FA (Tgt Acq)
- 1+2/1/3/C/4-441 ADA (MPD) (GS)

2-8 FA (155, SP) (R 4-42 FA)
- 1+2/2/3/C/4-441 ADA (MPD) (GS)

Brigade Troops
- C/4-441 ADA (-)
- 3/55 CM (DCN) (DS)
- 5/55 CM (SMK) (DS)
- **2/6/55 CM (RCN) (DS)**
- 33 Engr (-)
  - A/508 Engr (-)
- **C/55 MI**
- 3/55 MP
- 1/C/55 Sig
- **D/55 Avn (-) (UH-60) (OPCON)**

553 FSB
- 3/1/3/C/4-441 ADA (MNPD) (DS)
- 3/2/3/C/4-441 ADA (MNPD) (DS)
- 2/A/2170 QM (Water)

Attachment #2 (Reconnaissance Planning, Division to TF level)

Division MDMP	R&S Planning	Brigade MDMP	R&S Planning	Task Force MDMP	R&S Planning
Mission Analysis (Div WO #1)		Current Operations		Current Operations	
Mission Analysis Brief (Div WO #2)	Phase I Limits of Recon	Receive the Mission (Brigade WO #1)	Phase I ID Limits of Recon (IPB steps 1 and 2)	Receive the Mission (Task Force WO #1)	
COA Development (DIV WO #3)		Mission Analysis	(IPB Step 3)		
COA Analysis / Decision Brief (DIV WO #4)	Phase II Initial Recon Plan				
Issue OPORD	Phase III Issue Recon Order		Phase II Initiate Recon Plan (IPB Step 4)		
Back Brief	Phase IV Update Division Recon Plan	Mission Analysis	Situation Template and Event Template completed	Mission Analysis (TF WO #2)	Phase I ID Limits of Recon (IPB steps 1 and 2) Based on info in Bde WO #1
		Mission Analysis Brief (Brigade WO #2)	Develop Scheme of Recon Operations		Brigade WO #2 gives enough info to have most IPB products completed, just not validated against Blue Plan (IPB step #3)
		COA Development (Brigade WO #3)	Complete Recon Plan.	Mission Analysis / Mission Analysis Brief	Phase II Initial Recon Plan (IPB Step 4) Situation Template and Recon Plan completed
		COA Analysis / Decision Brief (Brigade WO #4)	Phase III Issue Recon Order	COA Development	Complete Recon Plan
		Issue OPORD	Receive Recon Back Briefs from Task Force S2s (Phase IV Refine Recon Order)	COA Analysis / Decision Brief TF WO #3	Phase III Issue Recon Plan
				Issue OPORD	Phase IV Refine Recon Plan

INTEGRATE LOGISTICS ESTIMATES IN DECISION-MAKING

Only by assessing the status and impact of the components of tactical logistics can logisticians bring an informed estimate to the planning process. Tacticians must include logisticians in planning, or face periods of diminished combat power during a mission – potentially at a critical point in the battle.

The Brigade and Battalion Staff Exercise (BBSE) provides an excellent training opportunity to practice logistics estimates. The continuing operations between missions logically prompt combat service support (CSS) actions, which are a focus of this exercise.

Objective The brigade combat team (BCT) uses the logistics estimate process to integrate CSS into planning, preparation, and execution of its mission. Accurate, up-to-date assessments are provided in time for tactical planners to include them in planning and decision-making. The logistics estimate is updated as conditions change.

- The brigade rear command post (bde rear CP) maintains a current logistics preparation of the battlefield (LPB) to define the logistics environment in which the BCT is operating.
- The bde rear CP maintains current and projected status of the BCT in the major logistical categories of:
  - maintenance
  - supply
  - transportation.
- The bde S4 develops estimates of the logistical requirements of the mission, later refines them for the specific courses of action (COAs) being considered, and finally, refines them for the selected concept of operations.
- The bde S4 makes recommendations and assessments of the impact of logistical issues on BCT missions.

Note This performance objective is developed for the logistical functions of maintenance, supply, and transportation. It does not include personnel or medical functions. Similar estimating processes and requirements exist for the personnel function and can be practiced in the exercise, but are not explicitly provided for in this performance objective.

Techniques and Procedures

Overview

Particularly at brigade level and below, logistics estimates are not written products with pages of data and statistics. What is important is that logistics planners organize the information, analyze its impact on current and future missions, and share that analysis with tactical planners in a clear, succinct, and efficient manner.

Logistics estimates must cover both mission support and continuous support. Mission support operations support a specific operation. Continuous support operations provide to the brigade the routine support needed on a daily basis.

Logistics estimates are supported initially by LPB. The LPB is not mission-specific, but rather defines the logistics environment of the area of operations. The LPB contains projections and implications related to sufficiency of the area of operations, enemy capabilities affecting logistics operations, host nation support, and current and projected status.

Logistics estimates are an ongoing process. The description in this performance objective picks up the logistics estimate process with the mission analysis for a new mission. The logistics estimate is updated to generate an assessment for the commander of the status of the BCT, and to identify for him and operational planners any anticipated limitations on the tactical options available as a result of logistics.

The logistics estimate is updated for a new mission to reflect changes in the logistical condition of the BCT and changes in the LPB. During COA analysis the logistics requirements specific to each COA are estimated and assessed. After the concept of the operation is approved, the estimate is updated to reflect the logistics requirements for that concept.

This new estimate is the basis for any future updates. The estimated logistical outcomes or end state of the current operation will be the basis for estimating the starting conditions of a subsequent mission.

A sound logistical estimate process results in COAs where the logistical implications are understood and considered, and for which sound, integrated logistical plans and instructions can be developed.

Continued on next page

Techniques and Procedures, Continued

Logistics estimate components

Supply, maintenance, and transportation are addressed in all the components of the logistics estimate. The components of the logistics estimate are:

- the current and projected status of the BCT
- the LPB which defines the logistical environment of the BCT
- the requirements of impacts of the upcoming mission
- the assessment of mission supportability or operational impacts driven by logistical considerations.

This last point is the critical "bottom line" for logistics estimates.

Logistics estimate process

Throughout the logistics estimate process, the S4 summarizes the current and projected logistical status of the BCT. He/she considers how the logistical environment, as described in the LPB, will change that status before and during the upcoming mission. He compares that dynamic estimate of the logistical status of the unit against the requirements he estimates will be inherent in the upcoming mission.

The final component of his logistics estimate is the assessment of the impacts of all of these factors on the supportability of the mission. Equally important is that through his estimate, the S4 identifies for the commander and staff, any operational restrictions or requirements he foresees logistics will place on the prospective COA(s). These might be requirements for pauses to refuel or rearm, limitations on employing certain units based on maintenance or operational readiness conditions, or COAs which cannot be supported logistically.

Continued on next page

Techniques and Procedures, Continued

Logistics estimate products

As previously discussed the estimate is not a written product. But there are certain products which support the estimate process.

Current and projected status of the BCT

The rear CP should have, in convenient format, the status of key elements of each of the logistical areas: supply, maintenance, and transportation.

The charts should include current and projected status. The projected status should usually reflect an as of time for the start of the next operation. The information should include those items which the S4 knows are of interest in assessing the capabilities of the BCT. For example, in each area:

- supply – status by unit of Class I, III, V
- maintenance – readiness condition of major systems by unit
- transportation – status of assets, readiness, and known or anticipated commitments.

The S4 will also require summary charts of the same information, that he can carry in his battle book when away from the rear CP.

Logistics preparation of the battlefield

The LPB is usually not confined to one particular medium or source of information. Rather it consists of the entire set of background information which defines the logistical environment of the BCT. This includes continuous and mission support information such as:

- elements of intelligence estimates that define the characteristics of the region, rear area threat, terrain, road networks, electrical grids, etc.
- logistics estimates and annexes from higher headquarters that provide the status and estimate assets available to the BCT
- standard or controlled resupply rates for the division
- locations of division and corps logistics bases
- main supply routes and status
- schedule for routine and special resupply actions.

Mission requirements

The requirements and potential impacts of each of the logistics areas can be summarized on charts. The mission requirements are summarized for each of the key areas. Consumption rates and total quantities of key items form the requirements against which the capability and status of the BCT will be compared.

Continued on next page

Techniques and Procedures, Continued

The S4's battle book

As discussed before, the logistics estimate is usually not a written product. More likely, it will exist as information and notes in the S4's battle book. The information should be organized in a fashion to make it easy to transfer data from the displays and status charts found in the rear CP.

Estimate briefing

The organized information in the S4's battle book should allow him to brief the essential elements of the components of his estimate quickly. A logical presentation sequence is:

- mission: State the mission and summarize the logistical requirements or effects it generates.
- assessment: Address the supportability of the upcoming mission and list any key limitations or restrictions due to logistics.
- status of the BCT: Summarize, for each of the logistical areas selected, key elements which describe the brigade's status, and project what it will be by mission start or any other key time of interest to the command.
- pertinent information from the LPB: Summarize the key elements of the LPB, resources to be available from division, characteristics of the area, anticipated problems, etc.

Sample BCT status chart

Mission: Area Defense				
	1-5 AR	1-7 AR	3-5 IN (M)	Bde
M1	30	45	0	75
M2	0	0	038	38
FISTV	3	3	3	9
CL III	G	A	A	A
CL V	A	G	A	A
Overall	A	A	A	A

Continued on next page

Techniques and Procedures, Continued

The logistics estimate and MDMP

During mission planning, the logistics planner uses logistics estimates to analyze the sustainment feasibility of each COA, and to compare COAs.

As the Bde Rear CP OIC, the S4 is responsible for the logistics estimate. However, following mission analysis, he may use an assistant to represent him in the MDMP. The assistant, often located at the Bde Main CP, integrates the S4's concept of support into the synchronized plan. This assistant must understand all facets of the logistics estimate process.

Overview

Tactical planners must understand the implications of CSS projections, in terms of the duration of the unit's combat power.

- Commanders need to know projections of their units' sustained combat power for the current mission, as well as for "be prepared" missions.
- Logisticians must understand the tactical plan and its ramifications for support. This will enable them to anticipate support requirements during planning. They also allow support tasks to be anticipated during planning so that logistics triggering mechanisms can be designated. This give more planning time to the subordinate units.
- Proper logistics estimates should prevent delays while the main CP seeks information from the rear CP or from units. The required information should be pushed by task forces, not pulled by brigade.

Current and projected status

The Bde Rear CP must quickly gather the status of the BCT. The logistician's mission analysis should not be a recitation of statistics and numbers, but an analysis of the BCT's combat power.

Logistics preparation of the battlefield

The logistician must consider the many factors represented in the LPB and analyze their impact on the commander's concept of operations.

Continued on next page

Techniques and Procedures, Continued

Mission requirements

Logistics planners use doctrinal and unit experience to estimate the logistics requirement for the upcoming mission.

- The estimate should describe, in the most relevant manner, the requirements for the upcoming mission. Descriptions may be in specific measures, (e.g., fuel, ammunition, or other parameters such as hours or miles of operation). It should include the logistical condition the commander requires at the end of the mission.
- The logistics estimate must translate operational requirements to logistical requirements that can be compared to the unit's logistical assets and capabilities.

The process for assessing feasibility includes:

- Determining whether or not the unit possesses the required resources to sustain the unit throughout the tactical operation. If requirements do not exceed capabilities, the sustainment of the COA will generally be feasible.
- If any requirements do exceed capabilities, determining the potential impact upon the mission. If the shortfall will cause the COA to fail, and there are no workable solutions to the problem, then sustainment of the COA is not feasible. Ensure all possible means to solve the problem are exhausted, to include support from higher headquarters, before the COA is deemed not feasible.

Participation in the wargaming process is necessary to anticipate mission requirements and establish "triggers" for resupply. The logisticians should leave wargaming with a refined, synchronized plan and the triggers for execution.

Assessment Guide for the Commander and Observers

Observing this performance objective

This performance objective integrates the logisticians with the tacticians. The logistics estimate is not just numbers and statistics, it is an analysis with implications for COAs. The logistics situation for the BBSE is continuous, as at combat training center rotations. This linking of CSS from mission to mission provides a valuable training opportunity for CSS planners.

Change of missions

As each mission ends, the logisticians must use the estimate process to ensure the follow-on operation can be sustained. The assumptions made about combat power and supplies remaining should be validated. If the brigade is severely damaged, the exercise director may need to use extraordinary measures to restore the brigade's combat power. This is an excellent opportunity to discuss the estimate process. For example, you might ask: "Did you predict these logistical conditions?"

Area defense mission

During the first mission, area defense (AD), the BCT should refine their reporting procedures. The CL V (munitions) estimate is especially important.

Deliberate attack mission

Planning for the deliberate attack (DATK) begins prior to executing the AD. The logisticians must predict the outcome of the AD and the requirements for the DATK in their analysis. To support consolidation on the objective, movement of the brigade support area (BSA), or use of a forward logistics element should be considered.

Movement to contact mission

Planning for the movement to contact (MTC) begins prior to executing the DATK. Though this mission may not be executed, predicting the outcome of the DATK and the requirements for the MTC should still be practiced. Particular attention should be paid to BSA movement and CL III (fuel) requirements.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Suggested times for scheduled feedback

The measure of how effectively logistics is integrated will come after the execution of a mission.

Scheduling

The first review of this performance objective can occur at the "end of the day" AAR which follows the completion of preparation for the area defense. The process for including the logistics estimate in the brigade's planning process can be reviewed as a major focus of the AAR.

Another review can be conducted when the execution of the area defense is reviewed. The accuracy and relevancy of the estimates can be verified as part of this review. If possible a brief review with the major participants in the estimating process can be conducted toward the end of the exercise to determine the changes, to the process and its products, that should be adopted by the brigade.

Considerations for assessment

In discussing the brigade's performance, the following questions should help expose key points.

1) **How was the estimate used by the BCT commander and his staff during planning?**

   The estimate should help them assess the impact of logistics on the upcoming operation.

2) **How was the logistics estimate included in the planning process?**

   The S4 should efficiently provide the key elements of his estimate during mission analysis. During wargaming, prospective COAs should be reviewed for their logistical supportability and impact.

3) **How did the brigade prepare and update logistics estimates?**

   The procedure, whether or not it is in the standing operating procedure, should include:

   - details of the data to be included
   - the data sources and how the data will be collected
   - who compiles the data
   - how the estimates are provided to whom
   - the timing of the estimates.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) Who prepared the logistics estimates?

For each logistical functional category (maintenance, supply, transportation), the brigade should designate the person who is responsible. Everyone involved in the estimate process must know their areas of responsibility. The responsibilities include not only compiling the facts and assumptions, and making projections, but also determining the estimate of COA supportability.

5) Discuss each updated logistics estimate from the exercise. For each update, discuss –

- What triggered the update?
  - ◊ Regular updates occur, as implied, on a regular basis (e.g., every 24 hours). The regularity may vary, depending on where the brigade is in relation to its planning timeline. Triggered updates should occur: (a) whenever a division fragmentary order, warning order, or mission is received; (b) when conditions change in ways that affect the COA or the commander's decision-making; or (c) when the plan is changed. Additionally, the commander may direct that estimates of any kind be updated in accordance with his own intent.
- Was the update provided soon enough?
  - ◊ To be useful to brigade planners, the estimate must be provided according to the planned timeline, or as soon as possible after conditions have changed. The brigade should decide whether or not they are receiving estimates soon enough, and, if necessary, how to ensure more timely delivery.
- How was the update used in planning?
  - ◊ Logistical planning representatives should bring their estimates and considerations to the planning process from the beginning of the mission analysis process, and stay involved throughout planning. The logistics estimates should be used in developing and evaluating COAs. They should also be used later in refining the tactical plan and preparing the concept of support.

Related Information

References

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MANAGE INFORMATION WITHIN THE BRIGADE COMMAND POSTS

Command posts (CPs) exist to assist the commander in fighting the brigade. Managing information is the central activity in this process. How well the brigade organizes its CPs; defines and enforces standard procedures for receiving, distributing, and processing information; and is able to sustain these activities during continuous operations over extended periods will be key to the success of the brigade's control of battlefield operations. This exercise provides practice opportunities on information management arrangements and procedures. In addition, this exercise facilitates the refinement of those arrangements and procedures in unit standing operating procedures (SOPs). This exercise is an excellent opportunity to train new personnel on their roles within the CPs and to try new solutions before conducting intense field exercises or actual operations.

Objective

Each CP will institute SOPs that support the commander's and the staff's requirements for time-constrained decision-making, accurate and timely situational awareness, and execution of continuous, sustaining, and mission-specific instructions and orders. According to those procedures, CP staff will prioritize, record, process, analyze, and disseminate routine information to specific recipients. The functioning of the CPs will permit continuous, long-term activity, displacement or loss of a CP. Procedures will separate those routine actions from those that demand command attention. Procedures will be recorded in the unit's tactical standing operating procedures (TACSOP).

Techniques and Procedures

Overview

A practiced, systematic method for collecting and processing information is essential to the efficient operation of the brigade. The following techniques and procedures outline methods of dealing with the vast amount of information that flows into and through a brigade's CPs. Information management is crucial to all CPs that the brigade operates: the main CP (MAIN), the rear CP (REAR), the tactical CP (TAC), and the command group. Although each of these will apply information management procedures somewhat differently, and under different conditions, each must have and use a systematic method of dealing with information.

Information management is continuous. It builds to a peak during execution of combat operations, but it is also crucial during the planning phase. During planning, the commander and staff are seeking information for mission analysis, COA development, COA analysis, and preparation and dissemination of operation orders. Information management is a critical part of the "Supervise" step of the commander's Troop Leading Procedure.

Information management steps

There are four major steps in the processing of information within any CP or staff section. These are:

- Step 1: Collect and Record Information
- Step 2: Perform Information Analysis and Prioritization
- Step 3: Disseminate Information within the CP
- Step 4: Conduct Commander/Staff Analysis and Further Dissemination.

Continued on next page

Techniques and Procedures, Continued

Step 1: Collect and record information

This first step is supported by three components:

- the information collection methods (information and communication channels)
- the people responsible for information collection
- the methods of recording the information.

Information collection methods.

Each CP must identify what types of information collection methods it has and the components of each method. Examples are: FM radio nets, MSE nets, digital information networks, runner systems. For each method, establish the following:

(1) equipment components, requirements, and locations

(2) stations or individuals who participate in the channel (e.g. subordinate maneuver commanders, fire support officer, battalion S2 sections, brigade rear)

(3) what individual or section is responsible for the channel (e.g., the S2 section in the MAIN controls the O&I net; the O&I net is monitored by the brigade operations section (S3) and by the subordinate S2 sections)

(4) identification of the types of information generally passed on the channel (e.g., spot reports, SITREPs, requests for fire, logistics summaries).

People responsible for information collection.

The CP operations must clearly identify those people within the CP who have responsibility for operating and supervising each information channel. Most information channels will have several layers of operators and supervisors. Start with the RTO and go up the chain. Everyone must know whom they work for and whom to go to if they have questions. The exact responsibilities of each operator and supervisor must be known.

For example: An RTO receives, writes down and collates messages; the S3 section sergeant supervises the RTO, operates within hearing distance of the receiver, and checks messages received; the battle captain has final authority for information management decisions.

Continued on next page

Techniques and Procedures, Continued

Step 1: Collect and record information, continued

Methods of recording information.

Each staff section must determine how to record information received on its channel(s) and what the recorder does with the information. Staff sections will often use multiple methods to record the same information depending on the type received. Leaders must train operators on the requirements for each method used. RECORD ALL INFORMATION RECEIVED. The following are common recording methods:

- staff logs and journals
- multi-copy message formats
- electronic or digital records
- fixed report formats (SITREP; RED ONE; FIRE REQUEST)
- situation maps
- status charts
- briefing charts
- battle boards.

Step 2: Perform information analysis and prioritization

Within each information channel there is at least one person at all times who is responsible for reviewing the content of information received and assigning a priority to that information. There should also be procedures for reviewing and referring information that the primary reviewer may be unsure about. Information processors must be aware that changing conditions can change the priority of information.

Continued on next page

Techniques and Procedures, Continued

Step 2: Perform information analysis and prioritization, continued

Prioritization is aimed at getting operational information immediate attention. The following are descriptions of the prioritization categories commonly used. Leaders must train information processors on using and practicing priorities:

- CRITICAL: This is information the commander requires that directly affects his decisions. It dictates the successful execution of operations. Commanders need to identify this information by stating the commander's critical information requirements (CCIR), including priority intelligence requirements (PIR), friendly forces intelligence requirements (FFIR), and essential elements of friendly information (EEFI). Normally, the executive officer (XO) or battle captain will take a direct role in managing and tracking this information, but it is essential that everyone including RTOs be aware what information will fall within this category during any given operation. NOTE: CRITICAL information applies not only to the brigade commander's CCIR but also to CCIR designated by higher headquarters and subordinate commanders.
- EXCEPTIONAL: This is specific and immediately vital information that directly affects the success of the current operation. EXCEPTIONAL information signals the occurrence of unpredictable or extraordinary events such as an unforeseen opportunity for success or an early warning of a pending emergency. This information is extremely time-sensitive for decision making and there can be no delay in further dissemination. Normally this information is delivered to the commander. An example of EXCEPTIONAL information is an observer's spot report of an enemy unit massing for movement through a defile. ALL individuals must be able to recognize EXCEPTIONAL information when received.
- ROUTINE: This is standard, repetitive information that occurs during day-to-day operations. It is not essential to the commander in its current, raw format and usually must be thoroughly analyzed and combined with other information before it is usable. Processing is important, but it must be done in such a manner that does not overload the staff or information system. Examples of ROUTINE information are "no change" situation reports, status updates, and routine logistical requests.

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Techniques and Procedures, Continued

Step 2: Perform information analysis and prioritization, continued

The unit must identify prioritization authority and responsibility by individual or position. Prioritization authority may differ by category of prioritization. Examples of persons who are normally given responsibility for prioritization are the shift noncommissioned officer (NCO), section noncommissioned officers in charge (NCOICs), section OICs, assistant staff officers, battle captain, principal staff officer, and XO. Prioritization by junior personnel (shift NCOs, junior officers) is dependent on their being well trained and fully aware of the prioritization procedure. However, making senior people (XO, principal staff officer) responsible for prioritizing too much information may slow the information management process and cause information backlog or overload.

Step 3: Disseminate information within the CP

After quickly analyzing and prioritizing information, a designated individual determines how and to whom to disseminate the information within the CP. The larger the CP operation (e.g. the MAIN), the more essential it is that there be specific procedures and recipients. Methods of dissemination to consider include:

- Verbal report to other specified individuals, staff sections, and special staff. Use for CRITICAL and EXCEPTIONAL information.
- Distribution of copies of messages and reports. Identify recipient sections. Use for EXCEPTIONAL and ROUTINE information.
- Posting section and common situation maps and charts. Specify what maps and/or charts. Use for CRITICAL, EXCEPTIONAL, and ROUTINE information.
- Conducting staff huddles. Specify who calls and what individuals are included. Use for CRITICAL and EXCEPTIONAL information.

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Techniques and Procedures, Continued

Step 4: Conduct commander and staff analysis and further dissemination

Staff officers collectively conduct predictive analysis on information received to determine its impact on current and future operations. On some occasions, the commander, the XO, or a battle captain may determine that an information item is CRITICAL or EXCEPTIONAL enough that collective or further analysis is not needed before forwarding that information to the commander, subordinate/adjacent units, or higher headquarters.

However, most information requires some type of analysis and interpretation before its full impact can be accurately determined or predicted. Collective analysis by the staff may change the priority of an information item, or several information items can be combined to form new information or conclusions. For example, a situation report from a subordinate unit that impacts the ability of that unit to accomplish an assigned task can turn a ROUTINE report into EXCEPTIONAL information.

Once the staff completes its analysis, the XO or battle captain must determine what to do with the analysis results. Normally there are two options: take action within that CP or disseminate the information to other CPs, subordinate units, adjacent headquarters, or higher headquarters.

If information must be further disseminated after analysis, the method of that dissemination must be decided and the information formatted. Normal methods to consider include:

- situation reports or spot reports to higher or adjacent headquarters
- fragmentary orders (FRAGOs) or warning orders (WARNOs) to subordinate units
- requests for information
- requests for support.

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Techniques and Procedures, Continued

An information management procedure example

The following example describes one way to manage the information flow within the CP:

Information Management Procedures

1. The RTO in the S3 Section monitors the O&I net and records a situation report from a subordinate unit.
2. The RTO gives the report to the shift operations NCO. The shift NCO assigns the message a ROUTINE priority.
3. The operations NCO posts the reporting unit's new location and status to the common situation map and status chart.
4. The battle captain analyzes the updated status of the subordinate unit and realizes that, in its new location, the unit will be unable to complete an upcoming, planned task. The battle captain upgrades the priority to EXCEPTIONAL and notifies the XO of the information and his interpretation.
5. The XO convenes a staff huddle of the battle captain, FSE rep, engineer rep, and S2 to further analyze the information. Their initial analysis indicates a change to the tactical plan will be necessary. They develop a recommended branch plan.
6. The XO transmits the information, analysis, and recommendation to the commander. The commander concurs and approves the recommendation.
7. The XO develops and transmits a FRAGO to the affected subordinate units.

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Techniques and Procedures, Continued

Special situations for information management requirements

There are some operational conditions that are either inherently disruptive or that put unusual stress on information management. These situations require special information management techniques to insure that information flow does not suffer when they occur. They require prior planning and intense management when they do occur. Some of these special situations include:

- shift changes
- CP displacements
- loss or impairment of a CP.

Shift changes

Each CP must be prepared to provide continuous support to the commander and to the unit. They must operate 24 hours a day over long periods of time. Plans must be made to employ multiple shifts and to provide for information sharing between shifts. The unit must have a plan that allows each section within a CP to change shifts with minimal impact on the support provided. To support this, CPs must employ the following:

- standardized information charts
- briefings
- use of standard graphic symbols
- complete understanding of SOP procedures
- training.

There are two shift change techniques that can be employed by CPs. Each has advantages and disadvantages.

Option 1: Change all sections within a CP simultaneously

- Advantages: This requires only two shift change briefings per day and briefings for all sections can be combined. Each shift section always works with the same shifts from other sections.
- Disadvantages: There is less continuity between CP shifts. There is often a decrease in situational awareness.

Option 2: Change each section on a staggered schedule

- Advantages: This increases operational continuity between shifts.
- Disadvantage: It requires multiple shift change briefings.

Continued on next page

Techniques and Procedures, Continued

Displacement or loss of a CP

Each CP must be prepared to assume the roles of the other CPs. When a CP displaces, it must pass responsibility for its command, control, and information management functions to one of the other CPs. Designated alternate CPs must assume those responsibilities when a CP is disabled or destroyed. The brigades information management plan should address these situations to ensure an uninterrupted flow of information.

Example: the TAC controls the command net during mission execution, controlling the close fight. The MAIN monitors the command net, collecting, recording, and analyzing information passed over the net. After a five minute interval when no one can contact the TAC, the XO determines that the TAC is nonoperational and directs that the MAIN assume responsibility for controlling the command net and controlling the close fight.

Assessment Guide for the Commander and Observers

Observing this performance objective

The Observer for this activity must split his or her time between all of the CPs (MAIN, TAC, and REAR) and between all of the sections within a CP. With such a broad area of responsibility, observation must be selective. However, over the course of the exercise, it should be possible to gather a general impression by following specific incidents from all of these entities.

Tools

Use the techniques and procedures, assessment considerations, and the unit's SOP as a guide during observation. Collect data on specific pieces of information by tracking them from the time of receipt until final disposition and compare that data with the process outlined in the T&P and the unit's SOP. Keep notes on several such information processing activities for each section within each CP and use these as specific incidents for feedback.

Preparation

In preparing for observation, spend some time with the exercise control (EXCON) cell reviewing the messages that they will send to brigade. This will give advance knowledge of some standardized incoming traffic that must be managed, and that you can track. However, the EXCON messages only reflect scripted higher headquarters (division) information. The majority of information you will need to monitor is unscripted traffic from subordinate units.

Coordination with other observers

You should also be aware that there is a similar management information effort going on with an Observer at the task force (TF) level. Although your observations and feedback are being conducted independently, you both share the same requirements. Coordinate your activities and observations where appropriate, particularly to identify message traffic which requires action at both echelons.

Suggested times for scheduled feedback

Suggested times for scheduled feedback are at the end of execution for all missions.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

Discuss the following considerations in determining the brigade's readiness for performing this performance objective.

1) Describe the brigade information management plan.

Information management does not "just happen." There must be a plan; everyone must know their role in the plan; it must work. Normally the TACSOP will address information management, but just having a written plan is not sufficient. If the SOP addresses information management, answer the following questions:

- Does everyone know what is in the SOP?
- Do we apply what is in the SOP?
- Are we satisfied with the result?

2) When and where does the brigade practice information management?

Information management is a requirement at all CP operations: MAIN CP, REAR, TAC, and Command Group, as well as any other CP type functions the brigade might find itself organizing. Information management is required as soon as any CP is "open for business" and is receiving information. It must be actively practiced throughout all phases while that CP is operational.

Examine the information management plan at all levels that it affects; don't just examine the MAIN. The information management plan must be applicable and used by all sections and operations within the brigade CP structure.

3) Identify the CCIR in this exercise. Track how information relating to CCIR was managed.

All information that supports or affects a CCIR must be identified as soon as it is received on the information channel. Everyone involved in the information management chain must know the current CCIR at the division, brigade, and TF levels. CCIR must receive the highest prioritization (CRITICAL) and the commander must receive the information immediately. Delays in recognizing and processing CCIR information cannot be tolerated.

Tracking CCIR information that should have been treated as CRITICAL but was not is a good way to expose problems in the information management system.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) **Identify information that was prioritized as EXCEPTIONAL (or the equivalent). Track some of these items to determine how this information was handled, starting with when it was received.**

   EXCEPTIONAL information is oftentimes the most difficult to identify because it does not follow the specified criteria (CCIR directed) of CRITICAL information. Most often, it is prioritized as such because of how it affects the immediate situation. Accurate identification of EXCEPTIONAL information depends on the alertness, training, and experience of the persons monitoring information, as well as on the existence of clearly understood information management programs.

5) **Who determines prioritization?**

   This will differ by CP, section, shift, event, and even by priorities. But such individuals must know who they are, what their requirements are, and how the information management system works.

6) **Describe the shift change procedure. How well did it work?**

   Shift change procedures should support incoming personnel assuming operational control without any deterioration of the on-going processes. It is an especially vulnerable time for both people and information. Closely examine the process that was used for a timely, efficient shift changes that left personnel feeling confident to take over. Likewise, examine items of information that were in the information pipeline at the time of shift change to identify any loss, mislaying, or delay of information. Identify why these happened.

Related Information

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- Task 71-6-0632, Monitor Logistics Operations
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- Task 71-6-1051, Process Combat Information and Intelligence
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- Appendix I: Information Management.

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PLAN AND IMPLEMENT BRIGADE AIR DEFENSE EARLY WARNING

Early warning of air attacks is a critical factor in force protection. The brigade must have a system that integrates passive and active air defense measures to ensure force protection against enemy air attacks. Subordinate units must react quickly to warnings of impending air attack. The staff procedures for rapidly disseminating air defense warnings can be practiced effectively in simulation exercises.

Objective

The brigade establishes and executes early warning dissemination procedures that identify and defeat intruding aircraft, and that cue friendly units to adopt protective measures. Early warnings include aircraft identification, directions, and specification of affected assets. Warnings are received by affected troops three minutes before visual detection of the aircraft. Missions of elements not directly affected by an air intrusion are not impeded by the warning.

Techniques and Procedures

Overview

Brigades must set up a procedure for implementing timely and accurate early warnings throughout the brigade area of operations. Early warning procedures must include all assigned, attached, and supporting units of the brigade combat team. Special attention must be directed to the brigade rear area which is highly vulnerable to air attack and that lacks the direct communication links to many elements located in the rear. Many elements in the rear area lack direct communication to EW nets.

Effective early warning requires the rapid and complete integration of supporting air defense artillery (ADA) assets into the brigade's early warning plan. These assets are often assigned on a mission-to-mission basis and the brigade does not have an opportunity to establish a working relationship with its support. Early command emphasis is essential to ensure that the supporting air defense is fully integrated into the early warning system. Commanders and staff at all levels must make sure that the air defense role in the early warning plan is understood and rehearsed and that air defense capabilities for early warning are factored into the brigade's early warning scheme.

These techniques and procedures emphasize the requirements of the brigade and task force (TF) staffs in implementing early warning. Because of restrictions in the exercise, they do not focus on the involvement of air defense units in countering enemy air or of friendly forces actually taking active or passive air defense measures. However, the practice and refinement of these techniques and procedures will ensure better performance at all echelons when employed under full field conditions.

Continued on next page

Techniques and Procedures, Continued

Preparation for early warning

Preparation is essential to an effective early warning plan. The following actions should be taken:

1. Identify key early warning personnel.
2. Identify early warning assets.
3. Identify redundant and non-redundant early warning conditions.
4. Determine early warning notification format.
5. Conduct ADA early warning backbriefs.
6. Conduct early warning rehearsals.

1. Identify key early warning personnel

An effective early warning plan is dependent on key personnel knowing their roles and activities when an early warning is received from division or higher command. Key personnel must be identified. Although these personnel may differ by unit and situation, consider the following positions:

- air defense coordinator (ADCOORD) or air defense officer (ADO)
- ADA platoon leaders
- brigade operations section (RTO, shift NCO, battle captain)
- brigade rear (RTO, shift NCO)
- brigade tactical command post (RTO, NCO)
- TF main (operations section RTO, Operations Sergeant, S3 Air)
- TF combat trains command post (RTO, NCO, OIC)
- subordinate CP (Support Battalion, Engineer, Artillery, MI).

Note: It is important that key early warning personnel be identified within each shift operation at a CP.

Continued on next page

Techniques and Procedures, Continued

2. Identify early warning assets

Dedicated early warning receivers and sensors are provided from ADA elements and are located throughout the brigade sector. It is necessary to identify where they will be located for each mission. All early warning devices must be continuously monitored. The individual responsible for that monitoring, and his activities in monitoring, must be part of the early warning plan. A typical division early warning net diagram is attached. However, each unit must verify the actual early warning support that exists for their situation and mission.

3. Identify redundant and non-redundant early warning conditions

Redundant early warning situations exist when ADA assets are collocated with maneuver or support elements. The brigade CP will almost always have redundant warning capability. Individual ADA platoons that support TFs also provide redundant warning capability to the units they support.

Non-redundant conditions exist when a brigade asset is not supported by an ADA asset. These units must rely solely on warnings issued over the command channel to alert them to air threats.

4. Determine early warning notification format

Early warning messages should be standardized within a unit to facilitate immediate reaction. Although formats may depend on the unit and the type of air-threat in the theater, all key personnel must know what to expect in an early warning message. Content and format should stress essential information; extraneous or non-essential information only delays the reaction. However, it is also essential that enough information be included to allow assessment of the threat. Consider the following content:

- alert type (LOOKOUT, DYNAMITE)
- aircraft type (fixed wing, rotary, high-performance, attack, nomenclature)
- number of aircraft
- direction of aircraft flight
- friendly assets affected (may be unit ID, area, axis, zone, sector, phase line, geographical area, operational area).

Continued on next page

Techniques and Procedures, Continued

5. Conduct ADA early warning backbriefs

The ADA platoon leaders, battery commander, brigade S3, and supported subordinate S3s should conduct a series of backbriefs on how early warning will be conducted within ADA channels and fed to non-ADA units. This will ensure a common understanding of expectations and procedures from ADA to supported units for early warning notification.

6. Conduct early warning rehearsals

Early warning rehearsals are an essential part of mission preparation. Most early warning rehearsals are considered Special Rehearsals and are conducted to augment other scheduled rehearsals. The brigade S3 and the ADCOORD/ADO are responsible for scheduling and conducting early warning rehearsals. Early warning rehearsals should include participants down through at least task force level. They should be conducted within the supporting ADA unit, between the ADA unit and supported units, and within channels that do not have ADA support (non-redundant).

As soon as all elements are in place, and if operational conditions permit, a radio rehearsal should be conducted that tests all early warning networks and procedures. This should include both redundant and non-redundant procedures. An after-action review of this rehearsal is essential.

Continued on next page

Techniques and Procedures, Continued

Execution of Early Warning

When enemy aircraft are detected, the air defense early warning must be accurate and timely. The following events should take place:

1. Receive early warning.
2. Evaluate the early warning.
3. Issue local air defense warning (LADW).
4. Track aircraft and monitor LADW.

1. Receive early warning

Most early warnings will be received at the brigade main CP from the division early warning net. Early warnings are extremely time-sensitive and will take precedence over almost all other activities. Division early warnings may or may not be accompanied or followed by warnings over the division command net. The brigade early warning key personnel must be primed to act immediately when an early warning occurs.

Below brigade level, initial early warnings may be received over the early warning net, over the command net, or over both. It depends on whether or not the unit is supported by an ADA asset (redundant, non-redundant).

2. Evaluate the early warning

At brigade level, the ADCOORD/ADO and the battle captain, or the executive officer (XO), independently or together, analyze the information in the early warning message. Depending on the situation, other personnel, such as the S2, may be brought into the huddle. This analysis is done very quickly. The analysis seeks to identify the following:

- likely targets or attack areas within the brigade sector
- likely track through the brigade sector
- identity of units likely to be affected by the intrusion
- level of alert for affected units.

Continued on next page

Techniques and Procedures, Continued

3. Issue local air defense warning (LADW)

Based on their analysis of the warning message, the XO or battle captain issues a LADW to specified units over the command net. This message is standardized, and is issued only to those units that will be affected by the intrusion. If possible, avoid brigade-wide alerts but err on the side of caution.

LADW is passed down to the lowest elements by the fastest means possible. Special procedures such as warning sirens are employed in areas such as the brigade rear where tactical communications are not widespread. The goal is to have the initial warning received by all elements of the affected units at least 3 minutes before the aircraft are within visual range. Update warning messages should continue to be passed over the early warning net.

4. Track aircraft and monitor LADW

Once the aircraft are sighted or identified in the brigade sector, both ADA elements and other units must report aircraft locations and activities. Personnel must stay alert to changing directions and targets. They must also alert other brigade units to these changes. Aircraft must be tracked and reported until they are destroyed or exit the brigade air space.

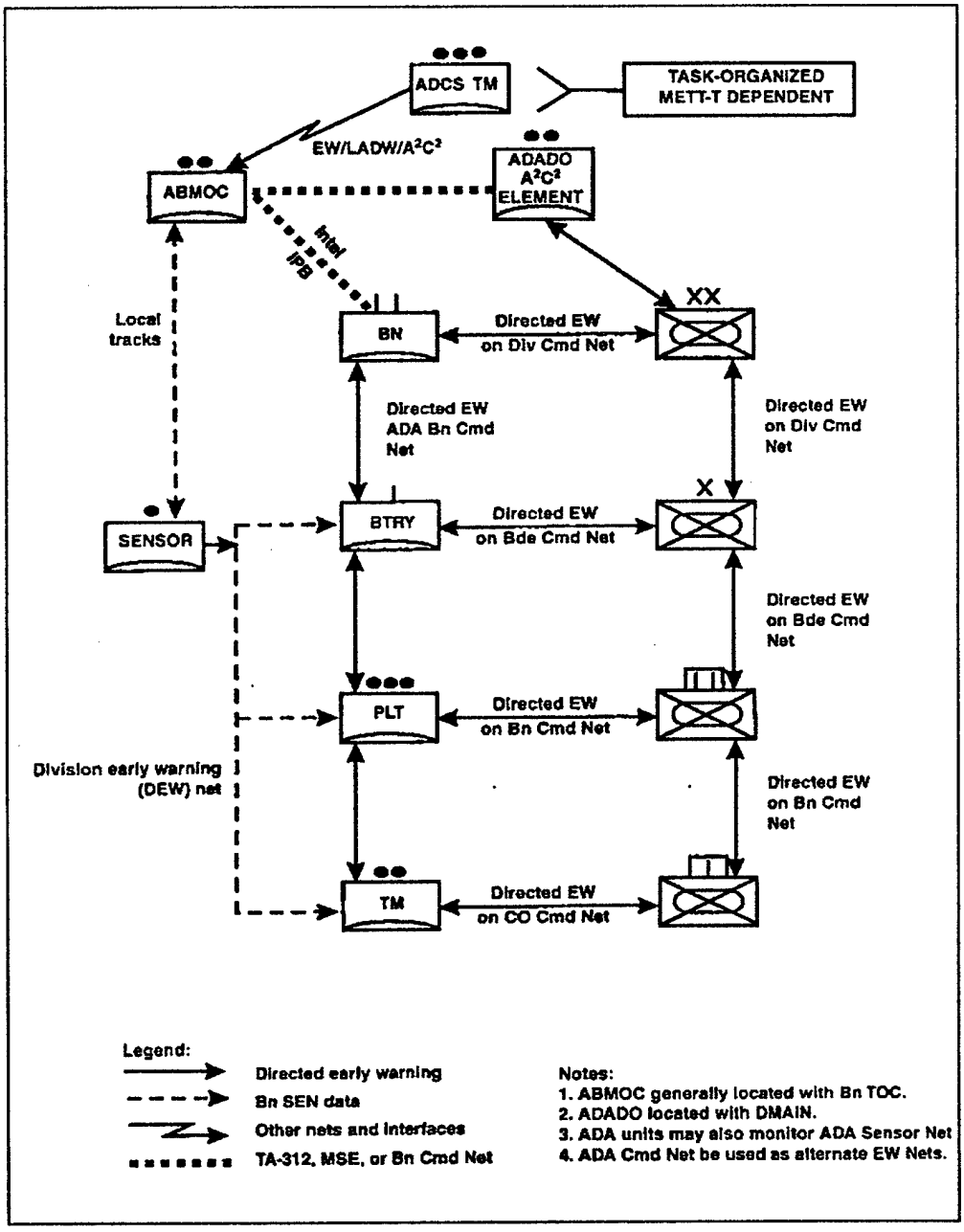
Units that are under an LADW remain in the prescribed alert status and activity until the alert is modified or an all-clear given. This will usually be determined by the XO or battle captain in consultation with the ADCOORD. Under some conditions, the brigade commander may make a risk assessment in connection with the mission, and modify an alert condition. Modifications or all-clears should be given over the brigade command net. It is essential that follow-up be conducted because elements under full scale alert status are generally ineffective for any other activities.

Continued on next page

Techniques and Procedures, Continued

Model early warning net

The following table depicts the air defense early warning net in a heavy division.



Assessment Guide For The Commander and Observers

Observing the performance objective

Observers for this performance objective are responsible for observing the early warning procedure as it is applied at brigade, within the TFs, and within the ADA channels being played in the exercise. Primary preparation requires becoming familiar with the procedures outlined in the techniques and procedures and with the assessment requirements. You should identify what receivers and channels are replicating early warning for the BBSE and where they are located. Most should be in command posts but some may be located at BBS workstations.

Coordinating air attacks in BBS

In the BBSE, enemy air attacks are coordinated between the opposing forces (OPFOR) and the exercise control (EXCON) workstations. Before the OPFOR launches an air incursion, he or she will notify EXCON which, acting as the division early warning net, will issue a standardized, voice early warning to the brigade. Sufficient time will be allowed for the brigade to initiate early warning procedures before OPFOR launches the flights. You should coordinate with both of these workstations to determine the approximate times that air activity will be initiated. This will allow you to prepare and position yourself to observe. You cannot observe, first hand, the complete process in any single air attack. However, over the course of the exercise, you should be able to observe each aspect of the process.

What to look for

One of the criteria for early warning is that affected troops receive notification no less than three minutes before they visually acquire the aircraft. This is a difficult criteria to apply within the BBSE, and it is not intended that this be stop-watch accurate. However, you can get some idea of the effectiveness of the process by locating yourself at either a company or TF workstation that you know (by coordinating with the OPFOR) will be overflown. The LADW should have been received at that workstation *at least* 1 full minute before the intruding aircraft is visible on the BBS screen. Anything less than that should be considered as a failure to alert the troops on the ground. This somewhat more lenient BBS condition is allowed because of the difficulty in equating BBS screen views to real-life conditions.

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Assessment Guide For The Commander and Observers,
Continued

What to look for, continued

The unit personnel are usually able to recount their own experiences at their level with the early warning procedures, including their preparation and rehearsal techniques. However, as an outside observer, you are in a unique position to move between echelons and to track the warning as it progresses through the chain. You are also able to identify when a warning notice stops or fails to arrive at its ultimate destination. Remain alert to the fact that you need to track the complete notification process, through both ADA (early warning) and command notice channels. The complete notification process includes the resolution of the warning; that is, the brigade must modify or lift warnings that restrict the activity of units when the air threat conditions no longer apply.

Suggested times for scheduled feedback

This performance objective should be covered after the execution of the area defense, and then again after execution of the deliberate attack. This provides an opportunity for the unit to receive feedback, make adjustments, and practice again under different conditions before receiving feedback on the second performance. Each feedback session should be relatively brief.

Considerations for assessment

In determining the brigade's readiness for performing this task, discuss the following considerations:

1) What is the brigade's procedure for reacting to air defense early warnings?

It is critical that the brigade establish a plan for how they will receive, process, transmit, and react to warnings of air attack. This procedure must incorporate available air defense assets, including the air defense early warning net, with normal command communications channels. The procedure for early warning must be specific, practiced, and workable.

The early warning procedure is a brigade wide requirement affecting all attached and supporting units, including units operating in the brigade sector.

Continued on next page

Assessment Guide For The Commander and Observers,
Continued

Considerations for assessment, continued

2) **Identify key personnel in the early warning procedure and what each person does.**

Early warning is an intense, concentrated activity. The number of people directly involved in the early warning itself should be kept small to prevent the system from becoming cumbersome and time consuming. Involved personnel generally include the: (a) ADA personnel people who have direct access to early warning receivers; (b) brigade staff who analyze and make decisions, such as the operations NCO, battle captains, S2, and XO; and (c) TF and other unit operations staff who translate brigade alerts into unit activities.

All key personnel should understand what they will do when they receive a warning message; they must know who they notify and how to conduct notification. This must be determined before operations start. Early warning will not be effective if key players do not practice their procedures before they are needed.

3) **Describe the brigade's early warning rehearsal techniques.**

The brigade should rehearse air defense early warning channels and their interactions with supported counterparts within the brigade. Command channel rehearsals are required as well, either as part of or apart from the early warning channels. An early warning systems rehearsal should include a test of all communications systems as well as the procedures to process early warnings.

Rehearsals or back briefs should cover how notification of units outside of the early warning net or command channel network will occur. This is especially important in locations such as the brigade support area.

Continued on next page

Assessment Guide For The Commander and Observers,
Continued

Considerations for assessment, continued

4) **What information was used during a warning? How was it used?**

Generally, the required information for the brigade is the aircraft type, number of aircraft, direction of flight, alert status, and unit affected. This is the basis for the LADW issued by the brigade. Processing of information for a LADW is critical; LADW must be issued to affected units not less than 3 minutes before they can visually see the aircraft.

LADW should not be issued unnecessarily as a blanket alert to all units in the brigade. LADW require troops to take a specified or predetermined action. This could needlessly interfere with mission preparations or execution. False alarms or unnecessary alarms to unaffected units are to be avoided, while still protecting the force from surprise attacks.

5) **Discuss each air defense early warning occurrence. Recount what happened, how it was processed, and outcomes. Reaffirm that the brigade is satisfied with its procedures, or identify areas that need correction. Identify what must be done.**

For each early warning, address the following:

- How was the warning processed within brigade (ADA and non-ADA channels)?
- How was the warning processed within TF and other subordinate units (ADA and non-ADA channels)?
- Who did the processing?
- Who issued the LADW?
- How long did it take to issue the LADW?
- Were LADW passed on (to at least company level)? How long did it take?
- Were LADW issued to units that were not affected by the intrusion?
- Was the LADW lifted or modified, or was an all-clear given? When? By whom?
- Were aircraft tracked and reported?

Related Information

References

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-0306, Coordinate Army Aviation Support
- Task 71-6-0308, Synchronize Air Defense Artillery
- Task 71-6-0309, Execute Airspace Command and Control in the Brigade Area
- Task 71-6-2750, React to Air Attack (Active)
- Task 71-6-2751, React to Air Attack (Passive)
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DEVELOP AND EXECUTE THE BRIGADE AND BATTALION PLAN FOR FIRES

Fire support plans must be integrated with maneuver plans to achieve successful fires in support of operations. The process begins with the commander's vision of the critical effects of fires that will make his plan successful. The details and methods for incorporating the entire brigade combat team are completed during the Military Decision-Making Process (MDMP). The commander and staff can explore, practice, and refine the necessary decision-making procedures during simulation-supported exercises.

Objective

The commander's intent and fire support planning guidance are the foundation for the integration of maneuver and fires. The commander and his staff have a common understanding of what fires must do to support the operation. Acting on the commander's fire support planning guidance, the staff develops the plan of how to achieve the commander's vision for fires.

The brigade and battalion fire support planning process is integral to the MDMP. The result of the fire support planning process is an effective, integrated, and executable fire support plan.

The fire support plan is:

- effective in using all available acquisition and attack assets in the best combination against High Payoff Targets (HPT) to support the commander's intent
- integrated with other battlefield operating systems (BOS) to achieve the required effects
- executable in that it has time, space, and resources to achieve the planned effects
- flexible in response to enemy courses of action (COAs) to allow the brigade to fight the enemy and not a plan. It ties detect and deliver assets to the HPTs and has a plan to assess the effects achieved.

Techniques and Procedures

Overview

Fire supporters at brigade and battalion must develop fire support plans that are effective, integrated, and executable. Four imperatives provide the foundation for this "a way" fire support planning process.

- *Fire support planning must be an integral part of the unit's MDMP.* The fire support planning process does not occur separately from the MDMP, and like the MDMP, requires the interaction of the battle staff and commander.
- *Fire support planning must truly integrate the targeting process and its functions of decide, detect, deliver, and assess.* The requirements of the targeting process must be achieved within the MDMP and its integrated fire support planning without separate processes or an additional set of steps.
- *Fire support planning must support and be integrated with the R&S plan.* The R&S plan links acquisition assets to finding specific enemy formations to attack. The R&S assets are supported throughout their employment by responsive, pre-planned fire support. Named Areas of Interest (NAI) and Targeted Areas of Interest (TAI) support requirements of the fire support plan, and fire support assets can support the collection requirements.
- *Fire support planning must result in an effective, integrated, and executable fire support plan.* Fire supporters must develop the fire support plan in concert with the battle staff that they support, and tie their planning to the MDMP.

Fire support planning as a process

Like any process, fire support planning has required inputs. The inputs are transformed by actions into outputs. Figure 1 describes the sequence of inputs, actions, and outputs of fire support planning for each step of the MDMP. The process described is a means to an end; what is important is that the fire support plan meets the commander's intent.

Note: Bold text in figure 1 relates to the commander's actions or guidance.

Continued on next page

Techniques and Procedures, Continued

Figure 1. Fire Support Planning Process Integrated with MDMP

MDMP STEP	INPUTS	FSCOORD/FSOs Actions	OUTPUTS
1 Receipt of Mission 2 Mission Analysis	• Higher HQ warning order (WARNO) or operations order (OPORD) • Facts from higher, adjacent, and subordinate fire support elements, field artillery (FA) Bn, air liaison officer (ALO), or other FS system liaisons • Intelligence Preparation of the Battlefield (IPB) Products • Enemy COAs from S2 • High value targets (HVT) by enemy phase or critical event	• Understand higher maneuver and FS plan • Organize and analyze facts • ID specified and implied FS tasks • Translate status of FS assets into capabilities • Analyze effects of IPB on FS • Identify potential Essential Fire Support Tasks (EFST)	• Fire Support Officer (FSO) portion of mission analysis brief: Higher FS plan Briefing charts FS Status FS Capabilities/limitations FS IPB analysis FS Timeline Potential EFSTs • **Commander: Issues guidance for intent for fires** • FSO: FS information included in Bde WARNO
3 COA Development	• **Commander's guidance for intent for fires (e.g. [task] Delay the ability of the AGMB to close and support the FSE [purpose] to allow our lead company to destroy the FSE before the AGMB arrives)** • Outputs from MDMP steps 1 and 2	• **Integrate fire support into each scheme of maneuver based upon commander's guidance for fires** • **Develop EFST to accomplish commander's intent** • ID HPTs for each EFST (Target Value Analysis) • Quantify the end states for EFSTs • Plan methods for EFSTs Allocate assets to acquire Allocate assets to attack Integrate triggers with maneuver COAs	• For each COA developed: Concept of fires Draft Fire Support Execution Matrix Draft target list/overlay Draft Target Selection Matrix (TSM) or modified TSM • FSO: FS information included in Bde WARNO

Continued on next page

Techniques and Procedures, Continued

MDMP STEP	INPUTS	FSCOORD/FSOs Actions	OUTPUTS
3 COA Development, continued		• use battle calculus • Assist S-2 collection plan refinement • R&S plan ID requirements (NAIs) Integrate FS assets	
4 COA Analysis 5 COA Comparison	• Concept for fires and draft fire support plans for each COA from MDMP step 3	• Targeting decisions - finalize HPTs and TSM • Wargame Fire Support Concept(s) Vs Enemy COAs • Test and refine Fire Support plans • Modify/refine draft Fire Support plans as required	• Final Drafts: Fires paragraph Fire support annex FSEM Target List Target Overlay TSM or modified TSM Fire Support Coordination Measures (FSCM)
6 COA Approval	• Final draft fire support plans for each COA	• Approval Briefing Fire support plan briefed as part of each COA Method to accomplish each EFST FSO presents analysis as part of battle staff	• **Commander: Selects, modifies, or approves COA** • FSO: Fire support information included in Bde WARNO
7 Orders Production	• Approved COA	• Finalize and reproduce written products • Manage refinement	• Fire support portions of OPORD • Fire support portion of OPORD Brief • Time, method, and location for the fire support rehearsal

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Techniques and Procedures, Continued

Preparation Throughout preparation the brigade FSO manages refinement of targets and triggers as enemy information is gained from reconnaissance and other sources. With this information, fire supporters continuously update and coordinate the fire support plan with both higher and lower echelons.

As soon as possible after the subordinate fire support agencies have rehearsed their fire plans the brigade fire support rehearsal should be conducted, preferably before the brigade maneuver rehearsal. The outcome of the fire support rehearsal should confirm or verify theses items:

- target list
- observation plan
- scheme of fire support
- event triggers
- event timing
- firing unit assignments
- volume of fire
- priority of targets
- communications
- fire support coordinating measures.

The brigade maneuver rehearsal includes fire support events that allow the brigade commander to verify the synchronization of his fire support and maneuver plans. Additionally, task force (TF) commanders will become familiar with the entire fire support plan, as opposed to only their part of the plan. The brigade FSO focuses on :

- the description of brigade controlled and directed fire support events, triggers for events, timing of events, and observation plan
- the transition of fire support from the deep, to close, to rear fight
- actions of fire support assets under brigade control (e.g. COLT, ALO)
- fire support coordinating measures.

Continued on next page

Techniques and Procedures, Continued

Mission execution

During mission execution, the fire support coordinator (FSCOORD), FSOs, and the fire support elements monitor the execution of the plan and the commander's decisions to ensure that fire support is meeting the commander's intent. Specific tasks include:

- Execute the fire support plan.
- Anticipate fire support changes from the developing engagement, and recommend revisions to the fire support plan.
- Coordinate all fire support in the brigade's zone or sector.
- Conduct clearance of fires.
- Override requests for fire, or direct that another system provide the requested fire support as necessary.
- Supervise target acquisition effort.
- Ensure continued flow of targeting information.
- Coordinate with the ALO on the brigade's use of tactical aircraft (TACAIR) assets.
- Generate fire support missions against targets of interest.
- Keep higher and lower fire support cells informed of supported forces situation.
- Exchange battlefield information with the field artillery and the supported force.
- Advise the commanders of the status of EFSTs and assets.
- Keep the brigade commander informed of the status of fire support assets.

Assessment Guide for the Commander and Observers

Observing this performance objective

Observers should monitor the interactions of the FSCOORD, FSO, and battle staff from receipt of mission through mission execution. The observers will provide information related to this performance objective at the after action review (AAR).

Fire support execution input from the Blue Forces Controller should be sought to assess whether the fire support plan was effective, integrated, and executable. The Blue Forces Controller's input should focus on the aspects of fire support execution that supports the maneuver plan and the commander's decisions during execution. The most useful observer inputs come from the Blue Forces Controller, who monitors workstation teams during execution. Information on losses to indirect fires, ordnance expenditures, and types of missions can be obtained as summary reports after the engagement from the simulation printouts. However, observers should avoid conducting the AAR based mainly on summary reports, as these reports reflect the limitations and artificialities of the simulation. The actions of the training audience should be the focus.

If the staff uses the planning process outlined in this performance objective, use Figure 1 as an aid in collecting information for the AAR. If the staff has an alternate process, the outputs identified in Figure 1 will only be helpful if the staff accomplishes key steps of the fire support planning process. In either case, follow-up observation may be necessary to adjudicate any refinement issues resulting from the COA approval briefing.

Suggested times for scheduled feedback

Scheduled feedback for this performance objective should be incorporated into the post execution AARs. This will give the opportunity for the brigade combat team to examine the fire plan's effectiveness, integration with other BOS, executability, and flexibility. Informal feedback should be given following the fire support or combined arms rehearsal, whichever is later.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

In determining the brigade's readiness for performing this task, discuss the following considerations:

1) Is the fire plan effective in supporting the concept of operations?

- How is the targeting process incorporated into the unit's planning process?
- How did the fire support plan define the effects desired on HPTs as a result of the wargame?
- Were all available acquisition and attack assets incorporated into the plan?
- What combinations of particular acquisition and attack assets are programmed against specific HPTs to support the commander's intent?
- How are EFSTs identified, and effects quantified, to assess accomplishment?
- How flexible was the fire support plan in addressing branches encountered during execution?

2) Is the fire plan integrated with the concept of operations?

- How were triggers for fires timed with maneuver and other BOS actions?
- What fires were planned to set conditions for maneuver elements to exploit?
- How did the FSO and S2 coordinate to ensure that there are adequate, redundant collection assets to find, track, attack, and assess the HPTs in the fire support plan?
- What synchronization issues had to be settled during the rehearsals?

3) Is the fire support plan executable?

- Does the fire support plan have the time, space, and resources to achieve the effects desired by the commander?
- What method did the staff use to communicate, simply and clearly, the plan to the staff and subordinate units?
- How well-defined were decision points and triggers for execution?
- Was the plan disseminated and understood by the Bde, TFs, ENGR, and FA battalion commanders and staff, FSOs, fire support elements, FISTs, company commanders, platoon leaders, scouts, chemical platoon leader, and ALO?
- What portions of the brigade and battalion commanders' intents for fires did the plan accomplish? What did the plan not accomplish?

Related Information

References

ARTEP 71-3 MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-3001, Establish Fire Support Cell
- Task 71-6-3002, Plan Fire Support
- Task 71-6-3003, Synchronize Fire Support
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CONDUCT A COMBAT HEALTH SUPPORT REHEARSAL

"Men, all I can say is, if I had been a better general, most of you would not be here."

-- George S. Patton, Jr. to wounded soldiers at Walter Reed Hospital, Washington, 1945

Good combat health support (CHS) rehearsals are not easy. They require a major work effort with sound preparation, discipline, and involve significant amounts of the precious commodity -- leader time.

The Brigade and Battalion Staff Exercise (BBSE) provides an excellent training opportunity to practice command and control of key medical support events. Throughout the brigade combat team (BCT), combat health planners prepare their support plans, but rarely are these plans synchronized with each other, or with the maneuver plan. Events are planned with little thought to specific information requirements and reporting responsibilities. This performance objective focuses the efforts of the BCT to coordinate these medical support plans and validate them in the *Combat Health Support Rehearsal.*

Objective

Doctrinally, the Bde Surgeon supervises preparation of the CHS plan. In reality, the planners of the brigade rear command post (Bde Rear CP) and the combat trains command post (CTCP) must prepare the plans as the Bde Surgeon's time is usually taken up by medical treatment needs. The concept for the CHS plan is developed by the brigade S4 during the decision-making process conducted at the Bde Main CP. The implementing plans are written by the forward support battalion support operations officer and the battalion task force (bn/TF) medical platoon leaders.

Prior to conducting the rehearsal, the combat health planners identify critical events and synchronize their plans. In addition to medical locations on the combat service support (CSS) overlay, these plans indicate the triggers for CHS events. At the CHS rehearsal, the combat health leaders validate their synchronized plans:

- The TF CTCP validates triggers for battalion aid station movement.
- The Bde Rear CP validates triggers for ambulance exchange post (AXP) movement.
- The Bde Rear CP validates triggers for aerial evacuation.
- BCT elements without organic medical support coordinate the location where medical support can be obtained. They also coordinate planned times those sites will be operational.

Techniques and Procedures

Overview

The CHS rehearsal is the culmination of the medical planning efforts for an operation. The brigade S4, as the officer in charge (OIC) of the bde Rear CP, has the responsibility for planning the CHS rehearsal. Though the Bde Surgeon is usually not available for planning, he/she should participate in the CHS rehearsal to validate all the CHS plans.

While the techniques for parallel planning of CHS are not the focus of this objective, the brigade, TF, and attached and supporting (slice) units must share information to conduct parallel CHS planning.

- All plans must be complete prior to the CHS rehearsal. During mission analysis, combat health planners identify the current and projected status of medical personnel, equipment, and supplies. During course of action (COA) development, the casualty estimates for each COA are developed and a concept of medical support is roughed out.
- During wargaming, the evacuation and treatment facets of the medical plan are synchronized with the maneuver plan.
- CHS rehearsals should focus on the events that are critical to mission accomplishment. A successful rehearsal will ensure explicit understanding by subordinate medical leaders of their individual missions, how their missions relate to each other, and how each mission relates to the higher headquarters plan. It is important for all medical echelons to see the total CHS concept.
- Rehearsing key CHS actions allows participants to become familiar with the operation and to visualize the "triggers" which identify the circumstances and timing for friendly actions. This visual impression helps them understand both their environment and their relationship to other units during the operation. The repetition of critical medical tasks during the rehearsal helps leaders remember the sequence of key actions within the operation.

The end result of a CHS rehearsal is a shared understanding of how the critical CHS events will be triggered executed.

Continued on next page

Techniques and Procedures, Continued

Planning the CHS rehearsal

The rehearsal is the responsibility of the Bde S4. His responsibilities include:

- Decide what events must be rehearsed.
  - ◊ Determine all the CHS activities on the CSS synchronization matrix to be rehearsed.
  - ◊ Focus on key events that must be carried out from just prior to line of departure (LD) time, through reorganization and consolidation.
  - ◊ Determine whether or not the rehearsal will include TF internal CHS decisions, such as TF mass casualty triggers and actions.
- Decide on the participants and observers for the rehearsal.
  - ◊ Participants provide information or perform actions causing triggered events to occur. Observers do not have a direct impact on triggered events, but gather information and answer questions as required.
  - ◊ The FSB Support Operations Officer represents all the FSB activities. The C Company Commander with the ambulance and treatment platoon leaders observe, but are not participants.
  - ◊ Determine which TF medical platoon leaders will participate. The reserve TF may need to participate, as the locations and displacement of its aid station may be critical to units without organic medical assets.
- Allow adequate time between the end of planning and the beginning of the CHS rehearsal for subordinates to develop their plans and synchronize them with brigade.
- Hold the CHS rehearsal on the same terrain model as the combined arms rehearsal.

The Bde S4 as Bde Rear CP OIC must inform key CHS personnel about the CHS rehearsal. This may be standing operating procedure (SOP) or via fragmentary order.

Continued on next page

Techniques and Procedures, Continued

An initial solution to key planning decisions

Participants

- Bde Surgeon (FSB Medical Company Commander)
- Bde S2 representative
- Bde S4
- FSB Support Operations Officer
- TF executive officers (XOs)
- TF Medical Platoon Leaders
- Aerial Medevac Team Leader.

Participants must be prepared to roleplay their portion of the plan and will bring:

- Bde/TF CSS execution matrix with locations
- Bde/TF graphics
- CHS execution matrix
- FSB execution matrix.

Observers

- FSB Commander
- Bde XO
- Bde S1 (Recorder)
- TF S4s
- C Company Ambulance Platoon Leader
- C Company Treatment Platoon Leader
- Bde Chaplain.

Time Target length of the rehearsal is one hour. The start time is 30 minutes after the combined arms rehearsal.

Location The CHS rehearsal should use the same terrain model used for the combined arms rehearsal.

Continued on next page

Techniques and Procedures, Continued

Introduction

The Bde Surgeon facilitates this CHS rehearsal. First the BCT Staff describes the situation in broad, general terms. This sets the conditions for each CHS event to be rehearsed. Participants will walk the terrain board and talk their "task and purpose" for each triggered event.

The overall situation for the operation begins the rehearsal.

The Bde S4 outlines:

- BCT scheme of maneuver
- key terrain
- concept of support.

The Bde S2 representative outlines the enemy threat to CHS:

- the threat (highlighting level 1 and 2 threats)
- likely enemy avenues of approach
- updated brigade intelligence data
- rear threats: artillery and aviation.

The FSB Support Operations Officer outlines:

- current brigade support area location
- critical CSS status of the medical company, ambulance and treatment platoons, specialty treatment, and aerial medevac teams.

Battalion aid station (BAS) movement

Each TF XO describes the situation that triggers action by his medical platoon. He always covers:

- TF scheme of maneuver
- location of lead and trail maneuver elements.

Each TF medical platoon leader then:

- describes the conditions that trigger movement of the aid station
- points out the new locations of the main and forward aid stations.

Continued on next page

Techniques and Procedures, Continued

AXP movement

The Bde S4 (Bde Rear CP OIC) describes the enemy and friendly situation that triggers action by the FSB.

The FSB support operations officer then:

- describes the triggers cause movement of the AXPs
- gives the new location of the AXPs.

Aerial medevac

The Bde S4 describes events/circumstances that may warrant using the aerial medevac team:

- number of casualties
- status of wheeled ambulances
- excessive time/distance for scout evacuation.

He also covers the restrictions on when and how aerial medevac will be used.

The medevac team leader then reviews the information requirements for an evacuation mission. This should be a part of every unit's SOP and should include army airspace command and control (A2C2) information and status of threat ADA.

BCT slice units

Each slice unit must know which medical activity will support them during different phases of the battle.

Summary

The Bde Surgeon will review:

- key features of the CHS plan
- the limitations on aerial evacuation.

The Bde Surgeon verifies that each of the brigade's subordinate units (TF, battalion, company, slice) know where and when medical support will be available throughout the operation.

Changes to the CHS plan are disseminated along with other changes to the brigade operation order generated by other rehearsals and preparation activities.

Assessment Guide for the Commander and Observers

Observing this performance objective

Plan and prepare

Though this performance objective focuses on the CHS rehearsal, preparation and synchronization of the CHS plans must occur throughout the BBSE. Here are some activities to watch during the exercise:

Mission Analysis

- Does the status of personnel, medical equipment, and medical supplies flow from BBS workstations through CTCPs to the Bde Rear CP?

COA Development

- Combat health planners should complete casualty estimates. During parallel planning, there should be estimate comparison between the Bde Rear CP and CTCPs.

Wargaming

- The combat health planner should have synchronization matrixes and service support sketches completed by the end of this phase. Sharing this information during parallel planning is vital to synchronization of the CHS plans. Information from the BBS Blue Forces simulation room can be useful in determining how well information flows and to what extent actions are synchronized with subordinate units.

Execution

During mission execution, other observers can provide feedback on the success of the CHS plan. Focus on the information flow between CTCPs and the Bde Rear CP and the timeliness of triggered events. The execution AAR should include information gained from the BBS Blue Forces room. Did the plan occur as planned? Were AXPs and aid stations positioned on the simulated terrain as planned? Were criteria for aerial medevac followed? Were triggers for displacements used and followed according to the plan? Do died-of-wounds rates indicate problems in staff procedures for supporting rapid evacuation?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Suggested times for scheduled feedback

The feedback sessions for this performance objective are handled differently than for other performance objectives.

- The first AAR should occur immediately after the CHS rehearsal for the AD mission, and will likely occur at the rehearsal site. This will require the observers to prepare before and during the rehearsal. This AAR audience consists of the participants and observers for the rehearsal. The focus of this AAR is rehearsal techniques and procedures.
- The second review of CHS should occur as part of the execution AAR for the AD mission. The audience includes brigade and battalion commanders and their staffs. The topic of CHS will be a small part of this AAR, but it will help the commander review this critical function.

Considerations for assessment

To adequately the staff's performance on this objective, observers must watch the staff's interactions throughout the rehearsal. Questions to consider include:

1) How well was the situation defined?

- What is the enemy threat to the CHS events? (artillery, aviation, maneuver)
- What does the staff identify as the current status of medical assets available to the brigade? Are all ambulances and helicopters assumed to be operational?
- Does the rehearsal cover the entire depth of the battlefield? What AXPs are open prior to crossing the line of departure? Do they support the recon/counter-recon battle?
- Are routes covered to include primary and alternate, and clean and dirty? Who decides on route changes?
- Does the CHS rehearsal cover branches or sequels to the BCT plan?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

2) Does each participant and observer understand their role in each triggered event?

- Who is the specific person tracking each trigger?
- What are the FFIR: specific information requirements (levels of casualties, availability of ambulances, distances to aid stations) in the CHS plan that must be tracked to ensure success?
- Is the communication plan sufficient to support the FFIR?
- Is A2C2 for aerial evacuation missions considered? Have routes been preplanned to all AXPs? Is SEAD considered?

3) Have the combat health planners synchronized their CHS plans prior to the rehearsal?

- What are the casualty estimates and estimated transit time to the medical company for each AXP? Are the FSB and TF estimates consistent? Who estimates the non-TF casualties? Where and when will these casualties occur?
- When must each AXP be established and what is the duration of operation for each AXP? Are specific quantities of ambulances, non-standard evacuation vehicles, and security described?

4) Is the BCT's comprehensive CHS plan adequately synchronized (higher/lower/lateral)?

- Is the brigade CHS plan linked with the TF and other slice unit plans?
- What flexibility is included in the CHS plan to support anticipated or unanticipated casualty levels?
- Has the staff synchronized the CHS plan with other CSS activities?
- Who has the responsibility for notifying the brigade slice units in the vicinity of AXPs?
- Is CL VIII resupply described?
- Are the differences between triggers and decision points made clear?
- Who is responsible for notifying the BCT slice units of where to receive medical care? Is a radio message over brigade admin/log sufficient?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

5) How are the changes made during the rehearsal disseminated?

- What changes (e.g., new AXPs, additional assets necessary) were needed in the CHS plan to support the scheme of maneuver? Who is responsible for disseminating changes?

6) Were all medical assets positioned throughout the rehearsal?

- Medical assets should be in position prior to first contact with the enemy.
- Those medical assets moving without triggers must be repositioned throughout the rehearsal.

7) Were AXP moves carried out according to the rehearsal?

- triggers should be used
- supported units should know of moves.

Related Information

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DECISION-MAKING IN A TIME-CONSTRAINED ENVIRONMENT

The military decision-making process (MDMP) is an analytical process that assists the commander and staff (battle staff) in developing a flexible, tactically sound, and synchronized plan to accomplish the assigned mission and protect the force. It is a proven process, with underlying principles that are adaptable to planning in a time-constrained environment. However, the techniques and procedures used for decision-making under time-constraints are different. The battle staff must define and practice procedures it will use to shorten the process and still produce flexible, tactically sound plans. The result of defining these procedures is a series of staff battle drills integrated into the decision-making process, driven by the commander. Command involvement, standard procedures focused on essential actions and information, and rehearsed staff battle drills are the keys to accelerating the decision-making process.

Objective

The brigade battle staff conducts an accelerated MDMP to produce a simple, flexible, and tactically sound plan within 12 hours from receipt of the division order. The commander uses directive guidance to focus the staff on his critical information requirements and limit the number of schemes of maneuver considered to produce a single course of action (COA). The battle staff wargames the single COA, with branches and sequels, against multiple enemy COAs (ECOAs) to complete the plan. The brigade uses timely warning orders (WARNOs) to facilitate parallel planning by subordinates.

Techniques and Procedures

Overview

Battle staffs routinely use the MDMP when available planning time allows them to thoroughly examine a combination of COAs and ECOAs. However, many factors may limit the time the staff has to develop and evaluate numerous COAs. The MDMP is still the foundation for planning in a time-constrained environment. The commander accelerates the decision-making process through combining steps of the process and focusing the battle staff effort on a single COA. The commander is directly involved with the staff during the process, providing responsive and definitive answers to develop, synchronize, and complete the plan quickly.

This performance objective presents one technique to conduct decision-making under time-constraints. The technique consists of five steps:

- receipt of mission
- mission analysis
- COA development
- COA analysis
- order production.

Parallel planning

Parallel planning is concurrent decision-making at several echelons. Although a routine procedure within the MDMP, parallel planning becomes critical in a time-constrained environment, where planning and preparation time for subordinate units is minimal.

Successful parallel planning relies on accurate and timely WARNOs from the brigade *and* a full sharing of information as it becomes available. The staff should not wait for a scheduled WARNO to disseminate information critical to subordinate unit decision-making.

WARNOs

The importance of WARNOs increases as available time decreases. Combat Training Center trends indicate the importance of standing procedures for the timing and content for the issue of WARNOs. The same procedures should be followed when the process is accelerated. This performance objective details the issue of four WARNOs as part of the decision-making process.

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Techniques and Procedures, Continued

Receipt of mission

The decision-making process begins with the receipt or anticipation of a new mission. The brigade may receive an order from higher headquarters or identify the new mission during operations.

At the receipt or identification of a new mission, the brigade makes an initial assessment of the time available and verifies current staff estimates. The commander then develops his initial guidance which transitions the staff to mission analysis.

Procedure

The battle staff:

- determines the time available prior to mission execution
- determines the time required for the brigade and subordinate units to plan and prepare for the mission
- verifies the level of intelligence preparation of the battlefield (IPB)
- verifies maps of the area of operations (AO)
- identifies staff estimates already available
- determines accuracy of information available through current staff estimates.

The commander issues initial guidance that covers:

- time allocations
- specifications to accelerate the decision-making process
- tactical options he is considering for the scheme of maneuver
- specific information requirements for mission analysis
- immediate reconnaissance requirements
- authorized movement.

Outcome

The primary outcome of this first step of the process is WARNO 1.

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Techniques and Procedures, Continued

First WARNO

The first WARNO alerts the subordinate units to the impending mission. It enables them to plan use of available time and to initiate their decision-making process.

It should include as a minimum:

- enemy information update
- division mission and commander's intent
- nature of brigade mission
- brigade AO
- priorities for support and supply
- initial preparation timeline.

Mission analysis

The purpose is to allow the battle staff to see the terrain, enemy, and themselves within the context of the higher headquarter's fight. The staff focuses first on answering the commander's specified information requirements from his initial guidance, then on analyzing related information. They determine the impact of the brigade's current and forecasted status and dispositions on any tactical options outlined by the commander in his initial guidance.

The commander makes his own estimate to include identifying any anticipated events or actions where he may be required to decide between tactical options during execution. These are the first potential decision points.

The staff briefs the commander by exception with presentations in the mission analysis brief limited to the coordinating staff. The special staff is prepared to present information upon request of the commander or to answer his questions. The briefing focuses on providing information that is essential to mission accomplishment and development of a COA.

The end state is for the battle staff to have a shared understanding of the current situation, the future mission, the effects of the current situation on the mission, and the commander's intent for the mission.

Continued on next page

Techniques and Procedures, Continued

Outcomes

The outcomes of the mission analysis process include:

- certain information from staff estimates
- logistics preparation of the battlefield (LPB)
- initial risk assessment (i.e., potential hazards)
- ECOAs
- reconnaissance requirements
- timelines
- commander's guidance
- WARNO 2.

Staff estimates

The estimates are the link between current operations and the future plan, and focus on available resources and capabilities. They are not formal estimates but answer the commander's specified information requirements from his initial guidance.

Logistics preparation of the battlefield

Logistics estimates are supported initially by LPB. The LPB is not mission-specific. The LPB contains projections and implications related to sufficiency of the area of operations, host nation support, and current and projected status of all logistical components.

Risk assessment

The battle staff:

- identifies potential hazards in the operation due to accidental risk
- assesses the hazards that cannot be controlled adequately at brigade or battalion level, and are most likely to result in the loss of combat power
- defines the level of risk for each hazard.

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Techniques and Procedures, Continued

Enemy Courses of Actions

ECOAs are a critical component of the decision-making process. They are instrumental during development of the friendly COAs and reconnaissance planning. The S2 briefs each ECOA as if he were the enemy commander, describing how he would sequentially deploy and commit his resources to achieve his objectives. He addresses enemy capabilities, as they are committed into the fight.

Each ECOA consists of a written description, a graphic representation (Situation Template) and a high value target (HVT) list. They include:

- location of immediate and subsequent objectives
- dispositions of identified and templated units
- reconnaissance objectives and tasks
- tasks and maneuver of main and supporting efforts
- dispositions and integration of fires
- dispositions and activities of engineer assets
- range fans for direct fire, artillery and air defense systems
- terrain effects on identified or templated weapon systems and radar
- likely timing and location of supporting air strikes or air assaults
- likely timing and locations of chemical attacks.

Reconnaissance requirements

The reconnaissance requirements are identified from the initial IPB products and division orders. They highlight the assets and information required to identify and distinguish the ECOAs.

They include as a minimum:

- gaps in the intelligence available
- reconnaissance requirements from division
- named areas of interest (NAIs) and specific intelligence requirements (SIR) that distinguish each ECOA
- assets available for reconnaissance
- acceptable risk for reconnaissance
- constraints on reconnaissance.

Continued on next page

Techniques and Procedures, Continued

Timelines The battle staff uses various timelines to assist and coordinate planning and preparation activities within the brigade. Examples of different timelines are:

- Planning timeline: used to coordinate the steps and activities for the decision-making process within the brigade staff.
- Preparation timeline: used to coordinate maneuver, combat support, and combat service support activities in preparation for the operation. It is issued with the first WARNO and updated with each additional WARNO.
- Enemy timelines: used in developing the friendly COA, wargaming, rehearsals, and execution.
- Friendly maneuver timelines: used in wargaming, rehearsals, and execution.

The timelines may be displayed together (a combination of planning, preparation, enemy, and maneuver) to show the linkage between critical events or tasks.

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Techniques and Procedures, Continued

Commander's guidance

Up to this point the staff has provided, to the commander, information tailored to the specific requirements he has for developing his vision of the fight. The process described here calls for the commander to give his guidance following that update. This guidance will be the basis for the second WARNO and the ground work for developing the COA. They are listed this way to help show how the guidance the commander develops provides major inputs for the WARNO.

There may not be a distinction between the commander's guidance and his visualization for the upcoming battle, which becomes the COA he provides to the staff. It depends on how far along the commander is in developing his vision for the battle. If he knows how he wants to fight the battle at the end of mission analysis, then specific elements of that description become his guidance and are used for the WARNO. If he has not yet developed that vision and intends to work with the staff in developing this through a distinct COA development step, he should issue his guidance to permit the publishing of WARNO 2, and then develop his COA with the staff's involvement.

The guidance expresses in specific terms when, where, and how he intends to mass his combat power to accomplish his mission according to the higher commander's intent. Although given verbally, the commander should provide a written copy if possible to preclude misunderstanding.

It should address as a minimum:

- intent for reconnaissance: purpose, method, acceptable risk, and end state
- initial intent for maneuver: purpose, method, decisive point, and end state
- prioritized ECOAs
- restated mission
- scheme of maneuver: deep, close, security and reserve, and rear
- integration of fires (effect, formation, function, and purpose)
- anticipated decision points
- updated CCIR
- tasks and priorities by battle operating system (BOS).

Continued on next page

Techniques and Procedures, Continued

Second WARNO

The second WARNO enables subordinate units to focus on their mission analysis with emphasis on IPB products.

The WARNO should include as a minimum:

- enemy order of battle, COAs, and timelines
- missions of adjacent units
- mission statement
- initial commander's intent
- brigade AO
- security and reconnaissance tasks
- initial concept of support: before operations
- attachments: modified combined obstacle overlay (MCOO), situation templates (SITTEMPs), ECOAs, and preparation timeline.

COA development

COA development in time-constrained decision-making is commander's business!

The ideal situation is for the commander to have visualized, the upcoming fight and have determined what he must do to win. This "movie clip" of the mission is the COA. It is his vision, intent, end state, key events, and decision points all rolled into a single script for the mission. As much of that script as the commander can outline is conveyed to the staff as the COA which is to be refined, synchronized, and completed and recorded as the plan for the operation. As early as possible, the commander starts to communicate this vision/COA to the command.

Continued on next page

Techniques and Procedures, Continued

COA development, continued

The commander's vision must account for at least two enemy courses of action. They are usually the most probable and the most dangerous. The commander must conclude what he thinks will drive the enemy commander to select one or the other. The commander's vision must include branches in his plan to account for either enemy choice.

The staff conducts a hasty wargame of the COA with the commander. They look for weaknesses which must be addressed, refinements which will improve, or clarification which will more better describe what the commander intends. If the COA is flawed, the staff must challenge the commander's concept. This step is one of the most difficult in developing the commander/staff relationship. The commander has to develop the ability to convey his vision to the staff. The staff has to develop the capability to rapidly assimilate and understand what the commander is describing. The staff must also be able to critique constructively, the commander's COA, without attempting to supplant that COA with those of their own.

During the hasty wargame the staff coordinates the initial movement and positioning of forces inherent in the scheme of maneuver. This initial positioning and synchronization will define the major conditions at critical points of the fight, and will be needed should the selected COA analysis technique not start with the earliest actions and proceed sequentially throughout the fight. For example, the box method will require information about positioning and actions of elements at the time the fight enters the box, not from the start of the mission.

The reconnaissance concept is developed as a part of this COA definition. If a separate cell begins reconnaissance planning, it must maintain close coordination with the battle staff as they continue the decision-making process.

The end state of COA development is a single flexible COA that clearly reflects how the commander expects to win the fight.

Continued on next page

Techniques and Procedures, Continued

Procedure

The following discussion assumes the commander has not "played out the battle in his mind," or visualized his own COA. Rather, it describes how the commander and staff work together to envision and develop the COA which will be the basis for the plan.

The preferred process is for the commander to have an emerging vision of the battle, and then to have the staff help him develop this vision and the resulting COA.

The commander's primary ECOA is used to develop the initial scheme of maneuver. A clear piece of acetate is placed over the first situation template. When complete, it will be the COA sketch and the base for the operation overlay.

During COA development the battle staff identifies events (e.g., such as employing close air support or lifting fires) and actions (e.g., such as the enemy following an alternative ECOA) that will require the commander decisions to complete the plan. These events and actions are designated *decision points*.

The decision points are graphically represented on the decision support template (DST) to facilitate synchronization during wargaming.

Refine tactical options

The commander identifies the decisive point (terrain, enemy, or maneuver phase). Forces are arrayed to obtain overwhelming combat ratios at that point. The main effort is identified, and forces allocated to supporting efforts are adjusted. The commander identifies initial command and control relationships for the arrayed forces and the basic graphic control measures are developed to support the allocation of forces and headquarters.

Continued on next page

Techniques and Procedures, Continued

Develop scheme of maneuver

The battle staff begins to translate the sketch into a descriptive scheme of maneuver. The scheme integrates maneuver with direct and indirect fires to depict how the arrayed forces accomplish the commander's intent. The commander identifies his high pay off targets (HPTs) from the HVT list. The battle staff identify subordinate unit tasks and purposes that support the scheme of maneuver.

The commander's involvement allows refinement of the COA prior to the formal wargame. However, while developing the scheme of maneuver the battle staff may identify events and actions where the commander cannot yet make a decision. These *points* are recorded on the DST. They will be refined during wargaming.

The initial support relationships for combat support and service support units are determined. The coordinating and special staff representatives develop their concepts of combat support and service support concurrently with the scheme of maneuver development.

Conduct hasty wargame

The battle staff conducts a hasty wargame to integrate branches for alternate ECOAs into the scheme of maneuver. The first enemy situation template is replaced by the second. The battle staff uses the ECOA and enemy timeline to determine friendly timing and actions required for each branch. The battle staff uses the original friendly dispositions and scheme of maneuver to determine the actions required to shift against the ECOA.

Analysis of enemy and maneuver timelines help identify the decision points to initiate these branches. These decision points are integrated into the DST.

Complete the COA

The commander then reviews the reconnaissance concept to ensure it supports the scheme of maneuver and DST. The commander reviews and approves the task organization for the scheme of maneuver.

The staff continues the hasty wargame to integrate the concepts of combat support and service support into the scheme of maneuver.

Continued on next page

Techniques and Procedures, Continued

Outcomes

The outcomes of COA development are:

- tactical risk assessment
- COA statement and sketch
- DST
- concept for reconnaissance
- concepts for combat support and service support
- WARNO 3.

Tactical risk

The battle staff evaluates accepted risk within the COA. They consider the effects of enemy action where the brigade has accepted risk, such as an economy of force. They also consider where an opportunity may be lost due to an educated gamble, such as the trade between using an unexpected avenue of approach (AA) to achieve surprise versus the potential disruption in employing combat power at the decisive point. The commander determines when and where he will accept tactical risk.

Continued on next page

Techniques and Procedures, Continued

COA statement Reading the COA statement should produce a visualization of the operation.

The COA statement should describe as a minimum:

- concept for deep operations
- concept for close operations
- task organization
- objective for reconnaissance
- security operations
- main and supporting efforts
- integration of maneuver with fires (direct and indirect)
- integration of additional combat multipliers
- specific tasks for subordinate units
- positioning and purposes for the reserve
- decision points and actions to adjust to alternate ECOAs.
- concept for rear operations (include composition of tactical combat force).

COA sketch The COA is graphically portrayed on acetate. It contains the minimum number of control measures required to control the operation and reflects the command and control relationships that have been designated. Viewing the graphics, even with reading the COA statement, should provide a vision of the operation.

Control measures depicted are based on:

- nature of the operation
- terrain
- types of units
- tasks assigned to units
- risk assessment
- command and control relationships.

Continued on next page

Techniques and Procedures, Continued

Decision support template

Each decision point portrayed on the DST should contain:

- location
- priority intelligence requirements (PIR) and observer
- friendly maneuver or actions required
- positioning and purpose for the reserve
- attack guidance.

Concept of reconnaissance

The concept of reconnaissance is developed simultaneously with the COA. It is developed from the requirements identified during mission analysis and the commander's guidance. The concept consists of a written description of the reconnaissance effort and an overlay (draft event template). Coordination with COA development is essential to ensure units slated for reconnaissance are not assigned conflicting maneuver tasks.

The statement describes who, what, where, when, and how reconnaissance is executed. The overlay identifies the NAIs, the specific information requirements for each NAI, and the limits of responsibility for reconnaissance within the brigade.

Concept for combat support

Concepts for combat support detail how combat multipliers are integrated into the scheme of maneuver.

As a minimum, they should describe the following:

- commander's priorities for effort and support (by phase if used)
- organization for combat (specific units need not be designated)
- support relationships (direct support, general support)
- scheme of movement and positioning of units
- tasks for units (e.g., Essential Fire Support Tasks)
- draft execution matrices
- draft target list and overlays.

Continued on next page

Techniques and Procedures, Continued

Concept of service support

The purpose is to provide the commander and staff a visualization of how the operation will be supported.

As a minimum, the concept of service support should describe the following:

- commander's priorities for support (by phase if used)
- scheme of movement and positioning of units
- tasks for units
- draft execution matrix
- mission-specific service support requirements.

Third WARNO

The third WARNO facilitates continued mission analysis by subordinate units.

The WARNO should include as a minimum:

- changes to enemy and friendly situation
- scheme of maneuver
- tentative battalion areas of operations
- tentative subordinate unit specific tasks
- reconnaissance instructions based on reconnaissance concept
- additional service support priorities and instructions
- attachments (i.e., updated preparation timeline).

Continued on next page

Techniques and Procedures, Continued

The remaining steps in the time-constrained process do not differ from the steps described for MDMP – with these exceptions:

1. The commander should be at the wargame. If he cannot be there, he must be briefed on the results and approve the results, direct any changes, and give any additional instructions for publishing the order.
2. Only one COA is wargamed against multiple enemy COAs. The wargame refines and synchronizes the one COA rather than forming a basis for comparing multiple COAs.
3. The purpose of wargaming is to complete the plan, not to evaluate multiple COAs for later comparison.
4. The brigade may have less time to produce its order.
5. The method, scope, or length of rehearsals may need to be modified.

The techniques and procedures while not unique to the time-constrained process are provided here as guides for the remaining steps.

COA analysis

COA analysis consists of formal wargaming to determine how best to employ combat power while considering force protection measures. It enables the battle staff to develop a shared vision of the battle while anticipating potential battlefield events. The step of COA approval is integrated into analysis.

The purpose is to refine and synchronize the COA. The commander leads the formal wargame to ensure that responsive and definitive answers are provided to resolve all issues. The COA must be wargamed against a minimum of two ECOAs to confirm decision points associated with enemy contingencies.

The DST is refined into the decision support matrix (DSM). During wargaming some decision points are converted into triggers. Decision points that represent anticipated decisions during execution are refined and retained on the DSM. Critical information required for the execution of either decision points or triggers are incorporated into the CCIR.

The end state is a synchronized plan based on potential enemy actions.

Continued on next page

Techniques and Procedures, Continued

Procedure

Table 1 presents a procedure for wargaming. Maneuver is integrated with direct and indirect fires. It ensures the effective use of all combat multipliers and that maximum combat power is employed at the decisive point. The commander can make the initial assumption that subordinate commands can handle normal situations within the scheme of maneuver. This allows the battle staff to focus on essential tasks and decision points.

Terrain management during maneuver is essential for the movement and positioning of combat support assets at the decisive point. The scheme of maneuver is synchronized with the capability to provide combat support and service support. Positioning of Forward Logistics Elements, Class III or refuel on move points, and Class V rearm points is critical for the brigade to retain the initiative for future operations.

Decision points are refined to ensure the timing of execution will have the maximum impact on friendly or enemy COAs. For points that present the commander a planning option, he determines the timing, criteria, and desired end state. Synchronization during wargaming by the battle staff converts these points to triggers and they are incorporated into execution matrixes.

The points that represent anticipated decisions for the commander during execution are synchronized and become the DSM. The matrix lists the decision points and their locations; PIR for each point; the action or option to occur at each point; the units that have the responsibility to observe and act; and the positioning and purpose for the reserve.

Critical information required to execute triggers or decision parts is incorporated into the CCIR. Examples of these CCIR include:

- When and where the AT-5s establish a firing line (PIR).
- When DS FA Bn has occupied position areas of artillery 1 and 2 (friendly forces information requirements).
- The movement of the reserve from AA RITA to AA KATE (essential elements of friendly information [EEFI]).

The targeting cell completes the first step of the target process to produce the attack guidance.

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Techniques and Procedures, Continued

Table 1. Wargame Technique

S3 briefs the COA. The commander briefs his intent.

ECOA	Event	Wargame Activity
S2 briefs first ECOA	Executive Officer (XO) selects the first event	S2 reviews HPT list S2 and S3 move unit symbols Staff conducts action/ reaction/counteraction process Record results: Adjust HPT list Adjust the scheme of maneuver Confirm and refine decision points Adjust the scheme for fires and attack guidance Adjust graphic control measures Modify task organization Modify reconnaissance plan Modify service support plan Add/delete/modify CCIR Synchronization tasks by BOS
	XO selects next event; repeat activities until ECOA is complete	
S2 briefs second ECOA	Repeat procedure to wargame against second ECOA	
	Friendly units start in same positions	
	Enemy units starting positions based on different ECOA	
	Staff conducts action/reaction/counteraction	
	Record actions and time for shifting forces to meet ECOA	

Continued on next page

Techniques and Procedures, Continued

Outcomes

The outcomes from COA analysis are:

- shared understanding of the COA
- accepted risk
- a synchronized plan
- refined reconnaissance plan
- additional coordination required to complete the plan
- WARNO 4.

Shared understanding

The battle staff recognizes the commander's vision for the fight and the decisive point, and understands when and where to maximize combat power against the enemy to ensure success while protecting the force. They understand the primary enemy scheme of maneuver, its transition points to sequels (exploiting success), and identification of alternate ECOA schemes of maneuver.

Accepted risk

The battle staff completes the risk assessment during wargaming.

The commander determines the level of residual risk he will accept to accomplish the mission. Acceptable risk may be through unit dispositions such as an economy of force to enable massing combat power at the decisive point. It may also be through the scheme of maneuver and integration of fires that poses some risk of fratricide. He must receive the division commander's approval to accept any risk that might endanger his higher commander's intent. The commander refines and approves the control measures that reduce risk. These measures are immediately incorporated into the COA.

Continued on next page

Techniques and Procedures, Continued

Synchronized plan

The synchronized plan should address:

- task organization
- intelligence
    - refined situation template
    - refined event template
    - refined SIR and PIR.
- concept of the operation
    - revised intent
    - maneuver
        - operations graphics
        - decision support matrix.
    - fires
        - scheme of fires
        - attack guidance matrix
        - control measures
        - refined target lists and triggers
        - CAS requests.
    - reconnaissance plan
    - engineer support plan
    - air defense plan to protect the force
    - smoke plan and triggers.
- concept for service support
    - casualty evacuation
    - traffic flow on MSR and SRs
    - CL III and CL V expenditures
    - priorities for reorganization based on future missions.

Continued on next page

Techniques and Procedures, Continued

Refined reconnaissance plan

A separate wargame should be conducted to synchronize the reconnaissance concept. The concept is then integrated into the brigade's formal wargame to ensure it supports every COA. The formal wargame may alter the commander's reconnaissance objective or PIR. Modifications from the formal wargame are incorporated into the concept to complete the plan. The reconnaissance order is submitted to the commander for approval.

Note: If the reconnaissance order has been previously issued, these modifications are issued in a fragmentary order.

Commander approval

When the commander is present for wargaming, no approval is needed. He summarizes changes, revised guidance, and instructions for the order, and instructs the XO to proceed with orders production.

Additional coordination required

The staff must recognize that additional coordination may be required to complete the plan. They must identify events and critical tasks that require additional synchronization, and determine the actions needed for final synchronization of events an tasks to complete the plan.

Fourth WARNO

The fourth WARNO allows subordinate battle staffs to complete mission analysis and COA development prior to issue of the brigade operation order (OPORD). It may be considered a read ahead copy of the OPORD.

The WARNO should include as a minimum:

- enemy situation update
- refined commander's intent
- concept of the operation
- battalion/task force sectors or zones
- confirmed subordinate unit specific tasks
- CCIR
- concept of service support
- attachments (i.e., draft operations overlay; DSM; and updated preparation timeline).

Techniques and Procedures, continued

Orders production

Order production consists of final coordination to complete the plan and prepare the order for issue. The brigade must provide subordinate units a flexible, tactically sound plan in a timely manner.

The purpose is to complete the plan that clearly and concisely details the brigade fight. The key for effective order production is to incorporate products developed during the MDMP directly into the order. The order records the assignment and synchronization of missions and tasks for all units assigned to or supporting the brigade.

It is recommended that the commander not delegate his authority for order approval. The commander's personal review and approval of the order ensures clarity of intent, and continuity between tasks and purposes for subordinate and supporting units.

Even though time will be short, a complete order should be produced. Matrixed orders or other abbreviations at brigade level do not adequately record the instruction, synchronization, and tasks associated with BCT operations.

The end state is an order that verbally and graphically portrays the brigade fight and subordinate unit roles in that fight.

Procedure

There are four aspects to orders preparation:

- complete the plan
- review and approve the draft order
- reproduce the order
- issue the order.

Outcome

The outcome of orders production is an OPORD including supporting annexes with graphics.

Assessment Guide for the Commander and Observers

Observing this performance objective

To assess the staff's performance on this objective, observers must observe the staff interactions throughout the decision-making process.

Receipt of mission

Key activities for observation during this step are the staff huddles conducted after receipt of division WARNOs and the OPORD; time analysis to develop planning and preparation timelines; interaction between the staff during LPB; the issue of the commander's initial guidance; and the development of the first brigade WARNO.

Additional activities that may be observed are the interaction between the brigade and subordinate staffs to determine the validity of the brigade's current estimates and unit status reports; and the interaction between brigade and division to resolve any of the brigade's requests for information (RFIs).

Mission analysis

Key activities for observation are staff huddles to disseminate information; interaction between the staff during IBP; the procedures used to identify the reconnaissance requirements; the procedures used to allocate resources within staff sections; the techniques used to establish priorities in gathering information; the interaction between the commander and staff in developing the initial CCIR; and the development of the second WARNO.

Additional activities that may be observed are the interaction between the brigade staff, and higher and subordinate staffs to resolve RFIs or gather information.

The observers verify the accuracy of the staff's status charts and reports by checking the actual status in the blue cells with that presented in the mission analysis brief.

COA development

Key activities for observation are the battle staff procedures emphasizing increased commander's involvement to develop a COA. These activities include: the identification of decision points and development of the DST; the use of ECOAs to develop the scheme of maneuver, branches, and/or sequels; and procedures used to develop and integrate concepts for combat support and service support into the scheme of maneuver.

Additional activities to be observed are the procedures used to develop the reconnaissance concept; the coordination conducted to integrate the recon concept into the scheme of maneuver; and the development of the third WARNO.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

COA analysis

The observer should check with Exercise Control (EXCON) prior to the start of the wargame to determine if the brigade commander attempted to backbrief his COA to the division commander (roleplayer).

Key activities for observation are the battle staff procedures to integrate the commander into the wargame. These activities include: the selection of wargame methods and recording technique; the delegation of wargame responsibilities between the commander and the executive officer; the procedures used to conduct the wargame; the resolution of decision points and development of the DST; integration of the targeting process into the wargame; and interaction between the staff to synchronize activities.

Additional activities for observation are staff huddles conducted after the wargame for coordination to complete the plan; procedures to incorporate and disseminate changes to the reconnaissance plan; and the development of the fourth WARNO.

Order production

Key activities for observation are the procedures used to coordinate completion of the plan; to compile and produce the order; to review and approve the order; and to reproduce the order.

Suggested times for scheduled feedback

Two feedback sessions are recommended for this performance objective. The first should be conducted sometime after the mission analysis brief and the commander's guidance. The second should be conducted sometime after the orders brief.

The first session allows the battle staff to review how well they answered the commander's specific information requirements, and to look at how well the enemy ECOAs were described. Including the commander's guidance allows the discussion to include how rapidly the commander was able to develop his vision for the battle and frame it in terms of his guidance.

The second session can occur at any point after the orders brief. It may even be delayed until after mission execution.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

In determining the brigade's readiness for performing this task, discuss the following considerations:

1) What procedures assisted the acceleration of mission analysis?

- How did the commander intend to accelerate the decision-making process?
- How did the commander focus the staffs activities in acquiring information?
- How did the battle staff allocate time for planning and preparation prior to mission execution?
- Does the battle staff have procedures for obtaining and presenting the information the commander desires from mission analysis?
- What staff procedures facilitate the development and maintenance of running estimates?
- How did the commander's guidance accelerate and focus the battle staff's continued planning activities?

2) What procedures contributed to producing a single, flexible, tactically sound COA?

- How did the commander's guidance drive COA development?
- How did the battle staff develop the scheme of maneuver?
- What criteria was used to determine decision points within the COA?
- How did the hasty wargame contribute to completing the COA?
- How did the battle staff develop and integrate the reconnaissance concept?
- What were the components of the completed COA?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

3) What procedures contributed to producing a complete plan through wargaming?

- Was the COA backbriefed to the division commander prior to wargaming?
- What factors influenced the wargame method and recording technique selected?
- How did the commander's participation influence the conduct of the wargame?
- How were the decision points refined?
- How were the CCIR refined?
- How was the reconnaissance concept refined?
- How effective was the wargame method for synchronizing the entire operation?
- What activities after wargaming were required to complete the plan?
- What actions critical in compiling the order could become standard procedures?
- Was sufficient time allocated for order reproduction?

4) What procedures facilitated timely, descriptive WARNOs that facilitate subordinate parallel planning?

- What factors influenced the number of WARNOs issued to subordinate units?
- What criteria were used to determine the content of WARNOs?
- What additional information was disseminated directly between staff sections to facilitate parallel planning?
- How did the use (or lack of) standard WARNO formats and content contribute to the issuance of effective WARNOs?
- Would subordinate units have benefited from the issue of additional WARNOs?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

5) How effective were the procedures used to accelerate the decision-making process and produce a flexible, tactically sound plan?

- Does the battle staff have standard procedures (battle drills) to accelerate the decision-making process under prescribed conditions?
- Does the battle staff have standard procedures for the conduct and content of briefings in a time-constrained environment?
- Does the battle staff have any pre-printed forms to assist in recording and disseminating information?
- Does the battle staff have a shared understanding of and procedures for identification of decision points and use of the DST and DSM?
- Does the battle staff have procedures to associate wargaming methods with recording techniques?
- Does the staff have standard procedures to facilitate wargaming with and without the commander's involvement?
- Does the staff have procedures to integrate related processes, such as the targeting process, into the decision-making process? Under time-constraints?
- Does the staff have a procedure to dictate the content and timing for the issuance of WARNOs?
- Do the procedures facilitate issuing a flexible number of WARNOs?

6) What procedures could be standardized into battle drills to improve decision-making under time-constraints?

Related Information

References

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- 1-6-1056, Conduct Intelligence Preparation of the Battlefield
- 71-6-1004, Produce Intelligence Products
- 71-6-1051, Process Combat Information and Intelligence
- 71-6-1002, Coordinate the Reconnaissance and Surveillance Plan
- 71-6-1003, Produce a Reconnaissance and Surveillance Plan
- 71-6-3002, Plan Fire Support
- 71-6-3003, Synchronize Fire Support
- 71-6-3005, Analyze Targets
- 71-6-2651, Develop the Engineer Estimate
- 71-6-2657, Prepare an Obstacle Plan
- 71-6-2652, Plan employment of FASCAM
- 71-6-8015, Coordinate NBC Operations
- 71-6-3101, Provide ADA Input to the Command Estimate
- 71-6-3102, Coordinate Air Defense Operations
- 71-6-3103, Command and Control ADA Operations
- 71-6-6021, Sustain the Brigade
- 71-6-0631, Conduct Logistical Planning
- 71-6-0001, Direct the Brigade Staff
- 71-6-0003, Direct the Brigade Staff Planning Process
- 71-6-0002, Analyze Mission
- 71-6-0015, Issue Commander's Guidance to Staff
- 71-6-0016, Develop Course of Action
- 71-6-0018, Evaluate Concept/COA
- 71-6-0004, Provide Operations Input into the Command Estimate
- 71-6-0050, Develop the Brigade Operations Order
- 71-6-0007, Synchronize Rear Operations with Close Operations
- 71-6-0307, Synchronize Close Air Support
- 71-6-0270, Synchronize Air Defense Artillery

continued on next page

Related Information, Continued

References, continued

FM 100-5 Initial Draft, *Operations*, 04 April 1997

- Part Three, The Art of Operations; Chapter 2, pp. III-2-23/27

FM 101-5, *Staff Organizations and Operations*, 31 May 1997

- Chapter 5, The Military Decision Making Process
- Appendix A, Mission Analysis Guidelines
- Appendix B, Commander's Guidance Guidelines
- Appendix C, Staff Estimates
- Appendix H, Plans and Orders
- Appendix L, Liaison

ATTACHMENT 1: Suggested Brigade WARNOs

WARNING ORDER #

References:

Time Zone Used Throughout Order:

1. SITUATION

a. Enemy forces

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *General situation* • *Divisional ECOAs*	• *Order of battle* • *Bde ECOAs* • *Enemy timeline*	• *Situation update*	• *Situation update*

b. Friendly forces

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *Situation update (optional)* • *Division mission* • *Division Cdr intent*	• *Division concept of operation* • *Adjacent units*	• *Situation update*	• *Situation update*

c. Attachments and detachments *As required with each order*

2. MISSION

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *Nature of mission*	• *Mission statement*	• *Change only*	• *Change only*

3. EXECUTION

Intent *Commander's intent included in second warning order and updated if required in fourth warning order.*

a. Concept of operation

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *Bde area of operations (maneuver box)*	• *Security instructions* • *Reconnaissance instructions*	• *Bde scheme of maneuver* • *Bn/TF area of operations (maneuver boxes)*	• *Concept of operation* • *Maneuver* • *Bn/TF sectors; BPs; or zones*

b. Tasks to maneuver units

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *As required*	• *Based on security/ reconnaissance instructions*	• *Tentative specific tasks based on scheme of maneuver*	• *Confirmed specific tasks based on concept of operation*

c. Tasks to combat support units *As required with each order*

d. Coordinating instructions

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order
• *Date Time Group (DTG) of Bde OPORD and rehearsals* • *Additional as required*	• *Initial movement instructions* • *Risk guidance* • *Additional as required*	• *Additional based on chosen scheme of maneuver*	• *CCIR* • *Additional based on concept of operation*

4. SERVICE SUPPORT

First Warning Order	Second Warning Order	Third Warning Order	Fourth Warning Order

• *Priority by unit*
• *Priority of Class resupply*
	• *Concept of support:*
	  • *Before*
		• *Concept of support:*
		  • *Update*
		  • *Before*
			• *Concept of support:*
			  • *Before*
			  • *During*
			  • *After*

5. COMMAND AND SIGNAL *As required with each order*

   a. Command

   b. Signal

ACKNOWLEDGE:

NAME (Cdr's last name)
RANK, BRANCH
Commanding

OFFICIAL:

NAME (S3's last name)

ATTACHMENTS:

First Warning Order	*Second Warning Order*	*Third Warning Order*	*Fourth Warning Order*
None required	*1. Timeline* *2. Intel Estimate* • *MCOO* • *SITTEMPs (ECOAs)*	*1. Timeline (updated)*	*1. Timeline (updated)* *2. Bde draft Operations Overlay* *3. DSM*

PLAN AND EXECUTE A DECISION POINT

As the brigade commander and staff plan, they identify key points in the fight where major decisions must be made. These become decision points and are central to the brigade's plan for the operation. The staff must now plan for, assemble, analyze, monitor, and provide to the commander at the appropriate times, the information he will need to anticipate and make required decisions. Staff procedures that facilitate and provide positive control over this process can be practiced and refined during simulation supported training exercises.

Objective

The need for decision points and how they assist the commander's visualization of the battle is clearly communicated and understood by the staff. The commander's critical information requirements (CCIR) are specified. Primary intelligence requirements (PIR) are addressed in the reconnaissance and surveillance (R&S) plan. The staff aggressively pursues satisfying these CCIR and monitors the progress of the command as it fights for that information. They seek solutions to information shortfalls and keep the commander apprised of problems. Subordinate units are aware of their roles in providing information to support the decisions and their tasks in implementing the decision options. As decision points approach, the staff assembles, reviews, and presents to the commander the CCIR required for the decisions. Staff processes supporting these decisions are described in the SOP and are a topic of routine staff training.

Techniques and Procedures

Overview

Decision points are anticipated decisions that have potentially significant impacts on the fight. Therefore, the commander is willing to expend considerable staff effort to plan, prepare, and make these decisions.

Decision points can be identified at any point during the decision making-process. Commanders who have a vision for how they plan to develop the battle may identify them when providing their guidance during mission analysis. Those who let their staffs develop the course(s) of action, will usually have the staff recommend decision points as part of the course of action (COA) recommendation.

Whether the decision points come from the commander or from the staff, they generate the same requirements.

Planning

As he identifies or approves the need for a decision point, the commander identifies the point in the battle, the reason for the decision, and the options he will consider. He also specifies the information requirements that support the decision in his CCIR.

The staff records the decision point in the operations order. The Decision Support Matrix (DSM) summarizes the key information associated with the decision point. The CCIR and specific tasks relevant to the decision point are recorded in paragraph 3. Instructions and orders to subordinate units are included in their operations and support orders. Reconnaissance orders are issued or modified to account for new or changed PIR.

Subordinates state their role in preparing for decision points in their plans and orders.

Continued on next page

Techniques and Procedures, Continued

Preparation Rehearsals include decision points.

The staff monitors progress towards satisfying the PIR and makes adjustments to the R&S effort.

Execution During execution, the battle staff tracks the assembly of the required information, provides it to the commander, and after the commander reaches his decision, implements the chosen action.

Planning

Characteristics of decision points As discussed in the Overview, decision points can be identified either by the commander or by the staff as the COA(s) for a battle are developed. They have the following characteristics:

- They are ANTICIPATED decisions which the commander cannot make during planning. Uncertainties about the enemy, the environment, or the possible outcomes of previous events require the commander to have the flexibility to tailor his unit's actions subsequent to the decision point. He decides to defer making these decisions until the uncertainties have been resolved.

- The plan could contain a decision point which would be reached prior to the start of the operation. Throughout planning, the staff identifies issues which require decisions in order to complete the plan. The staff resolves those issues within its authority and seeks commander guidance on those which require his approval. Resolved issues are incorporated into the plan. Those that cannot be resolved become decision points to be reached either before or after the start of the operation.

Once chosen, decision points become a major focus for the entire brigade combat team (BCT). They must be treated as exceptional issues throughout planning, preparation, and execution, and can consume considerable command and staff time and effort.

Continued on next page

Techniques and Procedures, Continued

Identification of decision points

The commander should identify decision points as soon as he can in the decision making-process. Decision points invariably result in reconnaissance tasks for subordinate elements. If these requirements can be included in early reconnaissance plans, fewer adjustments will be required after reconnaissance begins.

Commanders may be able to generate a clear vision of how they will fight the battle and are able to see battles played out in their minds before they actually occur. If so, commanders can identify, with their earliest guidance to their staffs, the specific decision points they have "seen" will be necessary.

If the commander has specified a decision-making process where the staff develops the COAs, he can leave the development of decision points to the staff as a part of that process. He may be able to anticipate the battle to a certain point, but wants to develop a plan which provides tactical options from that point forward. In this case he can use his guidance to require his staff to develop a decision point which retains the options he will need at that point.

The bottom line is that decision points are a commander's tool for including flexibility in his plan. A plan without genuine decision options is an inflexible plan that focuses the commander to react to, rather than allowing him to shape, unfolding battlefield conditions.

Commander's guidance for a decision point

When a commander selects a decision point, he now must provide guidance to the staff. As a minimum that guidance must address:

- why he is deferring making the decision
- when or at what point he will have to make the decision
- the options he will have or wants to have available at that point
- the purpose or need for the decision and how it supports his vision for the COA
- the information (CCIR) he will need to make the decision
- any specific staff actions he wants to occur at the time of the decision.

Continued on next page

Techniques and Procedures, Continued

Why he is deferring the decision

If the commander and/or his staff have visualized how they plan to fight the battle, they will know which decision points depend on an unpredictable enemy or battlefield situations. The commander, in his guidance, should share that scenario for the battle with the staff.

For example: "I don't want to decide whether to send the follow and support task force [TF] through Brown or Debnam pass until I know which breach has the most cleared lanes and whether the enemy forces which we expect to be defending those passes are withdrawing north or south of crash hill."

The commander has clearly placed a decision point in his plan and conveyed why he must wait to make that decision.

The point of the battle

The decision point will usually be tied to a battle event or to achieving a certain set of conditions. The more precise the commander can be in specifying that point, the easier it will be for the command to anticipate the upcoming decision.

For example: "I will have to make that decision before the follow and support task force crosses the LD [line of departure]..." provides good definition of when this event might occur.

"...before the lead company of the follow and support task force crosses the LD..." provides a more precise definition of the event.

"I will make that decision when we have defeated the FSE [forward security element]..." describes the attainment of a set of conditions, which may be associated with a decision point.

"...when we have destroyed all the tanks in the FSE and have the remainder of the vehicles fixed..." provides a more definitive set of conditions.

The issue is for the commander to have clearly in his mind what battlefield situation or conditions will define when the decision can or must be made.

Continued on next page

Techniques and Procedures, Continued

Options If the commander knows what choices he has available, he should specify them to the staff. Each choice will usually result in a series of "on order" or "be prepared" missions or tasks for subordinates. While the details will probably be worked out by the staff, the commander's clear statement of what branches or sequels he is considering will ensure that the staff's solution meets the commander's vision.

"I will need to decide whether to shift the main effort to the south or have it continue to the north..." provides the two options the commander is considering.

"I will need to decide whether to shift the main effort to the south along the high ground from Hill 321 to Hill 245 or to have it continue to the north toward Hill 333..." provides more specific guidance concerning what the commander is considering.

Purpose The commander quickly summarizes why this choice is necessary.

"...In order to concentrate the effort against the southern MRC or northern MRC." provides information about why he is considering shifting the main effort.

"...In order to concentrate two task forces against the southern MRC's left flank or to force the attrited northern MRC to be faced by a task force in an assault by fire position and an assaulting TF from another direction." provides a clearer understanding of why he is considering shifting the main effort.

This is not intended to become a drill of developing mission task and purpose for each contingency, but one of clearly communicating to the staff why the commander sees this as a choice.

Continued on next page

Techniques and Procedures, Continued

CCIR The commander will require certain information on which to make his decision. This information will become the CCIR for this decision point. The CCIR will likely include all three elements:

- PIR: Primary Intelligence Requirements; what he must know about the enemy and the environment at that point
- FFIR: Friendly Force Information Requirements; what he must know about his own forces
- EEFI: Essential Elements of Friendly Information; what information about his own force that he wants to deny the enemy.

PIR The PIR are usually addressed through the R&S plan. The specific requirements must be included in the plan and will frequently require additions to or adjustments of an R&S effort already in progress.

The staff must look at the specific factors associated with each bit of intelligence that the commander is asking for: when and where can it be determined, how can it be confirmed, what are back up systems, when will we likely know if we are on track to accomplish the requirement. This should be a part of the R&S planning procedures routinely used by the brigade.

As these PIR are tasked to subordinate units, the linkage to the decision point should be clearly specified.

Some of the PIR will not be answerable until the actual operation. For example, "As we reach decision point 1, I must know if the enemy has reacted to our fight flank and repositioned his Combined Arms Reserve." This PIR becomes important to every unit in the BCT, because they must know that at this point the commander will be searching for this vital bit of information about the enemy. The R&S plan may task a unit to position an asset to discover that information. Each leader, however, must also be attuned to observing and providing that information back to the brigade commander.

Each TF and subordinate commander must be sensitive to the fact that the brigade commander is going to demand that information and will have a very bad day if he doesn't get it before he wants to make his decision.

Continued on next page

Techniques and Procedures, Continued

FFIR As the commander reaches a decision point he will want to know the location, condition, and activities of his own forces which are key to his decision. He can use the FFIR to specify the conditions that must be met for his own forces and what he must know before he will make the decision. These FFIR can be a quick way of setting the friendly criteria for the decision.

For example, he might specify that before he reaches a decision point, he must have artillery in position to range the final objective and he must have one TF through a particular obstacle or past a particular point on the battlefield.

The information that will tell him that those conditions have been met will become FFIR for the decision point.

These FFIR must be clearly conveyed to the staff. He should specify only those which are essential to his decision and **usually not use a broad condition**, such as, "I want to know the location of all BCT elements."

A more specific statement follows: "Before I make this decision, I want to know TF 1-5's progress through the obstacle, the location and status of the reserve, and the estimated time of arrival of the close air support."

He may include logistical or readiness conditions of specific units and establishment of key communications capabilities in his requirements for his FFIR.

EEFI Key to his decision may be denying the enemy certain information about the BCT. In his guidance for a decision point, the commander may cover those things about his own force which would limit the enemy's ability to discover what decision the commander has made at this point. The indicators which would tell whether or not that information has been discovered become the EEFI for that decision point.

For example, "I want to deny the enemy information about the location of our reserve." Whether or not the reserve is still in a hide position, has received artillery fire, or has observed an enemy reconnaissance element will indicate whether or not the reserve's location may be compromised.

Specific actions If the commander wants additional specific actions associated with the decision point, he can add those.

For example, "I want the TAC located at Hill 333 for this decision point; displace it only after the decision has been implemented."

Continued on next page

Techniques and Procedures, Continued

COA analysis

Decision points are wargamed during the COA analysis. The information requirements, timing of the decision, and "be prepared" and "on order" tasks to subordinate units are recorded and included in the plan. Specific actions for each requirement of the commander's decision point are developed and recorded as part of the plan. Time and space factors are verified to ensure that the actions at the decision point can be carried out on the battlefield, and that units will be positioned and able to carry out their roles at each point.

The wargame provides all the information needed to incorporate the decision points in the operation order. Decision points that were recorded on the decision support template (DST) are transferred to the DSM for inclusion in the plan.

Recording decision points in the order

The decision points and all the needed actions and information are included in the DSM and in other parts of the plan.

The role of the decision points are clear in the commander's intent. Phases may be used to describe the scheme of maneuver and may be tied to the outcomes of the decision points.

The CCIR which support each decision point are also recorded in the coordinating instructions of paragraph 3. If warranted, the actions at a decision point may be included in tasks to subordinate units.

Subordinate units' plans should reflect the information and actions the brigade commander expects at each decision point.

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Techniques and Procedures, Continued

Preparation

Through backbriefs, the commander ensures that subordinate units understand the decisions he expects to make and the process he will use to make them.

The decision points should be a particular focus during the combined arms rehearsal. The information flow for each element of the CCIR, including any specific instructions for disseminating the decision, are rehearsed. If possible, the commander takes the BCT through the branches and sequels that result from each decision point. Because time is rarely available to rehearse all the possible combinations, the commander will have to focus the rehearsal on the decisions and subsequent actions which he feels are most critical or most difficult.

Adjustments are made to the DSM if necessary.

Adjustments are made to the CCIR as the preparations continue. Enemy actions discovered during the reconnaissance phases prior to the battle may require adjustments to the information the commander requires. The BCT planning processes must be able to adjust for changes which are found on the battlefield. To ignore the reality of what is actually occurring will likely cause the brigade to fight a plan, rather than fight and defeat the enemy.

Execution

The battle staff begins supporting the commander in carrying out his decision points as soon as the PIR are announced and actions are begun to satisfy those requirements.

The appropriate staff sections begin to assemble, analyze, and record the information the commander has determined that he needs for his decisions.

Staff huddles and "Attention in the TOC" are used to ensure that the status of CCIR are understood by each section. Staff sections that do not have the primary responsibility for elements of the CCIR must understand what information is being sought, and be attentive to their own channels for information which could provide or confirm critical information. The status of an enemy activity may surface in fire support or engineer channels, but may be a key element of the PIR that the S2 has tasked to a subordinate TF.

Continued on next page

Techniques and Procedures, Continued

Execution, continued

The battle captain uses the DSM as a management tool to focus his efforts prior to and during the battle. Each decision point and its CCIR become action items for him. Staffs may want to develop status charts which show progress in answering the commander's requirements.

As shifts change, battle captains use the decision point progress as a method of determining where the staff is in preparing for and tracking the battle.

When there is evidence that progress is not being made or that the unit is unsuccessful in satisfying a requirement, the battle staff immediately notifies the executive officer (XO) and then the commander, if necessary. The brigade's senior leaders should not be surprised if information is unavailable at the time of the decision point.

According to the rehearsal and the commander's instructions, some of the information, particularly FFIR, may come directly from the commanders of units in the brigade. The battle staff monitors those reports and completes the log or status board which is being used to track the assembly of the required information.

The battle captain alerts the XO that a decision point is approaching. If directed, he informs the commander. He is prepared at that point to "update the commander on the decision point." He reviews all the information the commander has designated as his CCIR, if requested. He essentially gives the commander an impromptu, but very succinct briefing on the readiness of the BCT for the upcoming decision.

The commander makes his decision and announces it as planned.

The staff begins immediately to carry out the announced decision and prepares for the next decision point.

Summary

As described here, the process may seem overly controlled. Practice will transfer this into a natural flow of staff actions and information. The result will be a staff process which fully supports the commander in defining, planning for, preparing for, and executing the key decisions in the battle.

Assessment Guide for the Commander and Observers

Observing this performance objective

The general approach for observing this performance objective is to watch the BCT commander and his staff as they select decision points, specify the requirements, wargame, and incorporate them into the plan. During execution, observe how well the staff supports the commander in anticipating and collecting the information he needs to make the decisions. The answers to the following questions will provide a sound basis for the scheduled feedback sessions on decision points.

Planning

When does the commander identify decision points? What guidance does he give to the staff for each? Do the staff members understand how the decision points are integrated into the scheme of maneuver and fires? Do they start to include the PIR in the reconnaissance plan and develop a coherent approach to assembling all the information the commander requires? Observing the initial steps of the decision making-process should provide answers to these questions.

Are the decision points clearly integrated into the DST and are they wargamed during the COA analysis? Are there any refinements necessary to the decision points discovered during wargaming? Watching the staff wargame the COA(s) should provide these answers.

Are the decision points provided for in the operations order? Are information requirements for subordinate units picked up by subordinate units as stated or implied tasks and included in their orders? This will necessitate reviewing the BCT order and also those of subordinate units. Information requirements for subordinate units should be traceable to the Brigade/Battalion Battle Simulation (BBS) workstations where those units are being roleplayed. Eventually some roleplayer or interactor will determine the answer from the simulation. The flow of requirements must provide for that from the brigade commander's statement of what he needs down to the commander or controller of the unit in the simulation. If it does not, there will likely be a similar interruption in satisfying the commander's requirements in actual operations.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Preparation

Are the PIR rapidly assimilated into reconnaissance operations and are appropriate changes to orders given to reconnaissance assets? This can be checked in the BCT main command post (CP) as the staff develops or modifies the reconnaissance plan.

Do the reconnaissance assets adjust their planned activities and include these PIR in their reconnaissance orders? This can be checked at the actual unit level that is carrying out the reconnaissance. Usually this will be at the BBS workstations which control the units carrying out the reconnaissance plan. Again the issue is, are the commander's requirements translated into actions on the battlefield?

Are the decision points rehearsed at the combined arms rehearsal? How well do subordinate units understand their role in the upcoming battle? Observing the combined arms rehearsal should provide a wealth of information on the degree to which the decision points have been developed and included in the mission.

Are the CCIR monitored, tracked by the battle staff, and discussed with the XO, commander, or other key leaders? Are the battle captains aware of the CCIR associated with each decision point, and do they have a system for displaying and monitoring progress towards satisfying those requirements? Are the CCIR a topic for shift changes and battle update briefs? Frequent checks with the main CPs of the brigade and the TFs will determine how well visibility of these key issues is maintained throughout the BCT.

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Assessment Guide for the Commander and Observers,
Continued

Execution

During execution does the battle staff track the decision points, assemble the CCIR for each, and provide them to the commander at the appropriate time? Are subordinate units aggressively pursuing their roles in supporting the commander's decisions? Are decision points used in the actual development of the battle?

Tracking an upcoming decision point at the main CP, down through subordinate units provides a check of how well the process is integrated into the BCT's actions. Verify the accuracy of the information that the battle captain ultimately provides to the commander. Are the units actually where they said they were in the FFIR? Was the enemy activity reported in the PIR actually what occurred on the ground? If not, what was different? Ws the commander's picture of what was happening ever corrected? Were the decisions clearly disseminated, once made? Did the decision points have the desired effect on the scheme of maneuver?

This information can be gained in the main CP and in the tactical CP (TAC), the CPs of the subordinate units, and the workstations where units are controlled. There should be awareness at each level of activities associated with decision points.

Suggested times for scheduled feedback

Two, possibly three, feedback sessions are recommended for this performance objective. The first should be conducted after wargaming for the area defense or deliberate attack. This review can focus on the planning for decision points.

The second session should be conducted after execution of those missions. It can review how the staff supported the commander in executing the decision points and the effect of the entire process on the operation.

A possible third session could review a second complete decision point from a follow-on mission from planning through execution.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

The following questions address the subject of this performance objective:

1) **Did the commander provide enough guidance to the staff after the mission analysis brief?**

- What key decision points were identified by the staff during the analysis of the division order?
- Did the commander identify specific requirements for the staff to focus on during mission analysis?
- What interaction occurred within the staff to identify decision points?
- What information did the staff provide to answer the commander's initial PIRs?
- Did the staff identify any duplication of effort or information? How was it identified? What process did they use to identify this problem?

2) **How did the commander's guidance drive COA development?**

- How did the staff identify the scheme of maneuver? Was it based on the critical decision points?
- Do the decision points lead to the decisive point?
- What criteria was used to determine decision points within the COA?
- What new decision points were identified during COA development that were not earlier identified? What impact did it have on the scheme of maneuver?

3) **During COA analysis/comparison, did the development of the DST and DSM provide accurate information on the event?**

- How did the staff refine the decision points?
- What effect did the refinement of decision points have on the CCIRs?
- What changes did the refinement of the decision points have on the collection plan?
- How did the staff capture the necessary information to identify, track, and report decision points?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) **During execution did the staff accurately track the decision points to help the commander make the proper decisions?**

- Did the decision points get executed during the mission?
- What caused revisions to the decision points during execution?
- Did the commander have enough time to make the decisions?
- How were the decision points refined? Were they based on the current situation, events, activities, or phases?

5) **As the enemy situation changed, did the concept of operation or the commander's information requirements change? How were the CCIR tracked.**

A flexible reconnaissance plan is a must. Reconnaissance may require adjustment to account for changes at any time during its planning and execution. Check for flexibility in execution by answering the following:

- How did the focus of the assets available change?
- Were changes in the focus disseminated to subordinate units?
- Were PIR canceled or adjusted?
- How were PIR added?
- How were R&S assets reallocated?
- Were changes integrated between brigade and TF?
- Was the R&S execution enemy-focused or plan-focused?

6) **Describe the procedure that was used to track the CCIR.**

A plan must be in place, with responsible individuals identified, that tracks each CCIR until its confirmation or until it is no longer considered viable.

7) **For each CCIR that was identified as a requirement at brigade, specify - YES or NO - whether that CCIR was accomplished. For each NO, explore the following:**

- Did the CCIR fit the PIRs for reconnaissance capabilities and assets to start with?
- When were problems with the PIR discovered? Who discovered them and who was notified?
- What plans were in place to back-up PIR? What steps were taken?
- Who was tracking that PIR?
- Who was tracking the CCIRs?

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

8) Did the brigade's reconnaissance effort accurately identify the enemy COA? When?

A reconnaissance effort that does not precisely identify and portray the ECOA chosen and executed by the enemy in time for commanders to make their decisions is NOT successful.

This is the criterion, no matter what else the reconnaissance might have been able to accomplish.

9) Did the commander have enough time to make the decisions?

Did the staff track the decision points?

10) Did the decisions facilitate the actions the commander wanted to influence the fight?

Related Information

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- Task 71-6-1005, Maintain the Brigade Intelligence Data Base
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DEVELOP AND EXECUTE THE BRIGADE CONCEPT OF MOBILITY/SURVIVABILITY

Properly employed engineer support creates conditions essential for brigade success. Achieving this success requires organizing engineer assets properly and thoroughly integrating them with the maneuver and fire support concepts so that, at any point on the battlefield, the effects of these systems are acting in concert, not separately. Rarely will the degree of mobility/survivability (M/S) integration needed for brigade success be attained by standard or routine checklist-type solutions. Effective engineer support is extremely dependent on a refined accounting of the factors of METT-T. It must start with clear commander's vision and guidance for desired outcomes and continue with integration by a team with considerable practice in the staff process of synchronizing the M/S system with brigade operations.

Objective

The brigade employs engineers and other assets to provide M/S support to combat operations and create conditions for brigade success. The integration of M/S begins with a realistic assessment and engineer capability projection in the form of the Engineer Battlefield Assessment (EBA). The integration process continues through the remainder of brigade planning, as the engineer develops a Scheme of Engineer Operations (SOEO) designed to achieve the commander's intent for engineers. The process culminates with the engineers conducting timely and effective execution of M/S operations in support of the brigade mission. All phases of this process require interaction between the brigade engineer and engineers at other echelons for the purposes of:

- gathering critical information regarding the status of engineer units and equipment,
- amplifying key aspects of engineer related brigade guidance,
- gathering engineer unique reports, and
- conducting staff supervision activities.

Techniques and Procedures

Overview

The development of the brigade's M/S plan begins with the EBA. The EBA provides the framework for the engineer assistance to the Bde S2 in the form of terrain analysis and identification of enemy engineer capabilities. The EBA assists the commander in identifying the commander's critical information requirements (CCIR) and prioritizes M/S tasks by quantifying the brigade's engineer potential (e.g., In the time available, the brigade has sufficient assets to dig either 40 turret defilade fighting positions for tanks and Bradleys, or construct 500 linear meters of tank ditch.) The commander uses this information to provide detailed guidance to the engineer on his M/S intent and priorities.

As the military decision-making process continues, the engineer applies the commander's guidance and information from EBA to develop and refine a SOEO to support the brigade plan. The SOEO includes all brigade M/S tasks, priorities, taskings, and task organization.

The SOEO is validated during the brigade rehearsal as the M/S related portions of the brigade plan are practiced and demonstrated. M/S actions rehearsed might include the execution of FASCAM in support of brigade deep operations, the re-task organization of the brigade's engineers based on the designation of a new brigade main effort, or the reporting of engineer-related CCIR.

During execution the engineer aggressively seeks information to satisfy CCIR, passes reports as appropriate, and acts on instructions from the supported brigade.

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Techniques and Procedures, Continued

Mission analysis

In addition to identifying specified M/S tasks, implied M/S tasks, engineer-related risk, and conducting time analysis, the engineer also lays the foundation for much of the brigade planning by conducting EBA. The EBA defines the brigade's engineer capability by:

- Quantifying and displaying the countermobility effort available to the brigade (e.g., Volcano, conventional mines, ADAM/RAAM, tank ditches). This description includes details such as density, obstacle effect, and linear meters, as appropriate. Obstacles such as conventional minefields and tank ditches should be associated with an amount of time for emplacement and must include the potential for work to be done by maneuver units.
- Identifying the total amount of survivability work the brigade can perform, in terms of the number of deliberate fighting positions or hull defilade positions, and graphically displaying this information.
- Describing and graphically displaying the amount of mobility tasks the brigade can perform. This amount includes the number of lanes which can be reduced by MICLIC, tank mounted mine plows, and engineer platoons.

During mission analysis the engineer also uses EBA as a means to facilitate coordination with the Bde S2 and to provide engineer-related input to intelligence preparation of the battlefield. Using Terra-Base and other tools, the engineer provides the S2 with the results of his terrain analysis and assists in developing and focusing the MCOO for the brigade area of operations. Applying information from the division engineer annex and other sources, such as doctrine, the engineer quantifies the enemy's engineer potential and assists the S2 in reflecting this information on the situation template (SITTEMP). This information includes:

- locations and composition of enemy minefields and other obstacles
- contingencies and locations where the enemy would employ FASCAM and other situational obstacles
- amount of survivability work the enemy is expected to accomplish.

Continued on next page

Techniques and Procedures, Continued

Mission analysis, continued

When mission analysis is complete, the commander and the rest of the staff must be aware of the key elements of the EBA. Critical EBA information, such as terrain information and enemy engineer capability, is also passed to subordinate unit engineers. Data from EBA is used by the commander to determine priorities for engineer support to the brigade and it may determine some of the CCIR. Examples of EBA initiated CCIR include:

- PIR (Priority Intelligence Requirements): The exact composition of the enemy obstacle templated at a specific location.
- FFIR (Friendly Force Information Requirements): The status of mine plows or MICLICs in the main effort task force (TF).
- EEFI (Essential Element of Friendly Information): The locations of brigade planned FASCAM.

Commander's guidance

The engineer must leave mission analysis with a clear understanding of the commander's guidance for engineers. This guidance should be specific and detailed in terms of priority tasks and the priority of engineer support to subordinate units. For example:

- "I want the main effort TF to be able to emplace two blocking minefields with Volcano."
- "I want each TF to be able to reduce two lanes over 100 meters with MICLIC."

Course of action development

For each course of action (COA) the staff develops, the engineer applies the commander's engineer guidance and develops a supporting SOEO. The SOEO supports all components of the brigade COA (i.e., close, deep, rear), and it includes:

- task organization of engineer platoons and other assets such as breaching equipment
- priorities
- concept for obstacles, to include FASCAM, and obstacle belts with effects.

Continued on next page

Techniques and Procedures, Continued

COA analysis (wargaming) and comparison

The engineer refines the SOEO during wargaming. Done properly, these refinements should result in a SOEO that is completely integrated with the brigade scheme of maneuver and indirect fires. To accomplish this synchronization, the engineer:

- adjusts obstacle belts and effects to support refinements to the scheme of maneuver and indirect fires
- confirms timing or changes the allocation of assets and task organization to meet operational requirements
- recommends refinements or additional engineer-related decision points and CCIR.

Orders production and issue

The engineer works with the rest of the brigade staff to ensure the subordinate units receive an SOEO that is clear, concise, and consistent with the rest of the brigade operation order. The engineer accomplishes this by:

- developing engineer portions of the brigade order, including any required overlays
- comparing the engineer products with other portions of the order to ensure consistency
- participating in the brigade order issue briefing and confirmation briefing.

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Techniques and Procedures, Continued

Preparation

The brigade combined arms rehearsal includes important engineer events. The engineer focuses on:

- the practice or description of engineer events, as either staff supervision or in the context of engineers under brigade control
- confirming engineer-related decision points and CCIR
- ensuring any refinements to the engineer portion of the plan are synchronized with other battle operating systems.

Mission execution

During mission execution the engineer tracks the battle, monitors the status of engineer operations and units while focusing on critical engineer tasks in the brigade area, submits and receives reports, and responds to brigade requests for information and action. Specific activities include:

- receiving and submitting minefield reports of intention, initiation, and completion
- submitting and disseminating scatterable minefield warning reports (SCATMINWARN)
- receiving and forwarding reports of enemy obstacles
- recommending changes to the SOEO or engineer task organization because of unanticipated events.

Assessment Guide for the Commander and Observers

Observing this performance objective

In order to adequately assess the staff's performance on this performance objective, observers must observe the staff's interactions through the planning process, rehearsal, and mission execution. Specific actions to observe and locations other than the brigade main command post where performance can be monitored include:

Mission analysis and commander's guidance

1) What does the engineer identify as current status of engineer units and equipment? (Confirm engineer equipment status with Brigade/Battalion Battle Simulation [BBS] Blue Forces Controller.)
2) Is there effective coordination between the engineer and S2?
3) What is the commander's intent for engineers? Is it clearly understood?
4) Does the commander understand the capabilities and limitations associated with the engineers?

COA development

1) Was an initial SOEO to support the scheme of maneuver and fires developed?
2) What engineer decision points and CCIR were identified?

COA analysis and comparison

1) What refinements to the SOEO were required by the results of wargaming?
2) Were engineer-related decision points and CCIR added or adjusted?

Order production and issue

1) How did the brigade ensure that its SOEO was clear and understood by subordinates?
2) What contradictions existed between the engineer operations and other portions of the order?
3) What was the engineer involvement with the order issue and confirmation brief?

Rehearsal

How does the brigade include engineer operations during the combined arms rehearsal?

Execution

How does the engineer:

1) Track/manage the key points of progress of the engineer operation to ensure that the plan is followed? (Confirm data with BBS engineer roleplayers.)
2) Maintain communications with engineer units and track progress and status? (Monitor communications between brigade engineer/ABE and engineer roleplayers.)

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Assessment Guide for the Commander and Observers,
Continued

Suggested times for scheduled feedback

As part of the exercise, observers will conduct feedback sessions where they serve as facilitators for the brigade staff's review of the performance objective. The brigade should have at least two opportunities to review their performance. The first session follows the brigade's mission analysis to assess EBA. The second session occurs the evening following the execution phase of the mission. The area defense and the deliberate attack are the mission most suited to assessing engineer performances. Questions for feedback sessions follow.

Considerations for assessment

1) **How are engineer and S2 coordinated products used by the brigade in planning?**

   The MCOO show where the mobility corridors are and what terrain lends itself to reinforcing; the situation and event templates describe the enemy in terms of maneuver and timing.

2) **How were decision points selected and used to support engineer execution?**

   Decision points should be identified during planning based on the timing of various enemy COAs related to the amount of time required to execute M/S mission, such as the execution of ADAM/RAAM minefield. During execution decision points are used as cues.

3) **How was the M/S effort integrated into the scheme of maneuver and indirect fires?**

   The engineer might propose and plan FASCAM to support planned brigade deep operations. The minefield would be covered by observation and fire. Obstacle belts might also be used as a means of synchronizing obstacles and the brigade scheme of maneuver.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) **How were M/S events selected to be included in the brigade combined arms rehearsal?**

The most important M/S events would be the ones most likely selected for rehearsal, and they might include breaching operations or execution of critical FASCAM. The importance of these events would be indicated by their inclusion in the brigade decision support template.

5) **How did the S3 or commander use updated engineer production estimates?**

Changes in anticipated work rates (e.g., mine laying) or unanticipated material failure (e.g., inoperable MICLICS) may cause a change in engineer priorities for the brigade.

Related Information

References

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-2651, Develop the Engineer Estimate
- Task 71-6-2657, Prepare an Obstacle Plan as an Annex
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PLAN FOR AND COMMIT A COMPANY-SIZE RESERVE

Brigades frequently operate with a company-size reserve. The impact on the brigade staff of interacting with a company-size reserve, as compared to a battalion task force, is significant. The brigade serves as the company's direct higher headquarters. The company will usually no longer have access to combat support and service support. The brigade staff must now plan and supervise this support. Because the company has no staff with which to plan, the missions and tasks for the company-size reserve must be consistent with the experience levels of its leaders and their capability to plan. The brigade's support extends from the planning phase through execution of one or more of the company's reserve missions. The staff processes needed to support a company-size reserve can be developed, practiced, and refined during simulation exercises.

Objective

The brigade staff accounts for the additional requirements it assumes when a company-size element is given the mission of becoming the brigade reserve. The combat support and service support requirements for the reserve must be included in the brigade plan. Command and control channels and communications must be deliberately chosen and clearly described in warning orders and task organization changes. The staff must ensure that the company leaders are present at appropriate orders briefs and rehearsals, and are provided all the orders and instructions essential to their mission. Supply, medical and maintenance channels, and evacuation procedures are adjusted within the brigade to ensure that the company will be as well supported as it is when operating within a task force. The company's position is included in the brigade's scheme of maneuver. The company is given any warning orders issued prior to committed and receives the latest battlefield information available for the area in which it is being committed. Combat support priorities are adjusted within the brigade to ensure support is provided to the reserve.

Note: The brigade must have a company size reserve in at least one mission for this performance objective to be observed.

Techniques and Procedures

Overview

This performance objective assumes that the brigade has designated a company-size element as the brigade reserve. There are two major ways this can be accomplished.

- First, the brigade moves the company under brigade control at the effective time for the changes to the brigade's overall task organization. At that point the company is the responsibility of the brigade headquarters.

This additional staff challenge often causes brigades to try a second method.

- The brigade leaves the company within the task organization of the task force, but creates a conditional task for the company to preclude it from being committed without the brigade commander's approval. Then, during the battle, the brigade commits the reserve and assumes the reserve's control.

While theoretically making planning tasks easier for the brigade staff, the second method often delays addressing some of the tough issues until the time of execution. This necessitates a change in task organization, command relationship and control at the most difficult time in the battle. The techniques and procedures discussed in this performance objective are based on the first method.

Planning for the reserve from the outset, as if it were a direct subordinate, forces the brigade staff to consider all the support, command and control issues that need to be addressed during planning, preparation, and commitment of the reserve. The brigade staff must work closely with the company and recognize it at the same command level as the task forces in all areas, to include items often forgotten, such as:

- distribution of the brigade order and overlays
- participation in briefings and rehearsals
- communication support in radio nets and net calls
- receipt of updated battlefield information, including intelligence updates.

Normally, units should include procedures dealing with reserve forces in their standing operating procedures (SOP). This performance objective is designed to facilitate that understanding and application.

Continued on next page

Techniques and Procedures, Continued

Plan

The commander provides initial planning guidance, including reserve mission, priority, and composition.

The staff, at the first indication the commander will employ a company-size reserve, must begin to adjust their planning to account for the additional requirements. Every member of the staff will probably be involved with the effort to ensure effective employment of the reserve. Major actions include:

- Develop courses of action (COAs) and conduct COA analysis as for any mission.
- Initially position the reserve.
- In accordance with doctrine, maintain the reserve as a truly uncommitted force for each scheme of maneuver. That is, each scheme of maneuver must be complete without using the reserve. If the scheme of maneuver depends on using the company, the company is not a reserve but a committed force.
- Identify initial decision points for committing the reserve, including the commander's critical information requirements (CCIR) associated with each decision point.
- Wargame committing the reserve to determine the time and distance factors to assist in positioning the reserve to achieve the desired effect.
- Incorporate the requirements necessary to provide command, combat support, and combat service support (CSS).
- Provide the company appropriate warning orders and intelligence products. Add the company to distribution list for future similar products.

Command and control

Command relationship

- The brigade establishes the command relationship (OPCON or attached) for the reserve.
- The brigade identifies when the reserve comes under its control prior to commitment.

Continued on next page

Techniques and Procedures, Continued

Command and control, continued

Decision points

- Each maneuver decision point includes reserve positioning and purpose.
- The events and information requirements that lead to committing the reserve are tied to the brigade's decision points on the decision support template (DST) and decision support matrix (DSM).

Communications

- The brigade identifies the communication nets the reserve must enter and when they must enter.
- The staff ensures the reserve has the means to communicate with the brigade.
- The communications requirements include the need for retransmission and/or modification to the signal operating instructions.
- The reserve understands any requirement to continuously monitor and report on brigade nets.

Orders distribution

- The brigade includes the company-size reserve in the distribution scheme for all warning orders and the brigade's operation order (OPORD) with overlays.

Reporting

- The staff tracks the status and location of the reserve company as a separate unit.
- The reserve must understand the brigade's reporting requirements.

Briefings

- The brigade ensures the reserve company leadership participates in the OPORD briefing, the commanders' backbriefs, and in the confirmation briefing to ensure the reserve understands the brigade commander's intent.

Control measures

- Include reserve position(s) and route(s) on brigade graphics.

Continued on next page

Techniques and Procedures, Continued

Maneuver

- The reserve's task and purpose for each reserve mission are specified.
- "Be prepared" tasks provide the anticipated actions the reserve will take.
- Reserve actions are described for each event or time covered in the synchronization matrix, DST and DSM.
- The reserve is positioned to provide cover and concealment.

Intelligence

- The reserve is included in the distribution scheme for all intelligence updates, including intelligence summaries.
- The collection effort provides for acquiring the intelligence needed for decisively committing the reserve.

Fire support

- The reserve's priority for fires is identified.
- The plan should provide the reserve the capability to call and control fires. This will probably include a fire support team or combat observation lasing team.

Mobility and survivability

- The reserve's priority for mobility and survivability is identified.
- The level of effort required for reserve survivability in initial and subsequent positions is determined.
- Reserve mobility requirements are determined.
- The use of smoke is considered for concealing the reserve's movement or as a deception.
- Reserve decontamination and NBC reconnaissance requirements are addressed.
- Reserve route reconnaissance and security is provided using military police (MP) or other supporting units.

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Techniques and Procedures, Continued

Air defense

The staff plans air defense for the reserve including:

- the commander's acceptance of risk to the reserve by air threat
- a plan to provide air attack early warning to the reserve
- using cover and concealment afforded the reserve in its initial position, subsequent positions, and along routes
- the requirement for continuous coverage of the reserve
- the extent of coverage provided by air defense units in close proximity.

Combat service support

The brigade should assume the reserve will need the brigade's assistance in planning and preparing for the reserve mission.

- The commander's guidance establishes the reserve's priority for CSS.
- For medical, supply, and maintenance support the staff incorporates the commander's guidance for the reserve in its planning and makes adjustments needed to provide the required service support.
- Plans provide for reserve CSS support to remain with the reserve following commitment.
- The staff must confirm that the reserve has its slice of medical support in the form of aidmen and ambulances.
- Procedures for the evacuation of casualties must be understood.
- The staff must account for the reserve in establishing ambulance exchange points.
- The staff directs how the reserve obtains supplies. This may include caches.
- Specific maintenance instructions provide details about how to request assistance, what information is needed, and who to contact.
- The plan provides for equipment recovery.
- The staff ensures the reserve's personnel level is adequate for its mission before the reserve comes under the brigade's control.

Continued on next page

Techniques and Procedures, Continued

Combat service support, continued

- The brigade must confirm that the reserve has sufficient organic transportation or makes arrangements to provide it with transportation assets.
- In the six functional areas of tactical CSS (fix, fuel, arm, man, sustain, and move), the reserve's projected status at execution must meet mission requirements.

The staff must take the burden of planning and coordination for CSS from the reserve company commander, NOT just remind him it needs to be done.

Continued on next page

Techniques and Procedures, Continued

Prepare

The commander checks reserve preparation during command inspections and visits.

The staff:

- Provides the reserve with the orders and intelligence products issued thus far, in addition to the orders and intelligence summaries which follow.
- Receives reserve status reports and updates estimates.
- Closely monitors the reserve, supervising support for the company team.
- Provides time for the reserve to plan and prepare.

Combined arms rehearsal

- Reserve company leadership participates in the brigade's combined arms rehearsal.
- Reserve positioning and movement are refined during the rehearsal.

Execute

The staff monitors the reserve's status and location and keeps the reserve abreast of the friendly and enemy situations. The reserve monitors the situation and keeps the brigade updated on its location, status, and activities.

At the time of commitment the staff updates the reserve on the location and actions of friendly units, the most recent enemy locations, and battlefield conditions, such as minefields or contaminated areas specific to the area of commitment.

The staff alerts other friendly units about the reserve's commitment, routes, and support requirements. It assists in coordinating passages, and controlling friendly fires. The staff adjusts combat support priorities and monitors the support being provided to the reserve.

Assessment Guide for the Commander and Observers

Observing this performance objective

The observation plan is focused on determining how well the staff recognizes and provides for the unique requirements of a company-size reserve.

Plan

Commander's guidance

1) At the conclusion of mission analysis in the brigade's main command post (MAIN), the commander provides guidance to the staff concerning the reserve mission, composition, and priorities.

2) Note the commander's guidance for the company-size reserve and priority for combat support and CSS.

COA development

In the MAIN, observe staff sections for indications that the staff included planning that provides for:

- initially positioning the reserve
- decision points for committing the reserve
- CCIR regarding the reserve's commitment
- concepts of support for the company-size reserve.

COA analysis

As the staff wargames and compares COAs in the MAIN note that the staff:

- lists reserve actions for each event or time on the synchronization matrix
- estimates reserve movements and their associated times and distances
- includes committing the reserve as a decision point on the DST with the information requirements and criteria.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Orders preparation

Check the brigade tactical products to ensure:

- the brigade graphics include the locations and routes for the reserve
- the order specifies the reserve's command relationship
- annexes include the company-size reserve support IAW commander's guidance
- the reserve's tasks include a realistic series of "be prepared" tasks
- committing the reserve is a decision point on the DSM with information requirements and commitment criteria
- the reserve company receives previously issued warning orders, overlays, and intelligence products after being identified.

OPORD Briefing

At the briefing site, observe the briefing activities to see that the reserve company leadership attends the OPORD briefing and that the reserve company receives a copy of the OPORD, overlays, and intelligence update

Confirmation briefing

Following the OPORD briefing observe any confirmation brief by the reserve commander.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Prepare

Command inspection Determine whether or not the reserve is included in commander and staff inspections and visits in the preparation phase.

Backbrief Observe that the reserve company commander backbriefs the commander on the reserve mission.

Staff assistance 1) In the MAIN, and from the reserve workstation, note times and conditions when:

- the staff checks on the support provided to the reserve
- the staff assists the company leadership in planning the reserve mission
- the staff provides the reserve time to conduct its own rehearsal for the reserve missions
- the reserve attains the required level of combat readiness
- determine whether combat support and combat service support assets are appropriately shifted on the "BBS battlefield" to reflect the support provided in the brigade order.

Combined arms rehearsal At the rehearsal site observe and note that:

- the reserve company leadership participates in the combined arms rehearsal
- the reserve movements are rehearsed and refinements developed.

Command and control From the MAIN or tactical command post (TAC), and the reserve workstation record when:

- the reserve company enters the specified brigade communication nets
- the reserve company receives updates in the form of fragmentary orders and intelligence updates
- the command relationship for the reserve company has been implemented at the BBS workstation
- communications with the reserve are established to reflect those called for in the order.

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Assessment Guide for the Commander and Observers,
Continued

Execution Observing from the MAIN, TAC, and the reserve workstation, determine:

- how the brigade handles reconnaissance and security of the reserve's routes and locations and communicates results to the reserve
- how the brigade controls the reserve company
- how the staff answers and updates the commander's CCIR pertaining to the reserve
- how information flows between the brigade and reserve
- when and where the brigade commander decides to commit the reserve company
- when and where the reserve company begins executing its committed role
- to what extent the brigade commander's intent for the reserve is met
- what combat support actions for the reserve company are accomplished
- what unanticipated reserve requirements and adjustments arise.

Suggested times for scheduled feedback As part of the exercise, observers will conduct feedback sessions where they serve as facilitators for the brigade staff's review of the performance objective. The brigade should have at least two opportunities to review their performance. Recommended times for feedback sessions are following the brigade's combined arms rehearsal, with a second session the evening following the execution phase of the mission. If the brigade has a company size reserve in a subsequent mission, recommend another feedback session after the brigade's combined arms rehearsal for that mission.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

In determining the staff's readiness to perform this task, discuss the following considerations:

1) **How does the staff plan and prepare for a company-size reserve?**

   The procedure, whether or not it is in the SOP, should include specific commander's guidance about the reserve. The staff should plan for the reserve as if the brigade is its next higher headquarters. Staff planning addresses the company-size reserve in the areas of command and control, combat support, and combat service support.

2) **Who participates in the reserve planning and preparation?**

   All sections of the brigade's staff should address the reserve in their particular area of expertise. Within the staff, each section should know the reserve's priority for support and include the reserve in the functional area plan in accordance with that priority.

3) **How and to what extent does the staff plan reserve support?**

   The staff must realize that the reserve does not have a staff to plan support operations. The brigade staff must plan combat support (i.e., air defense artillery, chemical, engineer, fire support, and MP) and CSS in detail for the reserve.

4) **How does the reserve receive information from the brigade?**

   The brigade staff treats the reserve like a subordinate task force and ensures that the reserve receives the brigade's orders and intelligence summaries.

5) **What is the role of the reserve's leaders in brigade briefings and rehearsals?**

   The reserve should participate in all brigade level briefings and the brigade rehearsals.

6) **How does the brigade commander ensure that the reserve commander understands his intent for the reserve?**

   The brigade commander confirms that the reserve commander understands his intent for the reserve through briefings and rehearsals.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

7) **What modifications should the brigade make to its TACSOP regarding a company-size reserve?**

The staff must answer this after a careful review of the existing brigade TACSOP.

Related Information

References

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-0015, Issue Commander's Guidance to Staff
- Task 71-6-0016, Develop Course of Action
- Task 71-6-0018, Evaluate Concept/COA(s)
- Task 71-6-0050, Develop the Brigade Operation Order
- Task 71-6-0190, Conduct a Rehearsal
- Task 71-6-0308, Synchronize Air Defense Artillery

FM 71-1, *Tank and Mechanized Infantry Company*, 26 January 1998

FM 71-3, *The Armored and Mechanized Infantry Brigade*, 8 January 1996

- Chapter 2, Fundamentals of Brigade Operations
- Chapter 5, Defensive Operations.

Center for Army Lessons Learned (CALL)

- NTC Trends Analysis 97-3, January 1997, TA.4 Command and Control
- NTC Trends Compendium 97-17, September 1997, TA.4 Command and Control

PLAN, INTEGRATE, AND MANAGE SMOKE ASSETS

Smoke can be a significant combat multiplier on the modern battlefield, but it can also be a combat detractor to a unit that does not practice planning and integrating its use into combat operations. Selecting this performance objective allows a staff to practice the processes associated with successful employment and integration of smoke support. A brigade staff must be able to identify its smoke capabilities, then integrate those capabilities into its tactical planning to achieve the desired battlefield effects while minimizing the likelihood of negatively affecting the brigade's operations.

Objective

The brigade plans for the integrated use of its smoke assets to achieve the effects necessary to meet the commander's guidance for smoke. The staff communicates its smoke plan to subordinate and supporting units through operation orders (OPORDs), fragmentary orders (FRAGOs), and annexes. The brigade then actively manages the preparation and execution of the smoke plan by tracking smoke assets, coordinating and synchronizing support, and adapting the smoke plan to meet changes in the commander's intent and scheme of maneuver.

Techniques and Procedures

Overview

The staff's contribution to successful smoke operations begins during mission analysis. They provide the commander information on the smoke capabilities within the brigade and on any smoke-related taskings from the division. As part of his planning guidance, the commander identifies the smoke effects required by his plan. The staff then develops a concept to generate those effects. The concept is wargamed to anticipate the sequence of activities necessary to carry out the concept. The staff considers a range of likely outcomes and provides contingencies, branches, and sequels. The staff may add additional smoke tasks to strengthen courses of action (COAs).

The published plan (i.e., OPORD, FRAGO) provides for controlling, positioning, protecting, cueing, and redirecting smoke assets. The plan addresses in detail all logistical support to the various smoke assets within the brigade. Smoke trigger points, decision points and key events are topics for the combined arms rehearsal.

The staff monitors the preparation and status of smoke assets, and keeps the commander informed of progress toward completion of the smoke plan. The staff monitors and anticipates trigger or decision points associated with the smoke plan. Any problems which may affect the smoke plan receive immediate command attention.

The staff tracks trigger and decision points, initiates execution of planned smoke targets, and adjusts the smoke plan to reflect current battlefield situations and conditions. The staff monitors execution and provides support in solving problems which may arise.

Continued on next page

Techniques and Procedures, Continued

Mission analysis

During Mission Analysis, the staff identifies the following smoke-specific information for use in later steps of the military decision-making process (MDMP).

- smoke-related taskings to the brigade from the division operation plan (OPLAN)/OPORD/FRAGO/Annexes
- enemy smoke capabilities and vulnerability to friendly smoke operations based on reconnaissance, intelligence, surveillance, and targeting acquisition systems
- weather and terrain effects on smoke, tailored to the brigade's area of operations
- current status and readiness of smoke assets available to the brigade (i.e., generators -- fog oil and/or multispectral; smoke pots; artillery and battalion/task force mortars -- HC and white phosphorous [WP])
- current capabilities of smoke assets available, expressed in operational terms. (e.g., X minutes of a 2500m-wide generated smoke blanket, Y minutes of 500m-wide artillery smoke haze)
- time required for various smoke assets to achieve build-up concentrations.

After the staff briefs the current status and capabilities of all brigade-controlled smoke assets, the commander provides guidance to the staff regarding the smoke effects he envisions. If one or more smoke effects are critical to his plan, he may include them in his initial commander's intent.

COA development

The staff translates the commander's desired effects into initial smoke targets to support each COA. Initial smoke target development identifies the task and purpose for each target -- what does the staff want this target to do (i.e., screen, obscure, deceive, signal) and why (e.g., protect breach force, prevent observation from aerial and ground observers). The staff does *not* identify smoke delivery assets during COA development; rather it plans as many smoke targets needed to support each COA in accordance with the commander's guidance. The staff may identify smoke targets in addition to those derived from the commander's guidance.

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Techniques and Procedures, Continued

COA analysis (wargaming) and comparison

During the wargame, the staff analyzes the planned smoke targets to assure they support the COAs. Questions that the staff should answer for each smoke target include:

Targeted systems What enemy systems are being targeted and what types of smoke can defeat those systems?

- visual only: Fog oil smoke, smoke pots, projected HC
- visual and thermal: Projected white phosphorous (WP)
- visual and millimeter-wave: Multispectral smoke
- visual, thermal, millimeter-wave: Multispectral and WP.

Timing When does effective smoke need to be on this target?

- What time is needed to safely position smoke assets upwind of the target? Will artillery/mortar units be in position/range to emplace it?
- What effects will weather and terrain have on cloud build-up for different smoke assets?
- What is the likely time of the task/event/activity that the target supports, (e.g., occupation of attack by fire [ABF] position by the support force)?

Limitations What limitations are caused by the relative location of the target and friendly and enemy forces? For example, obscuring smoke on an upwind enemy position overwatching a friendly breach site should not be emplaced by a smoke generator unit.

Asset identification How should the brigade emplace the target to take advantage of each smoke asset's inherent capabilities and lessen the impacts of weaknesses? (i.e., Initial emplacement of a smoke target with artillery/mortars, which conceals the movement of a generator unit into positions to continue smoking the same target) Which smoke system available to the brigade is best suited to emplace each target based on answers to the previous questions?

Effects on friendly operations What are the potential negative impacts on the friendly task or event the target supports (risk/benefit analysis)? Will the impacts prevent completion of the task or event? If so, are there other means available for providing the protection intended by the smoke target?

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Techniques and Procedures, Continued

Service support	How will the brigade resupply the various smoke assets? Do artillery and battalion/task force mortar basic loads need to be adjusted to provide the amount of smoke support planned? Do smoke generator units need external transportation support for fog oil drums?
Command and control	Will the asset need assistance and/or security to get into position to emplace a target? If so, who should control the asset based on intent and C2 capabilities (e.g., task organizing a smoke platoon to a task force for command and control and tasking the task force with providing security for the platoon as it moves to support a deliberate breach)?
Flexibility	Is the smoke support plan flexible enough to support COA branches and/or sequels identified in the wargame? Is it flexible enough to support *unforeseen* branches/sequels?
Redundancy planning	How effective will the smoke plan be if weather conditions do not meet the predicted conditions (e.g., different wind direction, high velocity winds, abnormal temperature gradient)? Will other assets need to be prepared to emplace critical targets?
Impact of failure	What will be the impact on the overall operation if none of the available assets can adequately emplace one or more planned smoke targets?
Staff recommendation	Which COA does the brigade's smoke support capability best support based on assets available, weather/terrain considerations, asset capabilities, intent for use of smoke?

Orders production

The staff includes and integrates their smoke plan into the order per their standing operating procedures (SOP). They assign smoke related tasks and purposes to delivery assets in the base order, in annexes (e.g., Fire Support, NBC Defense), and on overlays (e.g., Fire Support, Smoke Support, Operations). The brigade's SOP should address where the staff includes each task so that all affected units understand the smoke plan. At a minimum, each task or target assigned should include:

- Commander's intent for the target: What purpose the brigade is trying to achieve with this target (e.g., obscure a breach site, screen movement, deceive the enemy, screen the brigade support area [BSA] from aerial observation)?

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Techniques and Procedures, Continued

Orders production, continued

- Location of target: Illustrated so all affected units understand where the target is:
  - stationary or point target: grid locations and/or graphically displayed on an overlay
  - moving target (e.g., screen along the flank of an attacking unit): described in the task and purpose statement.
- Time or event for effective smoke on the target: Not the time for a generator unit to turn on their generators or for an artillery unit to have rounds on target. The delivery unit must reverse plan to determine initiation time based on system capabilities/limitations, weather/terrain effects, etc.
- Duration of smoke on target: Impacts on logistical planning/resupply, sequencing, and integration of different smoke assets.
- Visibility criteria on the target: Blanket, haze, curtain -- impacts on other friendly operations in the vicinity of the target.
- Command and control/task organization of the emplacing unit:
  - Unit/individual responsible for adjusting the target to meet the intent.
  - Individual responsible for starting and stopping the smoke on each target.
  - Unit responsible for providing assistance/security for the emplacing unit.
  - Tasks must be included in Paragraph 3 for subordinate units who will control, position, cue, or support smoke assets for particular targets.

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Techniques and Procedures, Continued

Preparation

The brigade rehearses its smoke support plan in conjunction with its combined arms rehearsal. Specific points to rehearse/address include:

- timing and reports associated with trigger points for smoke initiation
- location(s) of smoke assets to increase security/protection and to prevent fratricide
- impact of smoke operations on other friendly operations/tasks.

Mission execution

The staff manages smoke support operations during execution by ensuring that each planned target is executed, either by the unit assigned primary responsibility for the target, or by another asset if the responsible unit is not able to execute. Situation and spot reports assist the staff in assessing effectiveness of each smoke mission, adjusting the missions when necessary, and identifying opportunities for additional smoke support (i.e., hasty smoke operations). The staff:

- tracks key points of progress for the plan; (e.g., line of departure [LD] and positions of supporting generator units, locations of firing units, impending trigger points/lines/times)
- maintains communications with, tracks the location of, and directs supporting generator units
- monitors execution of artillery and mortar smoke missions with the FSE
- ensures execution of smoke pot missions through direct coordination with the unit(s) responsible for employment and initiation
- maintains an awareness of the status of the overall operation in order to anticipate additional smoke support requirements
- makes adjustments to the plan based on directed branches and sequels (anticipated and unanticipated)
- determines when to inform the commander and staff if the smoke plan is no longer feasible or viable, and of the impact on the overall operation
- informs and advises the commander on all smoke-related issues.

Assessment Guide for the Commander and Observers

Observing this performance objective

In order to assess the staff's performance on this performance objective, observers must observe the staff's interactions throughout the planning process, rehearsal, and mission execution. The following describes the activities to observe and information to gather, by phase.

Mission analysis and commander's guidance

1) identification of current status of smoke assets available to the brigade
2) analysis of enemy vulnerabilities to smoke and friendly capabilities to capitalize on those vulnerabilities
3) commander's guidance for smoke and staff understanding of desired battlefield effects. Possible effects by mission include:

- in the Area Defense:
    - generators or smoke pots on friendly units to prevent observation of obstacle or engagement area emplacement (screen)
    - artillery smoke to delay second echelon forces to cause time separation between echelons (obscure)
    - generators or smoke pots on the BSA to prevent aerial observation and targeting (screen).
- in the Deliberate Attack:
    - smoke on enemy defensive positions to prevent observation or engagement of friendly breach forces (obscure)
    - smoke along the flank of a moving friendly force as it crosses an open area to prevent observation/targeting by enemy observation posts (OPs) (screen)
    - smoke on a supporting attack to deceive the enemy as to the location of the friendly main effort (deceptive screen).
- in the Movement to Contact:
- smoke along the flank of a moving friendly force as it crosses an open area to prevent observation/targeting by enemy OPs (screen)
- smoke on a supporting attack to deceive the enemy as to the location of the friendly main effort (deceptive screen)
- smoke on a fixed enemy force to prevent observation of friendly forces moving to attack into its flank (obscure).

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Assessment Guide for the Commander and Observers,
Continued

COA development	1) identification of initial smoke targets to support the scheme of maneuver and assist in providing force protection 2) task and purpose for each initial smoke target
COA analysis and comparison	1) results of staff analysis of initial smoke targets for intended tasks and purposes 2) additional smoke targets suggested to support the scheme of maneuver/scheme of support 3) time for each smoke target to be covered and duration of coverage for each target (using reverse planning) 4) identification of key points of progress in the smoke plan that must be tracked and managed during execution to ensure success 5) flexibility built into the smoke plan to support anticipated or unanticipated branches and sequels 6) staff identification and synchronization of the sequencing of varied smoke delivery assets on single smoke targets 7) realization that an inability to provide planned smoke will have a serious negative impact on the success of the overall mission 8) selection of smoke asset(s) to best emplace each target based on the predicted enemy and friendly situation, targeted reconnaissance, intelligence, surveillance, target acquisition (RISTA) systems, and capabilities and limitations of each asset
Order production	How the staff includes the smoke plan in the OPORD/FRAGO, clearly identifying for each target: 1) commander's intent 2) location and size of target 3) time for effective smoke on the target (not generator start-up time or time for impact of rounds) 4) duration of target coverage 5) visibility criteria within the target 6) command and control of the emplacing asset 7) individual or unit responsible for initiating, adjusting, and ceasing the coverage on the target

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Assessment Guide for the Commander and Observers,
Continued

Rehearsal Inclusion of the smoke plan during the combined arms rehearsal, addressing each target's task and purpose, trigger points/lines, and locations of smoke delivery assets at critical points in the operation.

Execution
1) tracking/management of the key points of progress in the smoke plan's execution to ensure that the plan is followed
2) communications maintained with supporting smoke generator unit(s) and tracking of progress and status
3) coordination and synchronization of projected smoke targets
4) maintenance of a common situational awareness in order to identify opportunistic smoke targets and any needs or branches/sequels to the plan
5) determination of whether or not the situation warrants informing the commander that the smoke plan is no longer viable/feasible, and recommending alternative actions

Suggested times for scheduled feedback

Although observers or the commander may provide feedback at any time during the exercise, the following points are appropriate for scheduled feedback sessions with the combined brigade and task force staffs:

- following the brigade combined arms rehearsal for the Deliberate Attack to review the planning, coordination, and rehearsal of smoke operations
- following the execution of the Deliberate Attack to review the execution and effectiveness of the planned smoke operations
- following the Movement to Contact to review how smoke operations proceed from the development of the commander's planning guidance and intent, through the actual effects on the mission.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

To determine the brigade's readiness for performing Performance Objective Plan, Integrate, and Manage Smoke Assets, discuss the following:

1) **What friendly smoke capabilities and enemy vulnerabilities did the staff identify during Mission Analysis?**

   Capabilities should be expressed in operational terms (e.g., 2 hours of a generated smoke blanket; 30 minutes of artillery HC for a 500m target). Enemy vulnerabilities should be based on enemy systems templated in various positions/formations (e.g., combat security outpost [CSOP] comprised of BMP-2s -- can be defeated by HC and fog oil smoke; northern strongpoint includes T80 tanks with thermal imagery -- can be defeated by WP).

2) **What were the tasks and purposes for the initial targets identified by the staff to support each friendly course of action?**

   In planning targets, the staff should identify the task and purpose of each target, (e.g., Smoke Target 1 obscures the southern strongpoint to prevent it from firing on the breach force).

3) **During the wargame, what factors did the staff consider when deciding which smoke asset would emplace each smoke target?**

   For each target, the staff should address:

   - the location of the target in relation to locations of friendly and enemy forces
   - the time for effective smoke on target
   - the capabilities of each asset available
   - the task and purpose for the target
   - the enemy systems being targeted
   - the other friendly operations on or in the vicinity of the target.

   After collectively identifying, analyzing, and answering these factors/questions, the staff should identify:

   - which asset or assets can best emplace each target
   - the timing/trigger points for emplacement (in cases of multiple assets integrated on singular targets)
   - the timing and sequencing of each asset.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) What considerations lead the staff to recommend one course of action over another based on smoke support planned?

The staff should consider:

- force protection (of both the supported units and the smoke assets)
- impact of smoke on friendly operations
- logistical constraints
- and meeting the overall commander's intent for smoke operations.

5) What adjustments did the staff make to the smoke plan based on the combined arms rehearsal?

Possible adjustments include:

- timing/triggerpoints based on adjustments to maneuver or fire schemes
- identification of alternate individuals/units responsible for controlling smoke targets
- deletion of targets based on other friendly operations on or in the vicinity of targets
- identification of additional or alternate asset(s) to emplace a target based on other operations (e.g., artillery tied up firing SEAD or prep fires; use of artillery/mortars instead of generators to emplace obscuration in order to support a breach based on wind direction and the need to leave the breach itself unobscured).

6) How did the staff ensure that smoke operations were conducted as planned, or adjusted to support the current situation during execution?

The staff should collectively ensure that smoke plans are conducted, integrated, adjusted, and augmented based on the changing tactical situation. The chemical officer should be the staff action officer for smoke operations at brigade level. He should coordinate, manage, and adjust the actions of smoke support assets with the actions of other units to meet the commander's intent for each smoke target.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

7) **What actions or processes did the staff learn that they may want to include in their SOP to ensure future success?**

8) **How well did the staff keep leaders apprised of the status of smoke operations?**

Events or considerations to communicate include:

- upcoming trigger or decision points
- initiation of targets
- effectiveness of smoke coverage
- recommended adjustments based on changing situation or conditions.

Related Information

References

ARTEP 3-117-40-MTP, *Mission Training Plan for Chemical Section and NBC Center,* 29 September 1994

- Task 03-4-0004, Plan Chemical Unit Employment
- Task 03-4-0005, Coordinate Chemical Unit Employment
- Task 03-4-0016, Coordinate with Staffs on NBC Related Issues

ARTEP 71-3-MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-6-0002, Analyze Mission
- Task 71-6-0004, Provide Operations Input to the Command Estimate
- Task 71-6-0050, Develop the Brigade Operation Order
- Task 71-6-1004, Produce Intelligence Products
- Task 71-6-3002, Plan Fire Support
- Task 71-6-3003, Synchronize Fire Support
- Task 71-6-8015, Coordinate NBC Operations

Center for Army Lessons Learned (CALL)

- CTC Trends 97-9, 3rd & 4th Qtrs, FY96
- CTC Trends 97-3, 4th Qtr, FY94 to 2nd Qtr, FY96

MANAGE INFORMATION WITHIN THE TASK FORCE COMMAND POSTS

Command posts (CPs) exist to assist the commander in fighting the task force. Managing information is the central activity in this process. How well the task force organizes its CPs; defines and enforces standard procedures for receiving, distributing, and processing information; and is able to sustain these activities during continuous operations over extended periods will be key to the success of the task force's control of battlefield operations. This exercise provides practice opportunities on information management arrangements and procedures. In addition, this exercise facilitates the refinement of those arrangements and procedures in unit standing operating procedures (SOPs). This exercise is an excellent opportunity to train new personnel on their roles within the CPs and to try new solutions before conducting intense field exercises or actual operations.

Objective

Each CP will institute SOPs that support the commander's and the staff's requirements for time-constrained decision-making, accurate and timely situational awareness, and execution of continuous, sustaining, and mission-specific instructions and orders. According to those procedures, CP staff will prioritize, record, process, analyze, and disseminate routine information to specific recipients. The functioning of the CPs will permit continuous, long-term activity, displacement or loss of a CP. Procedures will separate those routine actions from those that demand command attention. Procedures will be recorded in the unit's tactical standing operating procedures (TACSOP).

Techniques and Procedures

Overview

A practiced, systematic method for collecting and processing information is essential to the efficient operation of the task force (TF). The following techniques and procedures outline methods of dealing with the vast amount of information that flows into and through a TF's CPs. Information management is crucial to all CPs that the TF operates: the main command post (MAIN), the combat trains command post (CTCP), and the command group. Although each of these will apply information management procedures somewhat differently, and under different conditions, each must have and use a systematic method of dealing with information.

Information management is continuous. It builds to a peak during execution of combat operations, but it is also crucial during the planning phase. During planning, the commander and staff are seeking information for mission analysis, COA development, COA analysis, and preparation and dissemination of operation orders. Information management is a critical part of the "Supervise" step of the commander's Troop Leading Procedure.

Information Management Steps

There are four major steps in the processing of information within any CP or staff section. These are:

- Step 1: Collect and Record Information
- Step 2: Perform Information Analysis and Prioritization
- Step 3: Disseminate Information within the Command Post
- Step 4: Conduct Commander/Staff Analysis and Further Dissemination.

Continued on next page

Techniques and Procedures, Continued

Step 1: Collect and record information

This first step is supported by three components:

- the information collection methods (information and communication channels)
- the people responsible for information collection
- the methods of recording the information.

Information collection methods

Each CP must identify what types of information collection methods it has and the components of each method. Examples are: FM radio nets, MSE nets, digital information networks, runner systems. For each method, establish the following:

(1) equipment components, requirements, and locations

(2) stations or individuals who participate in the channel (e.g. subordinate maneuver commanders, FSO, specialty platoons, TF rear)

(3) what individual or section is responsible for the channel (e.g., the S3 section in the MAIN controls the command net; the command net is monitored by the TF S2 section and by the subordinate commanders)

(4) identification of the types of information generally passed on the channel (e.g., spot reports, situation reports [SITREPs], requests for fire, logistics summaries).

People responsible for information collection

The CP operations must clearly identify those people within the CP who have responsibility for operating and supervising each information channel. Most information channels will have several layers of operators and supervisors. Start with the RTO and go up the chain. Everyone must know whom they work for and whom to go to if they have questions. The exact responsibilities of each operator and supervisor must be known.

For example: An RTO receives, writes down and collates messages; the S3 section sergeant supervises the RTO, operates within hearing distance of the receiver, and checks messages received; the battle captain has final authority for information management decisions.

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Techniques and Procedures, Continued

Step 1: Collect and record information, continued

Methods of recording information

Each staff section must determine how to record information received on its channel(s) and what the recorder does with the information. Staff sections will often use multiple methods to record the same information depending on the type received. Leaders must train operators on the requirements for each method used. RECORD ALL INFORMATION RECEIVED. The following are common recording methods:

- staff logs and journals
- multi-copy message formats
- electronic or digital records
- fixed report formats (SITREP; RED ONE; FIRE REQUEST)
- situation maps
- status charts
- briefing charts
- battle boards.

Step 2: Perform information analysis and prioritization

Within each information channel there is at least one person at all times who is responsible for reviewing the content of information received and assigning a priority to that information. There should also be procedures for reviewing and referring information that the primary reviewer may be unsure about. Information processors must be aware that changing conditions can change the priority of information.

Continued on next page

Techniques and Procedures, Continued

Step 2: Perform information analysis and prioritization, continued

Prioritization is aimed at getting operational information immediate attention. The following are descriptions of the prioritization categories commonly used. Leaders must train information processors on using and practicing priorities:

- CRITICAL: This is information the commander requires that directly affects his decisions. It dictates the successful execution of operations. Commanders need to identify this information by stating the commander's critical information requirements (CCIR), including priority intelligence requirements (PIR), friendly forces information requirements (FFIR), and essential elements of friendly information (EEFI). Normally, the executive officer (XO) or battle captain will take a direct role in managing and tracking this information, but it is essential that everyone including RTOs be aware what information will fall within this category during any given operation. NOTE: CRITICAL information applies not only to the TF commander's CCIR but also to CCIR designated by higher headquarters.

- EXCEPTIONAL: This is specific and immediately vital information that directly affects the success of the current operation. EXCEPTIONAL information signals the occurrence of unpredictable or extraordinary events such as an unforeseen opportunity for success or an early warning of a pending emergency. This information is extremely time-sensitive for decision making and there can be no delay in further dissemination. Normally this information is delivered to the commander. An example of EXCEPTIONAL information is an observer's spot report of an enemy unit massing for movement through a defile. ALL individuals must be able to recognize EXCEPTIONAL information when received.

- ROUTINE: This is standard, repetitive information that occurs during day-to-day operations. It is not essential to the commander in its current, raw format and usually must be thoroughly analyzed and combined with other information before it is usable. Processing is important, but it must be done in such a manner that does not overload the staff or information system. Examples of ROUTINE information are "no change" situation reports, status updates, and routine logistical requests.

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Techniques and Procedures, Continued

Step 2: Perform information analysis and prioritization, continued

The unit must identify prioritization authority and responsibility by individual or position. Prioritization authority may differ by category of prioritization. Examples of persons who are normally given responsibility for prioritization are the shift noncommissioned officer (NCO), section noncommissioned officers in charge (NCOICs), section OICs, assistant staff officers, battle captain, principal staff officer, and XO. Prioritization by junior personnel (shift NCOs, junior officers) is dependent on their being well trained and fully aware of the prioritization procedure. However, making senior people (XO, principle staff officer) responsible for prioritizing too much information may slow the information management process and cause information backlog or overload.

Step 3: Disseminate information within the command post

After quickly analyzing and prioritizing received information, a designated individual determines how and to whom to disseminate the information within the CP. The larger the CP operation (e.g., the MAIN), the more essential it is that specific procedures and recipients be identified. Methods of dissemination to consider include:

- Verbal report to other specified individuals, staff sections, and special staff. Use for CRITICAL and EXCEPTIONAL information.
- Distribution of copies of messages and reports. Identify recipient sections. Use for EXCEPTIONAL and ROUTINE information.
- Posting section and common situation maps and charts. Specify what maps and/or charts. Use for CRITICAL, EXCEPTIONAL, and ROUTINE information.
- Conducting staff huddles. Specify who calls and what individuals are included. Use for CRITICAL and EXCEPTIONAL information.

Continued on next page

Techniques and Procedures, Continued

Step 4: Conduct commander and staff analysis and further dissemination

Staff officers collectively conduct predictive analysis on information received to determine its impact on current and future operations. On some occasions, the commander, the XO, or a battle captain may determine that an information item is CRITICAL or EXCEPTIONAL enough that collective or further analysis is not needed before forwarding that information to the commander, subordinate/adjacent units, or higher headquarters.

However, most information requires some type of analysis and interpretation before its full impact can be accurately determined or predicted. Collective analysis by the staff may change the priority of an information item, or several information items can be combined to form new information or conclusions. For example, a situation report from a subordinate unit that impacts the ability of that unit to accomplish an assigned task can turn a ROUTINE report into EXCEPTIONAL information.

Once the staff completes its analysis, the XO or battle captain must determine what to do with the analysis results. Normally there are two options: take action within that CP or disseminate the information to other CPs, subordinate units, adjacent headquarters, or higher headquarters.

If information must be further disseminated after analysis, the method of that dissemination must be decided and the information formatted. Normal methods to consider include:

- situation reports or spot reports to higher or adjacent headquarters
- fragmentary orders (FRAGOs) or WARNOs to subordinate units
- requests for information
- requests for support.

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Techniques and Procedures, Continued

An information management procedure example

The following example describes one way to manage the information flow within the CP:

Information Management Procedures

1. The RTO in the S3 Section monitors the command net and records a situation report from a subordinate unit.
2. The RTO gives the report to the shift operations NCO. The shift NCO assigns the message a ROUTINE priority.
3. The operations NCO posts the reporting unit's new location and status to the common situation map and status chart.
4. The battle captain analyzes the updated status of the subordinate unit and realizes that, in its new location, the unit will be unable to complete an upcoming, planned task. The battle captain upgrades the priority to EXCEPTIONAL and notifies the XO of the information and his interpretation.
5. The XO convenes a staff huddle of the battle captain, FSE rep, and S2 to further analyze the information. Their initial analysis indicates a change to the tactical plan will be necessary. They develop a recommended branch plan.
6. The XO transmits the information, analysis, and recommendation to the commander. The commander concurs and approves the recommendation.
7. The XO develops and transmits a FRAGO to the affected subordinate units.

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Techniques and Procedures, Continued

Special situations for information management requirements

There are some operational conditions that are either inherently disruptive or that put unusual stress on information management. These situations require special information management techniques to insure that information flow does not suffer when they occur. They require prior planning and intense management when they do occur. Some of these special situations include:

- shift changes
- CP displacements
- loss or impairment of a CP.

Shift changes

Each CP must be prepared to provide continuous support to the commander and to the unit. They must operate 24 hours a day over long periods of time. Plans must be made to employ multiple shifts and to provide for information sharing between shifts. The unit must have a plan that allows each section within a CP to change shifts with minimal impact on the support provided. To support this, CPs must employ the following:

- standardized information charts
- briefings
- use of standard graphic symbols
- complete understanding of procedures established in SOP
- training.

There are two shift change techniques that can be employed by CPs. Each has advantages and disadvantages.

Option 1: Change all sections within a CP simultaneously

- Advantages: This requires only two shift change briefings per day, and briefings for all sections can be combined. Each shift section always works with the same shifts from other sections.
- Disadvantages: There is less continuity between CP shifts. There is often a decrease in situational awareness.

Option 2: Change each section on a staggered schedule

- Advantages: This increases operational continuity between shifts.
- Disadvantage: It requires multiple shift change briefings.

Continued on next page

Techniques and Procedures, Continued

Displacement or loss of a CP

Each CP must be prepared to assume the roles of the other CPs. When a CP displaces, it must pass responsibility for its command, control, and information management functions to one of the other CPs. Designated alternate CPs must assume those responsibilities when a CP is disabled or destroyed. The TFs information management plan should address these situations to ensure an uninterrupted flow of information.

Example: the tactical CP (TAC) controls the command net during mission execution, controlling the close fight. The MAIN monitors the command net, collecting, recording, and analyzing information passed over the net. After a five minute interval when no one can contact the TAC, the XO determines that the TAC is nonoperational and directs that the MAIN assume responsibility for controlling the command net and controlling the close fight.

Assessment Guide for the Commander and Observers

Observing this performance objective

The Observer for this activity must split his or her time between all of the CPs (MAIN, CTCP, and Command Group) and between all of the sections within a CP. With such a broad area of responsibility, observation must be selective. However, over the course of the exercise, it should be possible to gather a general impression by following specific incidents from all of these entities.

Tools

Use the techniques and procedures, assessment sheets, and the unit's SOP as a guide during observation. Collect data on specific pieces of information by tracking them from the time of receipt until final disposition and compare that data with the process outlined in the techniques and procedures and the unit's SOP. Keep notes on several such information processing activities for each section within each CP and use these as specific incidents for feedback.

Coordination with other observers

You should also be aware that there is a similar management information effort going on with an Observer at the brigade level. Although your observations and feedback are being conducted independently, you both share the same requirements. Coordinate your activities and observations where appropriate, particularly to identify message traffic which requires action at both echelons.

Suggested times for scheduled feedback

Suggested times for scheduled feedback are at the end of execution for all missions.

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Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment

Discuss the following considerations in determining the battalion's readiness for performing this performance objective.

1) Describe the TF information management plan.

Information management does not "just happen." There must be a plan; everyone must know their role in the plan; it must work. Normally the TACSOP will address information management, but just having a written plan is not sufficient. If the SOP addresses information management, answer the following questions:

- Does everyone know what is in the SOP?
- Do we apply what is in the SOP?
- Are we satisfied with the result?

2) When and where does the TF practice information management?

Information management is a requirement at all CP operations: MAIN, CTCP, and Command Group, as well as any other CP type functions the TF might find itself organizing. Information management is required as soon as any CP is "open for business" and is receiving information. It must be actively practiced throughout all phases while that CP is operational.

Examine the information management plan at all levels that it affects; don't just examine the MAIN. The information management plan must be applicable and used by all sections and operations within the TF CP structure.

3) Identify the CCIR in this exercise. Track how information relating to CCIR was managed.

All information that supports or affects a CCIR must be identified as soon as it is received on the information channel. Everyone involved in the information management chain must know the current CCIR at the division, brigade, TF, and Co/Tm levels. CCIR must receive the highest prioritization (CRITICAL) and the commander must receive the information immediately. Delays in recognizing and processing CCIR information cannot be tolerated.

Tracking CCIR information that should have been treated as CRITICAL but was not is a good way to expose problems in the information management system.

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

4) Identify information that was prioritized as EXCEPTIONAL (or the equivalent). Track some of these items to determine how this information was handled, starting with when it was received.

EXCEPTIONAL information is oftentimes the most difficult to identify because it does not follow the specified criteria (CCIR related) of CRITICAL information. Most often, it is prioritized as such because of how it affects the immediate situation. Accurate identification of EXCEPTIONAL information depends on the alertness, training, and experience of the persons monitoring information, as well as on the existence of clearly understood information management programs.

5) Who determines prioritization?

This will differ by CP, section, shift, event, and even by priorities. But such individuals must know who they are, what their requirements are, and how the information management system works.

6) Describe the shift change procedure. How well did it work?

Shift change procedures should support incoming personnel assuming operational control without any deterioration of the on-going processes. It is an especially vulnerable time for both people and information. Closely examine the process that was used for a timely, efficient shift changes that left personnel feeling confident to take over. Likewise, examine items of information that were in the information pipeline at the time of shift change to identify any loss, mislaying, or delay of information. Identify why these happened.

Related Information

References

ARTEP 71-2-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force*, October 1988 with changes

- Task 71-1-3901, Command and Control the Battalion
- Task 71-1-3902, Perform S3 Operations
- Task 71-1-3904, Operate Main Command Post
- Task 71-1-3905, Perform Intelligence Operations
- Task 71-1-3906, Perform S2 Operations
- Task 71-1-3908, Operate Fire Support Section Operations
- Task 71-1-3913, Operate Combat Trains CP

ARTEP 71-3 MTP Final Draft, *Mission Training Plan for the Heavy Brigade Command Group and Staff*, February 1997

- Task 71-3-0001, Direct the efforts of the Brigade Staff
- Task 71-3-2004, Manage the Intelligence Effort
- Task 71-3-2006, Process Combat Information and Intelligence
- Task 71-3-3003, Maintain the Current Situations
- Task 71-3-8005, Conduct Engineer Operations Staff Supervision
- Task 71-3-9002, Conduct Fire Support Coordination in Support of Ground Operations
- Task 71-3-9003, Supervise Execution of the Fire Support Plan

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FM 71-3, *The Armored and Mechanized Infantry Brigade*, 08 January 1996

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FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces, Armored Brigade, Battalion Task Force, and Company Team*, 30 September 1992

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Appendix I: Information Management

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Related Information, Continued

References, continued

Center for Army Lessons Learned (CALL):

- NTC Trends 96, 1QFY96 and 2QFY96, TA.4 Command and Control BOS
- Trends 97-3, CTC 4QFY94 to 2QFY96, TA.4 Command and Control BOS.
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- Newsletter 95-7, *TOC Operations*, 16 Sep 97.

MILITARY DECISION-MAKING PROCESS IN THE BATTALION

Battalion task forces (TFs) are not resourced to conduct a military decision-making process (MDMP) that develops and analyzes multiple friendly courses of action (COAs). They must use an abbreviated MDMP that is commander driven, consistent with the TF staff capability and available time, and results in a flexible plan that accounts for multiple enemy COAs (ECOAs). The TF must plan in parallel with the brigade, using emerging information from the brigade's decision-making process. Command involvement, standard staff procedures focused on synchronizing the commander's scheme of maneuver, and effective parallel planning enable TFs to rapidly develop flexible, tactically sound orders.

Objective

The TF abbreviates the MDMP to produce a simple, flexible, and tactically sound plan within 12 hours from receipt of the first brigade warning order (WARNO). At the earliest opportunity, the brigade and TF commanders work together to develop a shared vision of the coming brigade fight. The TF commander uses directive guidance to share his vision for the fight and focus the staff on his critical information requirements. The commander and staff then coordinate the battlefield operating systems (BOS) to ensure that combat multipliers are integrated and synchronized into the commander's scheme of maneuver. The completed plan portrays a battalion fight consistent with the battalion and brigade commanders' visions and intents.

Techniques and Procedures

Overview

The time available and staff experience or depth at TF level rarely will permit using a decision-making process which literally follows the MDMP. While perhaps suitable at division or corps level, the process consumes staff time and energy, and at TF level rarely results in a plan with the needed flexibility.

An abbreviated process which does work at TF level shifts the focus of the process from the staff to the commander. The key element in making this process work is for the TF commander to TELL the staff how he visualizes the fight occurring. His experience and tactical skills allow him to visualize the TF fight and turn that visualization into a COA which he describes in as mush detail as he can in his guidance and intent statement. The staff provides information and helps complete the details of that visualization of the operation, integrating and synchronizing all the assets available to the TF. They then produce the plan which records the COA.

The TF does not plan in isolation, but as part of the brigade concept. The brigade commander and TF commanders often develop the concept for the brigade and TF fights in an interactive, commander-to-commanders, manner. Staffs share information early, allowing parallel panning by subordinate levels. WARNOs, liaison officers, and free interactions between staff levels allow TFs to have essentially completed their COA development before the brigade order is issued.

The TF has limited capability to handle ongoing missions and plan for subsequent missions. Parallel planning between TF and brigade depends on the TF commander and staff being able to shift their focus from current operations to the new mission. However, the TF staff should be able to use early information about the new mission to organize and prepare for the upcoming planning processes; e.g., assemble current information, prepare planning products, issue orders to subordinate elements about the nature of the following missions, anticipate repositioning requirements, etc.

Continued on next page

Techniques and Procedures, Continued

Receipt of mission

The decision-making process begins with the identification of a new mission. As the mission is received, the staff makes an initial assessment of the time available, develops the guidance for planning, and verifies the current status of units. The activity is triggered by the first brigade WARNO.

The first TF WARNO alerts subordinate units to the new mission and outlines the TF's requirements and suspenses in preparing for the mission.

Procedure

The TF commander contacts the brigade commander at the earliest opportunity to develop a shared vision of how the brigade commander sees the battle unfolding. This vision should include the TF role and purpose within the brigade fight. From his understanding of his role and purpose, the TF commander identifies tactical options that are available and that could contribute to mission success. He presents these options to the staff at the earliest opportunity so that mission analysis results address the feasibility of the options.

The TF battle staff:

- determines the time available to mission execution
- determines the time required for the battalion and subordinate units to plan and prepare for the mission
- verifies that maps displayed currently support the new area of operations (AO)
- updates the intelligence preparation of the battlefield (IPB)
- updates the information on subordinate unit combat readiness.

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Techniques and Procedures, Continued

Outcomes The outcomes from receiving the mission include:

- initial timeline for preparation activities for the battalion
- initial planning timeline for the battle staff
- updated unit status, supplies on hand, and maintenance forecasts
- commander's initial guidance for planning
- TF WARNO 1.

Timelines The TF preparation timeline schedules the key events that must be completed by the TF and subordinate elements in preparation for the operation. It is disseminated with the first TF WARNO and updated as necessary.

The TF planning timeline is used to coordinate the steps and related activities for the decision-making process within the battle staff.

Updated status The staff updates the information it routinely tracks to portray the status of the TF. The updated results are immediately forwarded to brigade or used to answer specific requests for information (RFIs).

Commander's guidance The commander issues initial guidance for planning:

- time allocations
- tactical options he is considering for his scheme of maneuver
- specific information requirements
- changes to priorities for resupply or maintenance
- authorized movement.

First TF WARNO The TF WARNO should include as a minimum:

- general enemy situation
- updated friendly situation
- nature of TF mission
- priorities and schedule of supply and maintenance
- initial preparation timeline.

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Techniques and Procedures, Continued

Mission analysis

The purpose is to allow the battle staff to see the terrain, enemy, and themselves within the context of the higher headquarters' fight. The staff focuses first on answering the commander's specified information requirements from his initial guidance, and then on analyzing related information. They determine the impact of the TF's current and forecasted status and dispositions on any tactical options outlined by the commander in his initial guidance.

During parallel planning, analysis is conducted as information becomes available from the liaison officer and through brigade WARNOs. It is a "building block" approach in that sufficient information required to complete all the analysis tasks may not be available until the fourth brigade WARNO.

The commander makes his own estimate to begin refining his tactical options into a tentative concept of the operation. Upon conclusion of the mission analysis brief, the commander completes his scheme of maneuver and refines his guidance based on the information provided in the brief. He then issues his guidance to the staff.

The end state is that the battle staff share an understanding of the current situation, the future mission, the effects of the current situation on the mission, and the commander's intent for the mission.

Outcomes

The outcomes of mission analysis include:

- updated information about the TF
- ECOAs
- initial risk assessment (i.e. potential hazards)
- initial reconnaissance requirements
- commander's guidance
- TF WARNO 2.

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Techniques and Procedures, Continued

Updated TF information

This information is the link between current operations and the future plan, and focuses on available and projected resources and capabilities. It does not include formal staff estimates but answers the commander's specified information requirements from his initial guidance. The staff also presents the impact of their analysis on any tactical options the commander discussed in his initial guidance. This is critical as these tactical options are based on the TF commander's and brigade commander's shared vision of the fight.

ECOAs

ECOAs are a critical component of the decision-making process. Friendly COAs are developed from the ECOAs. The brigade ECOAs are expanded to show enemy platoons and adapted to the TF areas of interest (AIs) and AOs. The S2 briefs each ECOA as if he were the enemy commander, describing how he would sequentially deploy and commit his resources to achieve his objectives. He addresses enemy forces, as they are committed into the fight.

Each ECOA consists of a written description, a graphic representation (Situation Template) and a high value target (HVT) list. They include:

- location of immediate and subsequent objectives
- execution of reconnaissance to include likely routes and objectives
- dispositions and maneuver of identified and templated units
- integration of fires and combat support assets
- range fans for direct fire and artillery systems
- likely timing and location of supporting air strikes or air assaults
- likely timing and locations of chemical attacks.

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Techniques and Procedures, Continued

Initial recon requirements

The reconnaissance requirements are identified from the initial IPB products and brigade orders. They highlight the assets and information required to gain and maintain contact with the enemy.

They include as a minimum:

- gaps in the intelligence available
- reconnaissance requirements from brigade
- TF limits of responsibility throughout the operation
- named areas of interest (NAIs) and specific intelligence requirements (SIR) needed to gain contact with the enemy
- assets available for reconnaissance
- acceptable risk for reconnaissance
- constraints on reconnaissance.

Initial risk assessment

The battle staff:

- identifies potential hazards due to accidental risk
- assesses the hazards that cannot be controlled adequately at battalion level and are most likely to result in the loss of combat power
- defines the level of risk for each hazard.

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Techniques and Procedures, Continued

Commander's guidance

The staff provides the commander with information tailored to his specific requirements for analyzing the tactical options. His guidance reflects a conscious effort to take time to integrate the information provided by the staff to complete his tentative scheme of maneuver.

The commander describes a distinct concept of the operation for the battle staff to coordinate during COA development. His guidance expresses in specific terms when, where, and how he intends to mass his combat power to accomplish his mission according to the higher commander's intent. Although given verbally, the commander should provide a written copy, if possible, to preclude misunderstanding.

It should address as a minimum:

- intent for reconnaissance: purpose, method, acceptable risk, and success
- initial intent for maneuver: purpose, method, decisive point, and success
- prioritized ECOAs
- restated mission
- scheme of maneuver to include security and reserve
- integration of fires (effect, formation, function, and purpose)
- updated commander's critical information requirements (CCIR)
- tasks and priorities by BOS.

Second TF WARNO

The second TF WARNO should include as a minimum:

- changes to task organization
- mission statement
- initial intent
- security and reconnaissance instructions
- authorized movement
- priorities for resupply and maintenance
- attachments: modified combined obstacle overlay (MCOO), Situation Template (SITTEMP), and updated preparation timeline.

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Techniques and Procedures, Continued

COA development

The purpose of COA development is to refine the commander's tentative scheme of maneuver into a COA that reflects how the commander expects to kill the enemy and protect the force. The COA must account for at least two ECOAs. They are usually the most probable and the most dangerous. The battle staff analyzes relative combat power to identify enemy vulnerabilities and additional resources that may be required. Using the ECOAs, the battle staff jointly refines the scheme of maneuver into a COA (the tentative plan).

The battle staff conducts a hasty wargame of the scheme of maneuver. They look for weaknesses that must be addressed, refinements that will improve, or clarification that will better describe what the commander intends. If the scheme is flawed, the staff must challenge the commander's concept. The staff develops the concepts for combat support and service support through coordinating movement and positioning of forces inherent in the scheme of maneuver. This coordination defines the conditions and disposition of forces at critical points of the fight.

The staff develops the reconnaissance and surveillance (R&S) plan to support the scheme of maneuver.

The commander backbriefs the scheme of maneuver to the brigade commander for his approval prior to wargaming.

The end state is to have a COA ready for synchronization.

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Techniques and Procedures, Continued

Procedure

A clear piece of acetate is placed over the commander's first prioritized ECOA. The battle staff refines the commander's scheme of maneuver against this ECOA, drawing required control measures on the acetate. The alternative ECOA(s) are then placed under the acetate, and the battle staff develops actions to deploy the TF against these ECOA(s).

Refining the COA

The commander's decisive point (terrain, enemy, or phase) is verified. Forces are arrayed to obtain decisive combat ratios at that point. The main effort is identified, and forces allocated to supporting efforts are adjusted. Basic graphic control measures are determined. The scheme of maneuver describes how the arrayed forces will accomplish the commander's intent. Initial tasks with associated purposes for subordinate units are identified. Command and control relationships, to include support relationships for combat support units, are determined.

The battle staff then evaluates the effect of brigade branches and alternate ECOAs on the scheme of maneuver. The timing and actions required to execute a brigade branch or shift against and defeat the ECOA are identified.

The reconnaissance objective and priority intelligence requirements (PIR) are reviewed so the staff can develop the initial R&S plan.

Conduct hasty wargame

The battle staff conducts a hasty wargame to develop the draft execution matrix for the scheme of maneuver and its branches. The battle staff uses the original dispositions from the scheme of maneuver to develop the actions required for brigade branches and alternate ECOAs. The commander evaluates acceptable risk within the scheme of maneuver.

The hasty wargame allows the battle staff to coordinate movement and positioning of combat support and service support assets to ensure maximum employment of combat multipliers.

At the conclusion of the hasty wargame the commander approves the tentative task organization.

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Techniques and Procedures, Continued

Outcomes

The outcomes of COA development are:

- tactical risk assessment
- COA statement and overlay
- concept for combat support and service support
- draft R&S plan.

Tactical risk assessment

The commander evaluates accepted risk within the COA. He considers the effects of enemy action where the he intends to accept risk, such as an economy of force. He also considers where an opportunity may be lost due to an educated gamble, such as the trade between using an unexpected avenue of approach (AA) to achieve surprise versus the potential disruption in employing combat power at the decisive point. The commander determines when and where he will accept tactical risk.

COA statement and overlay

The statement should describe as a minimum:

- task organization (specific units need not be designated)
- objective for reconnaissance
- security operations
- main and supporting efforts
- integration of maneuver with fires (direct and indirect)
- essential tasks for subordinate forces
- reserve
- actions to adjust to brigade branches and alternate ECOAs.

The overlay contains the minimum control measures required and reflects the designated command and control relationships.

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Techniques and Procedures, Continued

COA concepts for support

Concepts of support should describe the following:

- priorities for support (by phase if used)
- organization for combat (specific units need not be designated)
- scheme of movement and positioning of units
- tasks for units
- schedule to echelon support
- timing and location of logistical elements, and supply and exchange points.

R&S plan

The R&S plan is developed from the requirements identified during mission analysis. Initial NAIs are drawn on a piece of acetate placed over the most likely COA. The acetate is then placed over the alternate ECOAs and additional NAIs are identified. This acetate becomes the event template and the basis for the R&S plan. The staff then confirms SIR and assigns them to NAIs, allocates assets to ensure redundancy, and develops the reconnaissance statement. The draft R&S plan should consist of as a minimum:

- the statement that describes who, what, where, when, and how reconnaissance is executed
- execution matrix that includes the timing, SIR, and observer for each NAI
- the overlay that portrays the event template.

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Techniques and Procedures, Continued

COA analysis

COA analysis consists of formal wargaming to ascertain the best means to employ combat power while considering force protection measures. It enables the battle staff to develop a shared vision of the battle while anticipating potential battlefield events. The purpose is to synchronize and refine the COA to accomplish the mission, focused on killing the enemy and protecting the force. The commander's direct participation ensures responsive and definitive answers to issues that arise during the wargame. The COA must be wargamed against a minimum of two ECOAs. The end state is the complete plan.

Procedure

Table 1 presents a procedure for wargaming. Maneuver is integrated with direct and indirect fires. It ensures the effective use of all combat multipliers and that maximum combat power is employed at the decisive point. The commander can make the initial assumption that subordinate commands can handle normal situations within the scheme of maneuver. This allows the battle staff to focus on essential tasks.

HVTs are used to determine engagement priorities. Critical information required for decision points or to execute tasks or triggers is incorporated into the CCIR. Examples of these CCIR include:

- when and where the AT-5s establish a firing line (PIR)
- when the mortar platoon has occupied firing position 41 to fire immediate smoke (friendly forces information requirements - FFIR)
- the movement of the reserve from AA RITA to AA KATE (essential elements of friendly information [EEFI]).

Terrain management during maneuver is essential for the movement and positioning of combat support assets at the decisive point. The scheme of maneuver is synchronized with the capability to provide combat support and service support. Positioning of combat trains, the UCMP, and LOGPACs is critical for the TF to retain the initiative for future operations.

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Techniques and Procedures, Continued

Table 1. Wargame Technique

S3 briefs the COA.

The commander briefs his intent.

ECOA	Event	Wargame Activity
S2 briefs first ECOA	Executive Officer (XO) selects the first event	S2 reviews HVT list S2 and S3 move unit symbols Staff conducts action/ reaction/counteraction process Record results: Adjust engagement priorities Adjust the scheme of maneuver Adjust the scheme for fires Adjust graphic control measures Modify task organization Modify R&S plan Modify service support plan Add/delete/modify CCIR Synchronize tasks by BOS
	XO selects next event; repeat activities until ECOA is complete	
S2 briefs second ECOA	Friendly units start in same positions	Repeat wargame activities from above
	Enemy units starting positions based on different ECOA	Record actions and time for shifting forces to meet ECOA
	XO selects the first event	
	XO selects next event; repeat activities until second ECOA is complete	

Continued on next page

Techniques and Procedures, Continued

Outcomes

The outcomes from COA analysis are:

- a complete plan
- control measures to reduce risk
- TF WARNO 3.

Completed plan

In addition to the action/reaction/counteraction process, wargaming enables synchronization across the battlefield operating systems:

- terrain management for maneuver and support units
- positioning of units and assets to protect the force
- concentrating combat multipliers at the decisive point
- casualty evacuation
- handling enemy prisoners of war
- traffic flow on main supply route (MSR) and supply routes (SRs)
- CL III and CL V expenditures
- priorities for reorganization based on future missions.

The synchronized plan should address:

- task organization
- intelligence
    - refined SITTEMP
    - refined event template
    - refined SIR and PIR.
- concept of the operation
    - revised intent
    - maneuver with execution matrix
    - operations graphics.

Continued on next page

Techniques and Procedures, Continued

Completed plan, continued

- fires
    - scheme of fires
    - control measures
    - refined target lists and triggers
    - CAS requests.
- R&S plan
- engineer support plan
- air defense plan to protect the force
- smoke plan and triggers
- CCIR
- concept for service support
    - casualty evacuation
    - traffic flow on MSR and SRs
    - CL III and CL V expenditures
    - priorities for reorganization based on future missions.

Risk assessment

The commander determines the level of residual risk he will accept to accomplish the mission. Acceptable risk may result from unit dispositions such as an economy of force to enable massing combat power at the decisive point. It may also result from the scheme of maneuver and integration of fires that poses some risk of fratricide. He must receive the brigade commander's approval to accept any risk that might endanger his higher commander's intent.

The commander refines and approves the control measures that reduce risk. He includes those measures that will give him the flexibility to adjust the plan as the mission progresses.

Continued on next page

Techniques and Procedures, Continued

Third TF WARNO

The third TF WARNO should include as a minimum:

- situation update
- task organization
- commander's intent
- scheme of maneuver
- company/team zones, sectors, or battle positions
- company/team specific tasks
- CCIR
- concept of service support
- attachments: R&S Plan, draft operations overlay, and updated preparation timeline.

Orders production

In the abbreviated procedure, synchronization should be completed before orders production begin. Orders production consists of the actions required to produce, duplicate, and disseminate the order.

Although the commander may delegate authority to review the draft order, he should personally approve the order.

The end state is an order that verbally and graphically portrays the battalion fight and the subordinate units' roles in that fight.

Procedure

There are four aspects to orders preparation:

- assemble the order
- review and approve the draft order
- reproduce the order
- issue the order.

Assessment Guide for the Commander and Observers

Observing this performance objective

To assess the staff's performance on this objective, observers must observe the staff interactions throughout the decision-making process. Continuity is important in observing the decision-making process.

Look at each step of the process and determine:

What did the staff intend to do during the step. Is it clear that they knew what the outcomes should be and focused their efforts toward those ends?

What did they actually accomplish? How does what they accomplished compare with what they describe in their tactical standing operating procedure (TACSOP) as their standing procedure?

Are there significant differences between the process the TF used and the techniques and procedures suggested?

What evidence is there of problems with a subsequent step as a result of incomplete or flawed outputs from a preceding step?

How was the commander's intent reflected in each step?

Are subordinate units made aware, through WARNOs, of what the TF is planning? Are subordinate units carrying out reconnaissance and initial tasks called for in WARNOs. How efficiently were task organization changes carried out? Were they on time? Check for these with the company workstations in the simulations room. Each order and instruction should result in some activity within the simulation. The flow of instructions down to the appropriate execution level is important in this process.

How did the staff interact with the brigade in seeking additional information, obtaining the answers to RFIs, and keeping the brigade informed of their status and intended plan for the upcoming operation?

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Assessment Guide for the Commander and Observers,
Continued

Suggested times for scheduled feedback

Two feedback sessions are recommended for this performance objective. The first should be conducted sometime after the mission analysis brief and the commander's guidance. The second should be conducted sometime after the orders brief.

The first session allows the battle staff to review how well they answered the commander's specific information requirements and to look at how well the enemy ECOAs were described. Covering the commander's guidance allows the discussion to include how rapidly the commander was able to develop his vision for the battle and frame it in terms of his guidance.

The second session can occur at any point after the orders brief. It may even be delayed until after mission execution.

Considerations for assessment

In determining the brigade's readiness for performing this task, discuss the following considerations:

1) What procedures assisted mission analysis?

- How did the commander intend to abbreviate the decision-making process?
- How did the commander focus the staff's activities in acquiring information?
- How did the battle staff allocate time for planning and preparation prior to mission execution?
- Does the battle staff have procedures for obtaining and presenting the information the commander desires from mission analysis?
- What staff procedures facilitate the development and maintenance of running estimates?
- How did information presented in mission analysis assist the commander in refining his tactical options into a tentative scheme of maneuver?
- How did the commander's guidance abbreviate and focus the battle staff's continued planning activities?

Continued on next page

Assessment Guide for the Commander and Observers,
Continued

Considerations for assessment, continued

2) What procedures contributed to producing a single, flexible, tactically sound COA?

- How did the commander's guidance drive COA development?
- How did the battle staff refine the commander's scheme of maneuver into the COA?
- How did the hasty wargame contribute to completing the COA?
- How did the staff integrate requirements from brigade branches and alternate ECOAs into the scheme of maneuver?
- How did the battle staff develop and integrate the reconnaissance plan?
- What were the components of the completed COA?

3) What procedures contributed to producing a complete plan through wargaming?

- Was the COA backbriefed to the brigade commander prior to wargaming?
- What factors influenced the wargame method and recording technique selected?
- How did the commander's participation influence the conduct of the wargame?
- How were the CCIR refined?
- How was the reconnaissance plan refined?
- How effective was the wargame method at synchronizing the entire operation?
- What activities after wargaming were required to complete the plan?
- What actions that were critical in compiling the order could become standard procedures?
- Was sufficient time allocated for order reproduction?

4) How did the TF liaison officer contribute to the TF's abbreviated decision-making process?

Related Information

References

ARTEP 71-2-MTP, *Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force*, 03 October 1988

- Task 7-1-3901, Command and Control the Battalion Task Force
- Task 7-1-3902, Perform S3 Operations
- Task 7-1-3904, Operate Main Command Post
- Task 7-1-3906, Perform S2 Operations
- Task 7-1-3908, Operate Fire Support Section Operations
- Task 7-1-3912, Perform Combat Service Support Operations

FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force*, Change 1 17 August 1994

- Appendix B, Combat Orders

FM 101-5, *Staff Organizations and Operations*, 31 May 1997

- Chapter 5, The Military Decision-Making Process
- Appendix A, Mission Analysis Guidelines
- Appendix B, Commander's Guidance Guidelines
- Appendix H, Plans and Orders
- Appendix L, Liaison