

ABBREVIATED MILITARY DECISION MAKING  
FOR BRIGADE COMBAT TEAMS

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff college in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE  
General Studies

by

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2001

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MASTER OF MILITARY ART AND SCIENCE

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

ABBREVIATED MILITARY DECISION MAKING FOR BRIGADE COMBAT TEAMS, by MAJ Charles W. Innocenti, USA, 138 pages.

This study investigates the Army's current military decision-making process and its applicability to brigade level combat operations in a time-constrained environment.

Tactical military decision making is an arduous process that many times occurs in less than ideal conditions. As the complexity of warfare increases and changes in the threat occur, the demand to develop tactical plans that leverage all the combat multipliers available to the commander, while providing the flexibility to maintain the initiative throughout the operation, becomes even more difficult. This problem is compounded further when decision making must occur in a time-constrained environment. This study examines the Army's doctrinal decision-making process and determines whether brigade combat teams can adequately utilize it in time-constrained combat situation to explore options, develop courses of action and produce a feasible plan. It specifically examines the techniques prescribed in doctrine to modify the process in a time-constrained environment, and identifies any issues related to those techniques.

This study concludes that the three primary techniques described in doctrine for abbreviating the military decision-making process work, however, described techniques within the process for considering the enemy are inconsistent and inadequate. An appendix is included in this study with a proposed technique to overcome the issues with regard to consideration of the enemy that were identified when using the current doctrinal decision-making process in a time-constrained situation.

## ACKNOWLEDGEMENTS

To my wife, JoAnne, I express my love and gratitude for her tremendous support during this past year. I also owe a great debt of gratitude to the members of my Committee, COL (Retired) Charles Soby, LTC John Chere, and Dr. Bruce Menning. Their support and guidance for this project was indispensable. Finally, I sincerely wish to thank all those senior military leaders, both active and retired, who took the time out of their busy schedule to teach me the art of war fighting.

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## ABBREVIATIONS

ARI	Army Research Institute
BOS	Battle Operating System
CAS	Close Air Support
CALL	Center for Army Lessons Learned
COA	Course of Action
CTC	Combat Training Center
ECOA	Enemy Course of Action
FASCAM	Family of Scatterable Mines
FM	Field Manuals
FRAGO	Fragmentary Order
IPB	Intelligence Preparation of the Battlefield
JRTC	Joint Readiness Training Center
LTP	Leaders Training Program
MDMP	Military Decision-Making Process
MRB	Motorized Rifle Battalion
NAI	Naimed Area of Interest
NTC	National Training Center
OC	Observer Controller
OPFOR	Opposing Force
PIR	Priority Intelligence Requirements
R&S	Reconnaissance and Surveillance

S-2 Intelligence Officer  
S-3 Operations Officer  
SITEMP Situation Template  
TTP Tactics, Techniques, and Procedures  
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## CHAPTER 1 INTRODUCTION

The commander has always been challenged with making tactical decisions on the battlefield. He must first gather all the information possible on the current situation and then develop a plan, which will lead to a favorable outcome. The conditions in which this process takes are usually unfavorable. There is rarely enough time to fully develop a detailed plan, and the problem is further compounded when facing a changing and unpredictable enemy.

As Cohen and Gooch explain, “More important, war is a contest between two sides, and once a battle begins each party will do its level best to make a disaster occur by breaking the enemy’s physical strength and destroying his mental resilience.”<sup>1</sup> The result is a conflict in which the outcome is usually awarded to the commander who has best been able to visualize himself, the enemy, and the terrain in space and time faster than his opponent. This, in turn, allows him to develop and maintain a flexible plan to meet the challenges of the modern day battlefield.

### Background

To help the commander see himself, the enemy, and terrain and then to make tactical decisions to get inside the enemy’s decision cycle, the Army has developed the Military Decision-Making Process (MDMP). This process provides the commander and staff with a systematic approach at gathering information, developing courses of action, and developing and executing workable plan.

The current model for military decision making can trace its beginnings to the Prussian Army of the early 1800s. The lack of military geniuses to fill critical command positions and the increasing size the armies of the early 1800s caused the need for a

logical and systematic approach to solving military problems.<sup>2</sup> The U.S. Army developed its system much later. In 1906, the Army adopted the five-paragraph order to standardize the process by which orders were based. In 1909, *Estimating Tactical Situations and Publishing Field Orders* was written by Captain Roger S. Fitch while he served at the Infantry and Cavalry School at Fort Leavenworth. This document served to set the foundation for the standard military decision making process. Later, aspects of the military decision making methodologies from the German, Russian, and French Armies were integrated into the U.S. Army's process.<sup>3</sup>

The U.S. Army's doctrinal manual for estimates and decision making is Field Manual (FM) 101-5, *Staff Organization and Operations*. The initial version of this manual appeared in 1932. It discussed the decision-making process that had been developed at Fort Leavenworth. In 1940, the term "visualization" was introduced in FM 101-5 as part of estimating outcomes of military actions. The revisions of FM 101-5 in the 1950s and 1960s discussed increased specificity in estimation, although the concept of visualization did not change. The term "war gaming" was first used in the 1968 version of the manual. The process is described as a detailed analysis of sequenced actions that would occur during the battle. In this version of the manual, the commander is the sole participant in the war gaming process.<sup>4</sup>

There were significant changes to staff activities related to the MDMP between the 1984 version and the 1997 version of FM 101-5. During that time, two final drafts were circulated (1993 and 1996) prior to the adoption of the latest official version in 1997. The major changes were the integration of the staff into the course of action development and actual war gaming. Visualization was now performed by the

commander to produce an intent and a concept that the staff used as a focus for developing the course of action and plan.<sup>5</sup>

### Defining the Problem

Despite the potential for the U.S. Army's informational dominance and overwhelming firepower on the battlefield, success in battle is not guaranteed. When examining today's complex environment in which a brigade commander must conduct combat operations at the mid to high intensity level, several factors should be considered. First, the nature of the threat the U.S. Army faces today has significantly changed from what it faced during the Cold War. Second, digitization will act as an enabler, but will not replace the MDMP process. Finally, despite these changes the tenets for Army operations have not changed and remain the characteristics for successful operations.

The threat has changed. Training and Doctrine Command Pamphlet 525-5, *Force XXI Operations*, describes the foundations for the future conduct of war and operations other than war. It lays out the expected future strategic environment and discusses the characteristics of future threats. It states that future threats will operate against the full spectrum of military capabilities and that "The days of the all-purpose doctrinal threat template are gone."<sup>6</sup> Training and Doctrine Command Pamphlet 525-5 also says that threat forces will use lessons learned from the Gulf War and Somalia to assess their own force deficiencies.<sup>7</sup> Future threats will focus on exploiting their strengths against the U.S. Army's weaknesses. The element of surprise will be important when attempting to neutralize the U.S. Army's superior ability to mass precision fires through information dominance.<sup>8</sup> Surprise will be achieved by being less predictable and engaging U.S. forces at a time and place that nullifies their tactical and technical advantages. In short,

the brigade commanders must be prepared to face a threat that will be less predictable and be capable of operating across the full spectrum of operations.

Digitization will have an impact on the MDMP, but will not eliminate it. Training and Doctrine Command Pamphlet 525-5, *Force XXI Operations*, also describes the impact digitization will have on how the U.S. Army conducts operations. Digitization will enable the decision-making process to potentially move faster than it ever has, but digitization will not replace or eliminate the process. Short of the creation of an artificial intelligence that can replicate and display enemy intentions, nothing currently in development will replace the commander's requirement to visualize the battle and develop a coherent plan to defeat the enemy. Digitization as an enabler will provide access to more data and allow an unprecedented nonhierarchical flow of information.

To understand how brigade commanders will develop effective plans to defeat these opponents and exploit the power of digitization one must understand the Tenets of Army Operations. The current version of FM 100-5 (1993) describes the tenets of army operations and says, "The Army's success on and off the battlefield depends on its ability to operate in accordance with five basic tenets: initiative, agility, depth, synchronization, and versatility."<sup>9</sup> The Student Text 3-0, *Operations* (October 2000) retains these five basic tenets and says, "These tenets are essential for victory."<sup>10</sup> Brigade commanders must develop plans that have courses of action that incorporate the five tenets to ensure success on the battlefield.

Initiative and agility are closely related concepts. FM 100-5 describes initiative as:

Applied to the force as a whole, initiative requires a constant effort to force the enemy to conform to commander's operational purposes and tempos, while retaining freedom of action. It means depleting the enemy's options, while still having options of their own. This requires leaders to anticipate events on the battlefield so that they and their units can act and react faster than the enemy.<sup>11</sup>

It is the "ability of friendly forces to react faster than the enemy and is a prerequisite for seizing and holding the initiative."<sup>12</sup>

To ensure the commander has initiative and flexibility, he must first understand how the enemy views success and the options available to the enemy. The commander must then recognize enemy vulnerabilities and possible opportunities. Only then can the commander develop plans to counter and eliminate enemy options. However, simply developing a plan is not enough. The commander must make decisions faster than the enemy to enable him to get inside the enemy's decision cycle and impose his will upon the enemy. Flexibility remains key to this process. Once the commander has the initiative, he must remain flexible to counter anticipated as well as unanticipated enemy reactions to continue to hold the initiative.

Plans are made based on enemy capabilities and intentions. However, it is not always possible to determine enemy intentions, so commanders must be able to address the full array of options available to the enemy. "A good Course of Action (COA) should be capable of defeating all feasible enemy COAs," so it stands to reason that this must be true of the overall plan as well.<sup>13</sup> Commanders must not get locked into a process where plans are only developed against a single enemy COA (ECO) that excludes other

enemy options; otherwise, they lose flexibility in their maneuver and risk being surprised by the enemy. Brigade plans, therefore, must not only be developed with initiative in mind, but must have the flexibility to address multiple ECOAs.<sup>14</sup>

The next two tenets of depth and synchronization are closely related as well. “Depth is the extension of operations in time, space, resources, and purpose.”<sup>15</sup> “Synchronization is arranging activities in time and space to mass at the decisive point” and “includes, but is not limited to, the massed effects of combat power at the point of decision.”<sup>16</sup> By leveraging all the combat multipliers available throughout the depth of the battlefield, the commander can quickly overwhelm the enemy. This degrades the enemy’s freedom of action and allows the commander to either gain or sustain momentum on the battlefield. Brigade plans, therefore, must fight the enemy throughout the depth of the battlefield and must seek to gain overwhelming combat power through synchronization.

The final tenet is versatility. “Versatility is the ability of units to meet diverse mission requirements,” and “the ability of tactical units to adapt to different missions and tasks, some of which may not be on unit mission-essential task list.”<sup>17</sup> If units must be able to adapt to these different missions, then the MDMP must also be flexible enough to develop feasible plans for many different missions. The MDMP itself must be versatile.

What does all this mean to a brigade commander on the ground trying to conduct an operation? It means the threat will be very dynamic, time will be limited, and the very nature of his operation will be complicated, if for no other reason than the capabilities that a modern U.S. Brigade brings to the fight. The commander’s ability to develop a plan and make tactical decisions when time is limited is paramount. The U.S. Army

doctrine must provide the commander the best model possible for developing a plan and making tactical decisions. It means the Army's MDMP in a time-constrained environment must develop plans at the brigade level that retain the initiative, are flexible, fight the enemy in depth, and synchronize combat multipliers and that the process must be versatile enough to develop plans for a variety of missions.

### Primary and Secondary Questions

Primary question: Does the Army's current MDMP for a time-constrained environment support brigade-level operations?<sup>18</sup>

Secondary questions:

1. What is the Army's current MDMP?
2. What changes are implemented to the MDMP when conducted in a time-constrained environment?
3. Do staffs implement the changes to the process that doctrine dictates?
4. Do brigades who follow this process encounter any consistent problems with developing effective plans?

### Scope

This thesis considers the challenges of decision making at the brigade level when time is limited. However, those who use the MDMP as a method to make tactical decisions in a time-constrained environment could potentially apply issues and recommendations concerning the MDMP at all levels.

### Assumptions

First, this study assumes that an MDMP for a time-constrained environment exists. FM 101-5 is the primary doctrinal manual for U.S. Army staff organization and

operations. It discusses decision making in a time-constrained environment at the end of chapter 5. The fact that other current U.S. Army manuals also refer to an accelerated MDMP further confirms that this process exists.

Second, this study assumes that staffs that deploy to the National Training Center (NTC) and the Joint Readiness Training Center (JRTC) have some working knowledge of the basic MDMP, as well as the time-constrained process. Brigades that conduct rotations at the NTC and JRTC usually go through train up exercises that prepare them for their actual rotation. While the extent of the train-up will vary, it includes several exercises that provide the staff with the opportunity to conduct planning operations using the MDMP.

Also, several months prior to their rotation, brigade staffs go through the Leadership Training Program at the appropriate Combat Training Center (CTC). This program includes classes, which discuss negative and positive trends, which talks about the MDMP in a time-constrained environment, and which provides an exercise in which the staff must develop a plan in a time-constrained environment. This program culminates with a simulation exercise in which the plan is executed. Although the quality of the unit train-ups vary, it is a safe assumption that no brigade-level staff deploys to NTC or JRTC without any prior experience conducting planning using the standard and accelerated MDMP.

Third, this study assumes that brigade operations at NTC and JRTC are conducted in a time-constrained environment. For example, at NTC, the time between the issue of the division operations orders and fragmentary orders (FRAGOs) to the initiation of those operations is usually less than 72 hours. Using the one-thirds two-thirds rule, the brigade

staff should take about 24 hours to develop a plan. However, operations at the NTC and the JRTC are continuous, so during the 24 hours allotted for planning of the next mission, the brigade staff is also conducting the current operation. This poses a major challenge, since the staff must plan for one operation and execute a separate operation at the same time. The challenge is even greater when many key staff elements do not have enough people to conduct both operations simultaneously. The staff must also find time to sleep during this time as well. All these challenges quickly reduce the amount of time a unit has for planning an operation to less than optimal.

#### Define Terms

**Abbreviated MDMP:** This term refers to the MDMP that has been shortened because of limited time. This term does not refer to a separate process. Reference to the abbreviated MDMP is used in the context of this these to simple refer to the MDMP where execution of the steps has been modified to conform to the demands of decision making in a time-constrained environment.

**Deliberate MDMP:** This term refers to the basic MDMP that has not been modified because of time constraints. This term also does not refer to a separate process. Reference to the deliberate MDMP is used in the context of this these to simple refer to the MDMP in a non time-constrained environment where no abbreviating of the process is required.

**Intelligence Preparation of the Battlefield (IPB):** A systematic approach to analyzing and integrating the terrain, weather, and enemy, “to determine and evaluate enemy capabilities, vulnerabilities, and probable courses of action.”<sup>19</sup> This process has four steps. These steps are: (1) define the battlefield environment, (2) describe the

battlefield effects, (3) evaluate the threat, and (4) determine threat courses of action (COAs).

Military Decision-Making Process or MDMP: “The MDMP is an adaptation of the Army’s analytical approach to problem solving.”<sup>20</sup> The overall process has seven steps. Each step builds upon outputs from the previous step. The seven steps are: (1) receipt of mission, (2) mission analysis, (3) course of action development, (4) course of action analysis, (5) course of action comparison, (6) course of action approval, and (7) orders production.

Time Constrained Environment: This refers to a situation where time is limited to the degree that it does not facilitate the basic or standard process of decision making to occur. This results in modifications or reductions in the steps of the basic MDMP process.

Wargaming: “A step by step process of action, reaction, and counteraction for visualizing the execution of each friendly COA in relation to ECOAs and reactions. It explores the possible branches and sequels to the primary plan resulting in a final plan and decision points for critical actions”<sup>21</sup>

### Limitations

The material available will impact the limitations of this study. Data gathered concerning the NTC and the JRTC rotations would be from sources that have already conducted some analysis of the data to provide summaries and overall trends. Detailed, unanalyzed information by itself concerning the NTC and the JRTC rotational unit performance may not be available.

Personal observations will be limited to the NTC. The researcher does not have any JRTC experience and therefore must rely on the primary source of data from the JRTC as being information collected from the JRTC observer-controller (OC) observations.

Information from former brigade commanders may be limited by the researchers ability to find and contact these individuals in a timely manner.

Current references to U.S. Army Operations doctrine are limited to the 1993 version of FM 100-5 *Operations*. The FM 3-0 *Operations* has not been released for distribution yet. This study will reference Student Text 3-0, *Operations*, October 2000, as the most current version of FM 3-0 to attempt to show those aspects of doctrine from FM 100-5 that potentially remain unchanged.

#### Delimitations

This thesis focuses on literature concerning current U.S. Army doctrine and information derived from the NTC and JRTC rotations. The literature examined will concentrate on infantry, mechanized infantry, and armor brigade-level operations and decision-making. The initial medium brigade will not be examined unless a substantial amount of literature and approved doctrine can be found to support its inclusion into this study. The information from the NTC and the JRTC unit derives from take-home packages that are provided to departing units, which highlight training deficiencies, and from information collected from the Center for Army Lessons Learned (CALL) and personal observations. This thesis only examines the seven steps of the MDMP and the modifications to those steps, which form the time-constrained MDMP.

Information from the Battle Command Training Program will not be examined. The research will focus on the NTC and the JRTC because they come closest to simulating the “fog and friction” of actual combat for a Brigade Combat Team. The NTC and the JRTC provide a setting where operations are conducted in an environment with multiple demands, countless distracters, and concurrent operations at multiple levels in a field-training exercise where the entire brigade is deployed. For the purposes of this research, the NTC and the JRTC do a better job of providing a stressful environment where decisions must be made in a time-constrained environment under near combat conditions than does the Battle Command Training Program for brigade-level operations.

The context for this study will be a mid to high intensity conflict. The scenarios presented at NTC and JRTC represent mid to high intensity conflicts, therefore, the data will reflect observations from these types of conflicts. This thesis will not discuss decision making in regards to operations other than mid to high intensity conflicts like operations other than war.

### Importance

This thesis can help determine whether current doctrine provides a system, which adequately aids the commander and staff at the brigade-level in problem solving when time is limited. If current doctrine is shown to meet this challenge, then this thesis will highlight those techniques and specific aids that help the commander to develop a flexible plan. If current doctrine is shown not to meet this challenge, then this thesis will provide potential techniques and aids that may correct the problems.

### Methodology

This research addresses the Army's doctrinal MDMP in a time-constrained environment and determines whether it provides a model that the brigade commander can use to develop the best possible plan. Chapter 1, the "Introduction," provides background on the MDMP and sets the stage for the research and discussion of this thesis. It also discusses the factors that are a critical part of an effective plan. This establishes the basis for evaluating whether the MDMP in a time-constrained environment is sufficiently applicable to brigade-level operations.

Chapter 2 of this study will examine the literature associated with the MDMP. This research first examines the U.S. Army FMs that describe the process. This includes the deliberate and time-constrained processes. The intent of this step is to identify what the Army's doctrinal MDMP is in a time-constrained environment. The research then looks at publications from the CALL that discuss positive and negative trends, and tactics, techniques, and procedures (TTPs) associated with the process. Finally, the research examines the NTC and the JRTC documentation discussing issues associated with the MDMP and studies by the Army Research Institute (ARI) that are applicable to this thesis.

Chapter 3 of this study examines in detail, several sources of information to determine positive and negative aspects of plans that are developed using the MDMP. Specific items examined are those related to the critical factors of effective plans as identified in chapter 1. Primary information will be gathered from the NTC and the JRTC. Another source of primary information will be data gathered from former brigade commanders. The final source of primary information will observations by the author as

an OC while assigned to the NTC. Secondary information will be gathered from CALL CTC trends publications and associated research studies.

Chapters 4 and 5 involve examining the data and identifying any consistencies. Once the data from the examination in the third step has been compiled, any negative trends will be compared with the data identified in earlier steps to see if there is any correlation. If there is a correlation, this study will highlight those issues and provide potential recommendations to reverse those negative trends. If there is no correlation, this study will highlight in the recommendation other factors that may cause negative trends that are outside the sphere of this study. It will then recommend those factors for further research. If no negative trends are discovered, this study will highlight those positive trends in the recommendation so that they are retained in future manual revisions.

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<sup>1</sup>Eliot A. Cohen, and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: The Free Press, 1990), 1.

<sup>2</sup>John E. Frame, "Gazing into the Crystal Ball Together: Wargaming and Visualization for the Commander and Staff" (School of Advanced Military Studies monograph, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1997), 7.

<sup>3</sup>Carl A. Alex, "Process and Procedures: The Tactical Decision-Making Process and Decision Point Tactics" (Master of Military Art and Science thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2000), 5-6.

<sup>4</sup>Frame, 8-9.

<sup>5</sup>Ibid., 10.

<sup>6</sup>Department of the Army, TRADOC Pamphlet 525-5, *Force XXI Operations: A Concept for the Evolution of Full-Dimensional Operations for the Strategic Army of the Early Twenty-First Century* (Fort Monroe VA, 1 August 1994), 2-5.

<sup>7</sup>Ibid., 2-4.

<sup>8</sup>Kevin A. O'Brian and Joseph Nusbaum, "Intelligence Gathering on Asymmetric Threats Part One," *Jane's Intelligence Review* 12, no. 10 (October 2000) 50.

<sup>9</sup>Department of the Army, FM 100-5, *Operations* (Washington, DC: GPO, 1993), 2-6.

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<sup>10</sup>U.S. Army Command and General Staff College, Student Text 3-0, *Operations* (Fort Leavenworth, KS, October 2000), 4-15.

<sup>11</sup>*Ibid.*, 2-6.

<sup>12</sup>*Ibid.*, 2-7.

<sup>13</sup>Department of the Army, FM 101-5, *Staff Organization and Operations* (Washington, DC: GPO, 1997), 5-12.

<sup>14</sup>Alex, "Process and Procedures: The Tactical Decision-Making Process and Decision Point Tactics," 9-10.

<sup>15</sup>Department of the Army, FM 100-5, 2-7.

<sup>16</sup>*Ibid.*, 2-8.

<sup>17</sup>*Ibid.*, 2-9.

<sup>18</sup>The definition of the word support in regards to MDMP supporting Brigade level operations for the purpose of this thesis is defined as providing a process for gathering and organizing information, making integrated decisions, and preparing and disseminating orders that have adequate information for execution.

<sup>19</sup>Department of the Army, FM 101-5-1, 1-84.

<sup>20</sup>Department of the Army, FM 100-5, 5-1.

<sup>21</sup>Department of the Army, FM 101-5-1, 1-161.

## CHAPTER 2

### LITERATURE REVIEW

Chapter 2 of this study examines the literature associated with the MDMP.

Chapter 2 represents the first phase of research for this thesis to answer two secondary questions. First, what is the Army's current MDMP, and second, what changes are made to the MDMP when it is conducted in a time-constrained environment? This chapter begins with a quick examination of military decision-making theory and then examines the U.S. FMs that describe the MDMP in four parts. The first part of chapter 2 examines FM 101-5, *Staff Organization and Operations* (1997), and FM 34-130, *Intelligence Preparation of the Battlefield* (1994), to describe the Army's current doctrine on the deliberate MDMP. Finally, it concludes with a section on literature discussing problems with the MDMP.

The second and third parts of chapter 2 look at the MDMP in a time-constrained environment. The second part of chapter 2 reexamines FM 101-5 and FM 34-130 and examines FM 34-8-2, *Intelligence Officer's Handbook* (1998), and CALL Newsletter 95-12, *Tactical Decision Making: "Abbreviated Planning,"* to determine what changes to the deliberate MDMP are doctrinally approved for use in a time-constrained environment. The third part of chapter 2 examines specific brigade operations manuals. FM 71-3, *Armored and Mechanized Infantry Brigades* (1996), FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces*, FM 7-30, *The Infantry Brigade* (1995), and FM 90-26, *Airborne Operations* (1990), are reviewed to determine if there are any changes or deviations to the doctrinal abbreviated MDMP for brigades.

The final part of chapter 2 is the conclusion. This part will look at the FMs to see if they are consistent in their doctrinal approaches on how to abbreviate MDMP at the brigade-level. Finally, any potential issues that may arise from the doctrinal abbreviated MDMP will also be highlighted.

### Decision-Making Theory

Several principles are associated with decision making in military operations. First, decisions cannot be made without consideration of the enemy. War is a contest of wills where both sides are trying to impose their will on one another. Second, it is generally believed that generating and implementing decisions faster than your opponent will provide one with an advantage. Third, military situations represent complex problems that cannot simple be reduced to a mathematical equation. They entail a combination of intuition and analysis to fully understand the situation and develop a plan. Fourth, also because military situations are complex problems filled with uncertainty, it is generally believed it is better to develop a workable plan and implement it as opposed to spending time developing the best plan and loosing the initiative to the enemy. Finally, the lower the echelon a decision can be made the faster that decision can be implemented.<sup>1</sup>

There are two major approaches to decision making. The first model of decision making is that of an analytical process. This process generates several options and then evaluates these options against identified criteria to select the best option. The second approach bases decision making on intuition. This process relies on an experienced commander to rapidly assess the situation and find the first feasible option rather than the best option.<sup>2</sup>

Each decision-making model has strengths and weaknesses. The analytical model is usually associated with a deliberate approach to planning, where time is not a factor, and information can be gathered and examined. The intuitive model can be associated with an approach to planning when time is short and the situation is uncertain. Here the emphasis is on the speed to which a decision can be made and implemented.<sup>3</sup>

### The Deliberate Military Decision-Making Process

FM 101-5, *Staff Organization and Operations* (1997), is the basic U.S. Army FM that discusses staff organization and operations. It is also the Army's primary doctrinal source of information on the MDMP. FM 101-5 describes the doctrinal way to approach decision making in an effort to help the commander and his staff review the situation and then develop logical decisions. Chapter 5 of FM 101-5 illustrates the MDMP and gives detailed descriptions of the seven steps within the process (fig. 1). Chapter 2 of this study reviews those seven steps to discuss key facets that will be examined in further detail later in the paper.

The first step in the MDMP is the receipt of the mission. The brigade staff either receives a new mission from its higher headquarters or the commander determines that he must change his current mission to achieve the higher commander's intent because of changes to the enemy situation. The staff gathers tools, which include the higher headquarters' order or plan with graphics, maps of the area, any current estimates, and any other products, such as standard operating procedures (SOPs) or FMs that will be needed during the process. It is during this step that the timeline for both planning and execution of the mission is established. The general rule is to allocate one-third of the

available time for planning and preparation to the brigade staff and two-thirds of the available time for planning and preparation to the subordinate units.<sup>4</sup>

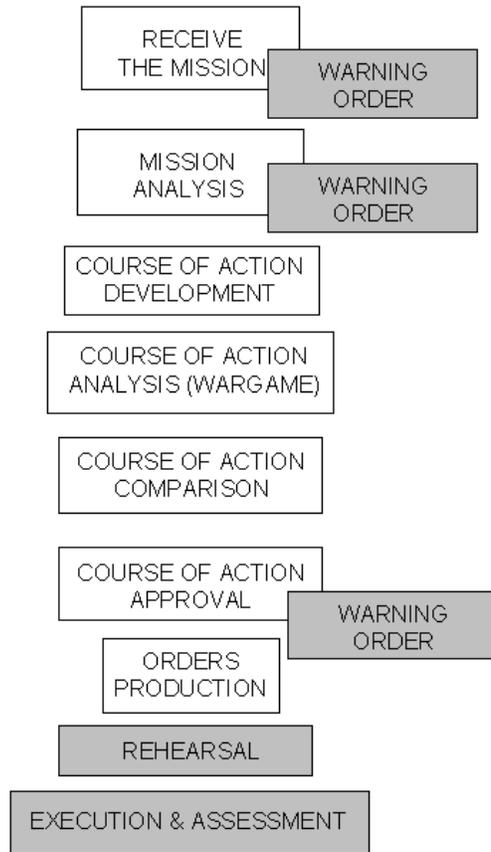


Fig. 1 The military decision-making process. Source: FM 101-5

During this step, the commander makes the decision to either do the full MDMP or to abbreviate the process. The commander will issue guidance to the staff concerning abbreviations to the MDMP, any initial movement or reconnaissance, and any additional

tasks that he wants the staff to complete.<sup>5</sup> Issuing warning orders during this step is also recommended to initiate parallel planning for subordinate units.<sup>6</sup>

The second step of the MDMP is mission analysis, which is described by FM 101-5 as a crucial step. “It allows the commander to begin his battlefield visualization. The result of mission analysis is defining the tactical problem and beginning the process of determining feasible solutions.”<sup>7</sup>

A process within mission analysis is IPB. The IPB is:

A systematic, continuous process of analyzing the threat and the effects of the environment on the unit. It identifies facts and assumptions that determine likely threat COAs. The IPB supports the commander and staff and is essential to estimates and decision making. It provides the basis for intelligence collection and synchronization to support COA development and analysis. It is a dynamic staff process, driven by the commander, that continually integrates new information into the process.<sup>8</sup>

Determination of ECOAs is critical to begin the planning process, and is an important product of the IPB process. Not only are the ECOAs required, the manual also directs that they be arranged in probable order of adoption.<sup>9</sup>

The FM 101-5 describes the use of situational templates (SITEMPs) and event templates to portray ECOAs. SITEMPs are shown during mission analysis to show ECOAs to the commander. The FM says, the event template does not have to be shown during mission analysis, but should be done prior to COA development to show where specific enemy actions may take place.<sup>10</sup>

The higher headquarters' order is analyzed to determine what tasks need to be accomplished and how the unit's operation and accomplishment of those tasks will fit in to the relationship of the higher commander's intent. The commander and staff review the tasks to decide which tasks are specified, implied, and essential for mission accomplishment. The analysis of what tasks need to be accomplished is complemented by a review of the facts and assumptions concerning the operation and what assets are available to the unit. This will identify the constraints and risks to the mission. The result of this portion of mission analysis is what the unit's mission is and what resources are available to unit to accomplish that mission. A product of this analysis is the restated mission statement, which once approved by the commander, becomes the unit's mission.<sup>11</sup>

What information is known and not known is an important result of the mission analysis step. The commander and staff must determine what are the Commander's Critical Information Requirements (CCIR). CCIR refers to information the commander needs in a certain situation to make decisions in a timely manner. The manual highlights three areas. First, information with respect to the enemy, especially gaps in knowledge concerning the enemy is called Priority Intelligence Requirements (PIRs). Second, information about friendly forces is called Friendly Forces Information Requirements. Third, information about friendly forces that must be protected from the enemy's intelligence gathering forces is called Essential Elements of Friendly Information. Once CCIR are developed, the manual emphasizes the development and execution of a reconnaissance plan to answer the PIR, to fill in the gaps of knowledge concerning the enemy.<sup>12</sup>

The commander then provides his intent. FM 101-5 describes the commander's intent as:

A clear, concise statement of what the forces must do to succeed with respect to the enemy and the terrain and to the desired end state. It provides the link between the mission and the concept of operations by stating the key tasks that, along with the mission, are the basis for subordinates to exercise initiative when unanticipated opportunities arise or when the original concept of operations no longer applies.<sup>13</sup>

This is the commander's visualization of what needs to be accomplished without dictating how it will be accomplished, to allow for initiative by subordinates.

Completion of mission analysis should provide the commander and staff with several products. First, the commander and staff should have an understanding of the enemy and what enemy actions to expect. Second, they should have an understanding of the tasks to be accomplished, and the unit limitations on its ability to accomplish those tasks. This results in a restated mission statement, commander's intent, and commander's guidance.<sup>14</sup>

The third step of the MDMP is COA development. Options on how to accomplish the mission are now determined. The commander continues to play a key role. "His guidance and intent focus the staff's creativity to produce a comprehensive, flexible plan within the time constraints. His direct participation helps the staff get quick, accurate answers to questions that occur during the process."<sup>15</sup> FM 101-5 states that each

COA considered must meet the criteria of being suitable, feasible, acceptable, distinguishable, and complete.

The guidelines established are to analyze relative combat power, generate options, array initial forces, develop the scheme of maneuver, assign headquarters, and prepare COA statements and sketches. When generating options, two key points are stressed. First, FM 101-5 states that:

A good COA should be capable of defeating all feasible enemy COAs. In a totally unconstrained environment, the goal is to develop several such COAs. Since there is rarely enough time to do this, the commander usually limits the options with his commander's guidance. The options should focus on enemy COAs arranged in order of probable adoption.<sup>16</sup>

FM 101-5 also stresses that while the commander may be able to combine or adopt favorable elements of COAs; the staff must not present one good COA among several COAs that are clearly not adequate. Another point stressed is the determination of the decisive point. "This is where the unit will mass the effects of overwhelming combat power to achieve a result with respect to terrain, enemy, and time that will accomplish the unit's purpose."<sup>17</sup>

Step four of the MDMP is COA analysis. This step determines which COA is best as it determines the advantages and disadvantages of each COA. The primary process involved in COA analysis is war gaming. War gaming is a process that allows the commander and staff to visualize how the battle will unfold. This process examines in detail each friendly COA with regard to the enemy's COAs. It should follow a

sequential flow of action, reaction, and counteraction. This allows the staff to consider enemy responses to the unit's actions and to develop and synchronize unit actions and counteractions against those enemy responses. The manual provides an example synchronization matrix for recording the synchronization of the BOS within the COA.

FM 101-5 says, "When war-gaming the COAs, it is best to do so against all the feasible enemy courses of action."<sup>18</sup> This would mean that each friendly COA is in turn war gamed against each ECOA which would require a substantial amount of time before going to the next step.<sup>19</sup> However, FM 101-5 stresses the importance of this process by stating that: "War gaming is the most valuable step during COA analysis and comparison and should be allocated more time than any other step."<sup>20</sup>

There are three war gaming methods: the belt technique, the avenue-in-depth technique, and the box technique. Each technique looks at the area of interest and those enemy forces that can influence the operation. The staff must therefore determine exactly what the boundaries of each technique should be. In the belt technique, the battlefield is divided into belts running the width of the area of operations. Subsequent events are then examined in subsequent belts. This allows the staff to focus on events across the full width of the battlefield that will influence a particular action. The avenue-in-depth technique examines in detail events in one avenue of approach at a time. This technique is advocated for operations in restricted terrain, where forces are not mutually supported. The box technique examines a particular event in detail. It can be used to examine the accomplishment of essential tasks in more detail than the other techniques would allow. FM 101-5 advocates the box technique be used when planning time is short.<sup>21</sup>

A key step in war gaming is identifying critical events and decision points. “Critical events are those events that directly influence mission accomplishment. They include events that trigger significant actions or decisions (commitment of an enemy reserve), complicated actions requiring detailed study (a passage of lines), and essential tasks identified during mission analysis.”<sup>22</sup> These critical events come from a list of actions that must occur between where the unit is now up to the point of mission accomplishment. “Decision points are events or locations on the battlefield where tactical decisions are required during mission execution.”<sup>23</sup> Decision points associated with these critical events are linked to Named Areas of Interest (NAIs). NAIs look for actions or the lack of actions by the enemy to confirm or deny a specific ECOA. NAIs therefore look for specific criteria that provide the commander with information needed to make a tactical decision. The results of the war game should include critical events and decision points for each friendly COA.<sup>24</sup>

Step five of the MDMP is COA comparison. Each COA is examined to determine the advantages and disadvantages of that particular COA. This is initially done from the perspective of each staff officer. Later, the staff compare each COA to one another by using evaluation criteria, developed in the COA development step, to determine which COA has the best chance of accomplishing the mission and succeeding against the enemy. The result of this analysis is then presented to the commander at the commander’s decision briefing.<sup>25</sup>

Step six of the MDMP is COA approval. In this step, the commander decides which friendly COA is the best. He has the option of not approving any of the COAs if he believes that none of them adequately accomplish the mission or meet his intent. He

may also refine his intent or refine one of the COAs, which would require the staff to go back to the COA analysis step to reexamine the synchronization required to accomplish the mission.<sup>26</sup>

Finally, step seven is orders production. Based on the selected COA and any final guidance by the commander, the staff will make the final refinements to the plan and produce an order to be issued to subordinates that will allow the COA to be implemented. This completes the MDMP.<sup>27</sup>

Two other points made in chapter 5 are parallel planning and the need to follow the MDMP sequentially. Parallel planning is addressed throughout the chapter. FM 101-5 directs the issuing of warning orders to provide subordinate units information so they can begin their own MDMP. This prevents subordinate units from having to wait until a final product is complete to begin their MDMP. Lack of parallel planning results in the loss of a substantial amount of planning time.<sup>28</sup> The manual makes the point that the MDMP is a sequential process. FM 101-5 states that, "Each step of the process begins with certain input that builds upon the previous steps."<sup>29</sup>

The MDMP, as described in FM 101-5, is a systematic approach to problem solving. It follows a seven-step process, in which each step builds upon one another. This makes it difficult to skip steps within the process. The process focuses on selecting a COA, synchronizing the COA, and distributing the detailed plan to subordinates. War gaming within the COA Analysis step is where the detailed plan is developed. While flexibility of the COA is discussed, most of the effort is placed on synchronization of the COA.

FM 34-130, *Intelligence Preparation of the Battlefield* (1994), describes the fundamentals of how to conduct IPB. The IPB drives the MDMP.<sup>30</sup> It identifies and determines the impact of the enemy on mission accomplishment. FM 34-130 describes the basic procedures of how to develop ECOA. It illustrates the four steps of the IBP process and provides examples of products that should be developed as a result of each step of the process. This manual discusses, in detail, how to use these products as part of the MDMP and how intelligence is integrated into each step of the MDMP. It also provides guidelines on how to expedite the process because of the lack of time.

Determination of the ECOAs is one of the most important products of the IBP process. Enemy COAs have a big impact on the MDMP because it describes the enemy forces, which the friendly commander must overcome. FM 34-130 describes the steps to take to determine the ECOAs. The first step is determining the environment in which the operation will occur and the impact of that environment on enemy and friendly operations. The second step is determining what the enemy objectives are and how the enemy normally conducts operations with the forces he has to accomplish those objectives. He then refines the ECOAs based on the restrictions within the environment that the operation will occur.<sup>31</sup>

SITEMPs display how the enemy will look on the ground if a particular ECOA is implemented. It portrays a “snap shot” in time of a single COA. SITEMPs, usually show the most critical event of an ECOA. Several SITEMPs can be produced to illustrate a single ECOA by showing several points in time.<sup>32</sup>

## EVENT TEMPLATING

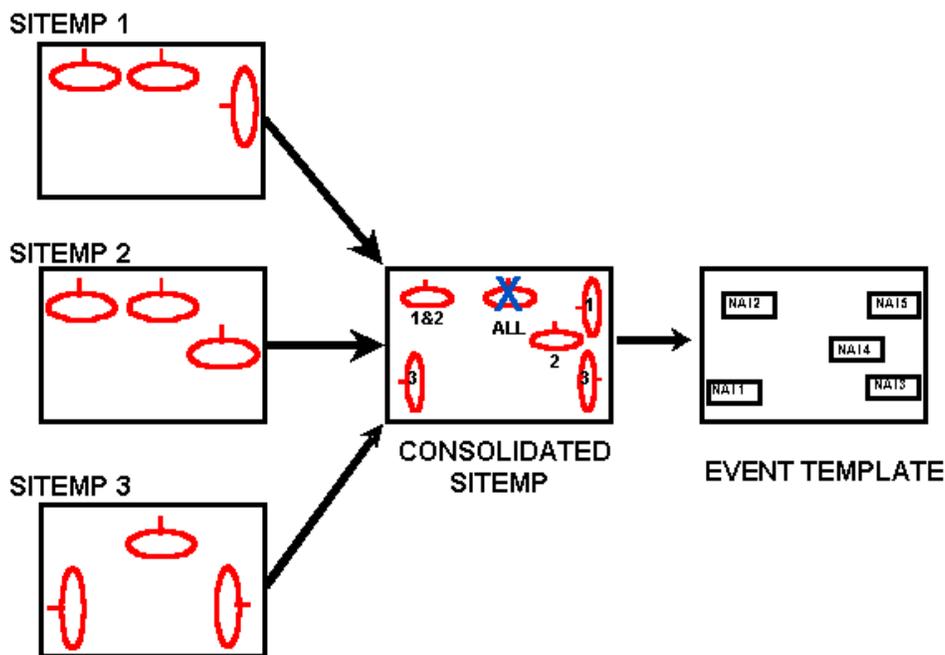


Fig. 2. Development of the event template. Source: FM 34-130

Event templates portray multiple COAs and focus on the features that make them different. Once a SITEMP for each ECOA is developed, these templates are combined onto a single overlay, so that the differences between the COAs can be illustrated.

Determining where activities will occur is the next step. Then time phase lines are added to display when these enemy actions might occur. Once the details of what, where and when the differences will occur are identified, NAIs are established over those areas.

Activity or the lack thereof within the NAIs confirms or denies the ECOA. All this is placed on a single overlay called the event template (fig. 2), which makes this one of the key products needed for the planning process and especially war gaming.<sup>33</sup>

The FM 34-130 stresses the examination of the full set of COAs available to the enemy. "Identify the full set of COAs available to the threat. History repeatedly

demonstrates that those who predict only one COA are often surprised by the enemy.”<sup>34</sup> FM 34-130 lists several factors to be considered when determining ECOAs. Some of the major enemy factors are desired end state, objectives, vulnerabilities, strengths, dispositions, enemy perceptions of friendly forces, and efforts to achieve surprise. Other factors discussed include ignorance of military arts and sciences, immature decision making, unexpected objectives or desired end states, desperation, and audacity.<sup>35</sup>

While FM 34-130 stresses examining the full set of ECOAs, it also includes instructions to prioritize the ECOAs to focus the planning effort of the staff. The FM 34-130 explains that while the full set of ECOAs may have been determined, they remain assumptions since there is no way to predict with complete accuracy what the enemy will do. “However, the commander and his staff still need to develop a plan that is optimized to one of the COAs, while still allowing for contingency options if the threat chooses another COA. Therefore, each COA must be evaluated and prioritized according to how likely the estimate is that the threat will adopt that option.”<sup>36</sup> This means the focus is on determining enemy intentions over capabilities. Several criteria are presented to determine the prioritization of ECOAs, which include the fact that enemy may choose the second or third best option while portraying the best option as a deception effort.<sup>37</sup>

The process of reprioritization is also discussed within FM 34-130. “For example, the initial priority of order of threat COAs does not account for the friendly COA, since one has not yet been selected. . . . Alternately, after the commander has selected the friendly COA, reprioritize the initial list of threat COAs to reflect changed friendly dispositions and activities.”<sup>38</sup> This means that during mission analysis, the intelligence officer (S-2) may present an initial priority of ECOAs, but within COA

development he must revise that priority to reflect the effect the new COA will have on the ECOAs. This must then be done for each friendly COA.

The FM 34-130 also directs the war game address each ECOA. “During the wargaming session the staff ‘fights’ the set of threat COAs, developed in step 4 of the IPB process, against each potential friendly COA.”<sup>39</sup> Furthermore, the manual directs that the process must be done before adjusting the friendly COA. “Only after the COA has been war gamed against all threat COAs should the staff decide whether to modify the COA to correct its deficiencies, to retain the COA as it is (noting the risk of failure), or to discard the COA altogether.”<sup>40</sup>

The IPB drives the planning process. The FM 34-130 shows how IPB develops ECOAs to drive the process and stresses that the MDMP must consider multiple ECOAs throughout the planning process and their impact on the friendly COA. It directs the full set of ECOAs be identified during mission analysis and war gamed against each friendly COA during COA analysis. The ECOAs are prioritized to reflect an order of enemy intentions. Also, when the ECOAs are prioritized, the manual stresses the need to reevaluate that prioritization during the COA development step and prior to the war game, to reflect the potential enemy response to the friendly COA. Although FM 101-5 says that the friendly COA “should focus on ECOAs arranged in order of probable adoption,” the manual does not talk about the reprioritization process that is in FM 34-130.<sup>41</sup> Finally, the key products used during the IPB process are SITEMPs and event templates to portray the ECOAs during the planning process.

When comparing how FM 101-5 and FM 34-130 each present the MDMP, the key difference is the emphasis placed on synchronization and flexibility. Both FMs show

how war gaming builds flexibility into a COA. However, FM 101-5 stresses the MDMP from the standpoint of selecting a COA and synchronizing that COA; while FM 34-130 seems to stress the need for flexibility by considering all feasible ECOAs throughout the process.

The FM 101-5 stresses synchronization of the plan as an outcome, while FM 34-130 stresses flexibility of the enemy as a key point to consider. The FM 101-5 directs that a friendly COA be able to defeat all feasible ECOAs, but does not provide any details on how to accomplish this. It does provide examples of synchronization matrices, but only shows entries for a single ECOA, and not for any alternative ECOAs.<sup>42</sup>

Prioritization of ECOAs puts emphasis on synchronizing the friendly COA instead of developing a flexible COA. Although the FM 34-130 states the COA should be flexible enough for branch plans, prioritizing ECOAs is meant to focus the staff on developing a plan that will best defeat only one ECOA. This is in contrast to a plan that would best defeat all or at least several of the considered ECOAs.<sup>43</sup> The reprioritization of ECOAs during the COA development is meant to consider the biggest factor in the enemy's choice of COAs, which is actual friendly forces and actions. However, this critical step is not in the FM 101-5. Again, the FM 34-130 focuses on the flexibility of the enemy while the FM 101-5 stresses synchronization of the plan.

While the war gaming process as illustrated in the FM 101-5 and the FM 34-130 will develop flexibility in a COA, it is a very time intensive process. War gaming each friendly COA against each ECOA produces a COA that must address multiple enemy options. However, this can be very time consuming. To war game three friendly COAs against four ECOAs would mean that a total of twelve individual war games would have

to be conducted before going to the next step.<sup>44</sup> This also might not account for the branches of the plan that would be identified during the actual war game, which would necessitate the need for further war gaming. Even in an unconstrained environment, this is a monumental task to be undertaken by a brigade staff. In a process where steps must be done sequentially, this requires a tremendous amount of time and effort to the planning process.

#### Literature Concerning Issue With The MDMP

The FM 101-5 describes the MDMP as a proven analytical process that provides the commander and staff with a tool to develop feasible plans.<sup>45</sup> However, not everyone agrees that the MDMP is the best method for developing and implementing plans for military operations. Several authors attack the MDMP on the basis of being solely focused on planning at the expense of execution and inadequate COA development.

MAJ Wilson Shoffner in his monograph titled, “The Military Decision-Making Process: Time for a Change,” asserts that the MDMP is a poor model for tactical planning and decision-making.<sup>46</sup> He says the MDMP focuses entirely on selecting a COA for a given situation and, “does little to aid the commander in making the critical decisions during the execution of the mission.”<sup>47</sup> He also says that so much time is spent on selecting the COA built around the enemy’s most likely COA, that little time is left for developing branches and sequels to that plan and therefore it develops plans that are inflexible during execution. Finally, he finds fault with the sequential process imbedded in the MDMP because it does not account for how people actually deal with complex problems.<sup>48</sup> He advocates several alternative decision making models.

MAJ Gregory Banner believes the MDMP is flawed in the way it develops and selects friendly COAs. In his *Military Review* article title, “Decision Making - A Better Way,” he says that generating several friendly COAs lends itself to creating COAs that are mirror images on one another with only slight modifications or the development of “throw away” COAs simply because the MDMP says several COAs must be created. He believes the focus should be on a single COA in an effort to maximize the best one instead of wasting time developing several friendly COAs.<sup>49</sup>

Finally, MAJ Carl Alex states that the MDMP does not include integral decision aids within its procedures. His thesis on MDMP and decision point tactics illustrates that the current methodology does not adequately deal with uncertainty, and that the focus on only the most dangerous and most likely enemy COAs does not provide the commander with the tools needed to deal with other enemy options. His thesis shows how Decision Point Tactics includes key decision aids such as the Decision Points, Decision Support Templates, and Decision Support Matrixes to provide the commander with the tools needed for execution. He advocates the current MDMP incorporate these decision aids to the extent needed to create flexible plans.

#### MDMP in a Time-Constrained Environment

The FM 101-5, *Staff Organization and Operations* (1997), addresses decision making in a time-constrained environment in chapter 5. It says the MDMP may be modified when time is limited, but points out, “There is still only one process, however, and omitting steps of the MDMP is not the solution.”<sup>50</sup> The FM places the emphasis on the commander on how to shorten the process.<sup>51</sup> He has the flexibility to abbreviate the process however he best sees fit so that he does not have to implement a cumbersome

process when time does not allow for it.<sup>52</sup> However, the FM does include several suggested techniques and procedures that can be followed to abbreviate MDMP.

Four techniques for saving time are emphasized. First, increasing the commander's involvement should allow him to make quicker decisions during the planning process. Second, the commander may be more directive and therefore focus the staff more. Third, the number of friendly COAs developed and war gamed may be limited. This includes developing only one COA, which the commander may direct. The fourth technique is maximizing parallel planning, to provide subordinate units with information and guidance to expedite the MDMP at their level.<sup>53</sup> These techniques are subsequently incorporated into the seven steps of the MDMP.

While there is no change to the mission receipt step, the commander must decide at this time whether he wants to abbreviate the MDMP and, if so, how he wants to do it.<sup>54</sup> Increased commander involvement in mission analysis reduces the amount of time required for this step. If the commander and staff perform mission analysis together, a formal briefing may not be required. The mission analysis briefing may range from an oral presentation without briefing aids to simply providing the commander with critical information pertaining to the mission. FM 101-5 continues to stress the IPB effort in this phase, especially to initiate the required reconnaissance needed for the upcoming mission.<sup>55</sup>

The commander's guidance has the most impact on the COA development step. The commander may be more detailed and directive in this step and reduce the number of COAs developed or simply direct a single COA with branch plans instead of having the

staff develop one from his guidance. The FM 101-5 also says that the commander may limit the number of ECOAs he wants each friendly COA war gamed against.

Another procedure discussed is conducting a hasty war game as part of the COA development step. The hasty war game allows the commander to determine if he favors a particular COA, which may lead to the commander deciding on a COA much earlier in the process. War gaming a single COA “allows the staff to concentrate on synchronizing the COA rather than continuing to develop the COA during the formal war game session.”<sup>56</sup> This essentially eliminates the COA comparison step.

Although having the commander directly participate in the COA analysis step may shorten it, the emphasis remains on synchronizing the COA. “The commander and staff must war game the COAs to ensure all elements are fully integrated and synchronized.”<sup>57</sup> The commander’s presence at the war game is meant to allow the staff to get quick decisions on issues that arise, which should allow the process to go much faster. Although FM 101-5 states it is best to war game friendly COAs against all feasible ECOAs, it also states that the commander may limit the number of ECOAs he wishes to have the staff war game against to further save time. “When only one COA is developed, the purpose of the COA analysis is to verify, refine, synchronize, and integrate the commander’s COA and recommend modifications as necessary.”<sup>58</sup>

The remaining two steps should go more quickly in the accelerated process. COA comparison may be skipped if the commander decides to only war game a single COA. Otherwise, the FM 101-5 suggests reducing the number of evaluation criteria to save time. The COA approval may have already been completed if the commander had

selected a single COA prior to war gaming. If not, his increased participation during the process will make this step go much faster.<sup>59</sup>

To sum up FM 101-5, the major changes to the accelerated and abbreviated MDMP compared to the basic MDMP are shortening steps, increased commander participation, and development of fewer friendly COAs. While the seven steps to the MDMP may be shortened, the FM 101-5 stresses that steps should not be omitted. However, the one exception is the omission of the COA comparison step when only one COA is developed. The primary technique used to shorten the steps is to have the commander focus the staff to only provide critical details or to develop key products, or the commander may simply do several steps himself. Linked to this shortening of steps is the development of fewer COAs. The manual even accepts the development of only a single commander-directed COA as an acceptable option, when time is very short.

In December 1995, the Center for Army Lessons Learned (CALL) issued Newsletter No. 95-12, *Tactical Decision Making: "Abbreviated Planning."* This was one of the first documents to discuss the modifications that could be done to the MDMP in a time-constrained environment. This document was published before the current version of FM 101-5. The preface of the newsletter says it was issued as a response to the inadequacies of current doctrine in addressing techniques for abbreviating the planning process. The preface also says that the CALL Newsletter 95-12 was updated and reissued in May 1997 to reflect the changes to the MDMP that were published in the 1997 version of FM 101-5. It also incorporates established TTPs that were effectively demonstrated at the CTCs. The newsletter states that, "there are no major differences between the two processes presented and the deliberate MDMP."<sup>60</sup>

The major changes between the 1995 and 1997 CALL newsletters are the emphasis placed on continuous planning and the distinction between what it calls an abbreviated process and an accelerated process. The newsletter also recommends the deliberate process be used when the unit has 16 to 24 hours from receipt of order to order issue to subordinate units. It further recommends the abbreviated technique be used when the unit has 10 to 16 hours, and the accelerated process should be used when the unit has 10 hours or less to produce an order.<sup>61</sup>

The CALL Newsletter 95-12 (May 1997) places emphasis on continuous planning because of the lack of situational awareness by the unit during the planning process. The newsletter discusses the dilemma of needing to issue a detailed order in a timely manner, with the problem of not having adequate situational awareness required to accomplish that task until late in the planning process.<sup>62</sup> The newsletter says to, “Remember, the original order was probably published with approximately 30 percent situational awareness with respect to the enemy, terrain, and friendly situation.”<sup>63</sup> A specific issue noted in the newsletter that hampers situational awareness during the planning process is that the staff usually does not have the most recent information on critical items like the unit status reports.<sup>64</sup>

Other than attempting to do things quicker, chapter III of the newsletter differentiates the deliberate process from the abbreviated MDMP by increasing the level of participation and guidance by the commander, which in turn limits the flexibility of the staff.<sup>65</sup> Chapter III says that the abbreviated process can be done when time is not available for the deliberate process, the staff is new or inexperienced, or the commander’s access to the staff is limited.<sup>66</sup> “The abbreviated technique is characterized by detailed

guidance by the commander, and only one or two COAs developed by the staff based on the commander's guidance."<sup>67</sup> Chapter III also talks about abbreviating the process by conducting a hasty war game at the end of the COA development and to have the commander present at the war game as described in FM 101-5. It also says that the hasty war game at the end of COA development is meant to refine and not to synchronize the COA.<sup>68</sup>

Most of the other issues discussed, however, are not unique to the abbreviated process but would have a detrimental effect on the deliberate process as well. The lack of available SITEmps; the slow assembly of staffs for key events; the inadequate interpretation of the higher headquarters mission, intent, and guidance; and the need to develop detailed COAs and war gaming do not necessarily provide key insights on how to abbreviate the MDMP that are much different from what is needed for the deliberate process as well.<sup>69</sup> These items are simply a list of consistent problems that can be fixed through training and discipline.

Chapter IV of the CALL Newsletter 95-12 distinguishes the accelerated MDMP from the abbreviated MDMP by saying that in the accelerated MDMP, the commander's active participation is increased even more and only one friendly COA is developed.<sup>70</sup> Again, the newsletter is in line with FM 101-5 by stating that the commander may receive an informal mission analysis brief without aids from his staff and consider their input for the COA, or he may simply direct a COA. It further states that if a COA is directed, the war game then focuses on synchronizing and integrating the COA and not on analyzing and comparing multiple COAs.<sup>71</sup>

The CALL Newsletter 95-12 stresses the need for flexibility in the plan as well as synchronization for both the abbreviated and accelerated processes, but does not give details on how to do it. Chapter III addresses the issue of the S-2's SITEMPs not being present when staffs develop COAs.<sup>72</sup> Not allowing the IPB to drive the planning process leads to plans that do not adequately consider the enemy and further reduces the flexibility needed to address enemy actions. The COA development step in chapter 4 emphasizes developing a COA with branch plans that are flexible. The newsletter further emphasizes identifying and developing branch plans to the base plan in the COA analysis step.<sup>73</sup> Although, flexibility is emphasized, neither chapter provides specifics on how to accomplish this.

The FM 34-130, *Intelligence Preparation of the Battlefield* (1994), also includes guidelines for abbreviating the IPB process when time is not available to conduct a detailed analysis. This usually occurs in conjunction with an abbreviated MDMP as well. Working ahead and adjustments in detail are the two major techniques discussed for abbreviating the process.<sup>74</sup>

The FM 34-130 continues to stress consideration of more than one ECOA in the abbreviated IPB process at the expense of detail. "Rather than fully developing one threat COA at the expense of all others, identify the full range of available COAs. Determine the degree of detail required and then develop all COAs to that level of detail."<sup>75</sup> The FM 34-130 then recommends that the S-2 determine the most likely and most dangerous ECOA and focus developing those two ECOAs in as much detail as possible before focusing on the other COAs. The event template is the product that the

manual recommends using to portray at a minimum the most likely and dangerous ECOA and the other COAs, if possible.<sup>76</sup>

The FM underlines the point that the S-2 must ensure the staff consider multiple ECOAs. “**NEVER** take just one COA [ECOAs] into wargaming--this is not an acceptable way to abbreviate the IPB or staff planning process.”<sup>77</sup> As a minimum, the staff is urged to war game against the most likely and most dangerous ECOA.

The FM 34-8-2, *Intelligence Officer's Handbook* (1998), describes the roles and missions of G2 and S2s sections. It focuses on the application of intelligence doctrine and TTPs. Chapter 3 addresses the MDMP and includes a section on the accelerated process. The FM 34-8-2 mirrors the description and techniques for the accelerated process as discussed in CALL Newsletter 95-12. “The accelerated process is characterized by active participation by the commander, and development of one COA that is suitable, feasible, and flexible.”<sup>78</sup> Emphasis is placed on not trying to develop the “perfect” COA because of lack of time, but the section does say to develop a “COA with branch plans that are flexible, feasible, suitable, and acceptable.”<sup>79</sup> Finally, the section also specifies that the focus of the war game is to synchronize and integrate the COA.

#### Brigade Operations Manuals

The FM 71-3, *Armored and Mechanized Infantry Brigades* (1996), describes the U.S. Army's approved doctrine on the employment of the armored and mechanized infantry brigades. This includes the employment of these units for several different types of operations. It discusses the brigade's organizations and operations, battle command, combat support, and combat service and support. Appendix I briefly describes decision making. It includes a section on what it calls the deliberate decision-making process and

a section on the abbreviated decision-making process, but makes no distinction between an abbreviated and an accelerated planning process.

The FM 71-3 provides only broad guidance for abbreviating the MDMP. It mentions shortening or foregoing the in-depth estimate, increasing commander participation, and limiting COAs as alternatives to abbreviate the process, but provides no in-depth discussion of the subjects. Two areas stated that must be included, however, are the war game and risk assessment. The manual stresses that war gaming is required to synchronize the battle operating systems (BOS). No mention is made concerning the flexibility of the plan.<sup>80</sup>

The FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force and Company Team* (1992), is a supplement to FM 71-3 (brigade), FM 71-2 (battalion), and FM 71-1 (company). It illustrates TTPs for heavy combined arms operations from the brigade to company level. It further describes the integration of the seven BOS throughout the planning, preparation, and execution of tactical operations. Section two of chapter one talks about the planning process. This section also briefly discusses what it calls the Abbreviated Decision-Making Process.

The FM 71-123 also addresses abbreviating the decision making by shortening the mission analysis process, increasing commander participation, having the commander issue detailed and specific guidance, and limiting COAs. The manual even states that the commander may develop an entire COA and give it to the staff so they can immediately begin war gaming. However, it also states that if the COA development step is seriously compromised, the war gaming step will suffer.<sup>81</sup>

Of specific note is the technique the manual recommends for abbreviating the COA analysis step. “The commander can direct that the staff war game the courses of action against only one situation template.”<sup>82</sup> This essentially means that the staff can war game against only one ECOA.

The FM 7-30, *The Infantry Brigade* (1995), discusses dismounted infantry brigade operations. Its purpose is to help the commander and his staff in the planning, preparation, and execution of combat operations for the dismounted infantry brigade. It is a sister manual to FM 71-3. The FM 7-30 includes brigade organization, fundamentals of brigade operations, battle command, tactical employment, and combat support and combat service support operations.

Appendix I discusses decision making, but does not address an abbreviated or accelerated MDMP. The paragraph addressing COA analysis says that, time permitting, each possible ECOA will be war gamed, but “At a minimum however, the enemy’s probable COA will be war gamed.”<sup>83</sup> This suggests that war gaming the friendly COA against only one ECOA is an acceptable technique if time is short, as was reflected in the FM 71-123.

The FM 90-26, *Airborne Operations* (1990), addresses the use of airborne units from the brigade-to-battalion level in tactical operations. It talks about planning with regard to the airborne operation and the ground tactical plan. However, the one sentence that discusses an Abbreviated MDMP states, “In time critical situations, the commander may be forced to complete his estimate based on his personal knowledge of the situation and issue oral orders to his subordinate units.”<sup>84</sup>

## Conclusion

An examination of the manuals dealing with the abbreviated MDMP process at the brigade-level shows that there is consistency on how to accelerate the process with one exception. All the manuals place the emphasis with the commander on determining how to shorten the process. Although the commander can determine a number of ways to shorten the process, the doctrinal manuals discuss several specific techniques.

Almost all the doctrinal manuals are consistent in noting the three primary techniques for abbreviating MDMP; increased commander's participation in the process, development of fewer friendly COAs, and shortening the individual steps. Most manuals include the development of a single, directed, friendly COA by the commander as the preferred method for shortening COA development. While the manuals still allude to the need to follow the steps sequentially, some do allow for a quick war game of COAs during the COA development step before going to the COA analysis step. Although increased parallel planning and continuous planning are also discussed, these aspects of the MDMP are not unique to the abbreviated MDMP. These techniques are emphasized during the deliberate process as well as the abbreviated and therefore are critical aspects to the process regardless of time constraints.

The manuals are not consistent with the technique for considering the enemy. This is reflected in the number of ECOAs that are considered and war gamed against a single, directed, friendly COA in the abbreviated MDMP process. The FM 34-130 stresses the need to consider multiple ECOAs, while other manuals do not. The FM 34-130 firmly stresses that at least two ECOAs be included in the war game. The FM 101-5 only says that the commander may limit the number of ECOAs war gamed against. Both

FM 71-123 and FM 71-30, however, appear to accept war gaming against only a single ECOA, the most likely ECOA, as an acceptable technique for abbreviating the MDMP. Also, once the friendly COA is selected, again no manual other than FM 34-130 discusses the reprioritization of ECOAs to further assess the impact of the friendly COA on enemy actions. Overall, FM 101-5, the various brigade-level FMs, and FM 34-130 are not consistent with regard to consideration of the enemy in the abbreviated MDMP.

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<sup>1</sup>Department of the Navy, Naval Doctrine Publication 6, *Naval Command and Control* (May 1995), 23-24.

<sup>2</sup>*Ibid.*, 24-25.

<sup>3</sup>*Ibid.*, 25.

<sup>4</sup>Department of the Army, FM 101-5, *Staff Organization and Operations* (Washington, DC: GPO, 1997), 5-3.

<sup>5</sup>*Ibid.*, 5-5.

<sup>6</sup>*Ibid.*

<sup>7</sup>*Ibid.*

<sup>8</sup>*Ibid.*, 5-6.

<sup>9</sup>*Ibid.*

<sup>10</sup>*Ibid.*

<sup>11</sup>*Ibid.*, 5-5 – 5-9.

<sup>12</sup>*Ibid.*, 5-7 – 5-8.

<sup>13</sup>*Ibid.*, 5-9.

<sup>14</sup>*Ibid.*, 5-5 – 5-11.

<sup>15</sup>*Ibid.*, 5-11.

<sup>16</sup>*Ibid.*, 5-12.

<sup>17</sup>*Ibid.*, 5-15.

<sup>18</sup>*Ibid.*, 5-30.

<sup>19</sup>*Ibid.*, 5-19 – 5-21.

<sup>20</sup>*Ibid.*, 5-16.

<sup>21</sup>*Ibid.*, 5-18 – 5-19.

<sup>22</sup>*Ibid.*, 5-18.

<sup>23</sup>*Ibid.*

<sup>24</sup>*Ibid.*

<sup>25</sup>*Ibid.*, 5-24.

<sup>26</sup>*Ibid.*, 5-26.

<sup>27</sup>*Ibid.*

<sup>28</sup>*Ibid.*, 5-10.

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- <sup>29</sup>Ibid., 5-3.
- <sup>30</sup>Ibid., 5-6.
- <sup>31</sup>Department of the Army, FM 34-130, *Intelligence Preparation of the Battlefield* (Washington, DC: GPO, 1994), 2-40 – 2-41.
- <sup>32</sup>Ibid., 2-45.
- <sup>33</sup>Ibid., 2-51.
- <sup>34</sup>Ibid., 2-43.
- <sup>35</sup>Ibid.
- <sup>36</sup>Ibid., 2-44.
- <sup>37</sup>Ibid.
- <sup>38</sup>Ibid.
- <sup>39</sup>Ibid., 1-6.
- <sup>40</sup>Ibid., A-4.
- <sup>41</sup>Department of the Army, FM 101-5, 5-12.
- <sup>42</sup>Ibid., 5-19 - 5-21.
- <sup>43</sup>Carl A. Alex, “Process and Procedures: The Tactical Decision-Making Process and Decision Point Tactics” (Master of Military Art and Science thesis. U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2000), 8-10.
- <sup>44</sup>Wilson A. Shoffner, “The Military Decision-Making Process: Time For A Change” (School of Advanced Military Studies monograph, US Army Command and General Staff College, Fort Leavenworth, KS, 1999), 10.
- <sup>45</sup>Department of the Army, FM 101-5, 5-1.
- <sup>46</sup>Shoffner, “The Military Decision-Making Process: Time For A Change,” ii.
- <sup>47</sup>Ibid., 11.
- <sup>48</sup>Ibid., 11-19.
- <sup>49</sup>Gregory T. Banner, “Decision Making--A Better Way,” *Military Review* 77, (September-October 1997): 53-56.
- <sup>50</sup>Department of the Army, FM 101-5, 5-27.
- <sup>51</sup>Ibid.
- <sup>52</sup>John Warner, Lieutenant Colonel, one of the authors of the 1997 version of FM 101-5, interviewed by the author, written notes, Fort Leavenworth KS., 26 January 2001.
- <sup>53</sup>Ibid., 5-27 – 5-28.
- <sup>54</sup>Ibid., 5-29.
- <sup>55</sup>Ibid.
- <sup>56</sup>Ibid., 5-30.
- <sup>57</sup>Ibid.
- <sup>58</sup>Ibid., 5-31.
- <sup>59</sup>Ibid.
- <sup>60</sup>Center for Army Lessons Learned, Newsletter No. 95-12 “Military Decision-Making: “Abbreviated Planning” (Fort Leavenworth, KS, CALL: 1997), I-5.
- <sup>61</sup>Ibid.
- <sup>62</sup>Ibid., II-8.
- <sup>63</sup>Ibid., V-1.
- <sup>64</sup>Ibid., III-4.

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- <sup>65</sup>Ibid. III-1.
- <sup>66</sup>Ibid.
- <sup>67</sup>Ibid., III-8.
- <sup>68</sup>Ibid.
- <sup>69</sup>Ibid., III-1 – III-12.
- <sup>70</sup>Ibid., IV-1.
- <sup>71</sup>Ibid., IV-1 – IV-5.
- <sup>72</sup>Ibid., III-8.
- <sup>73</sup>Ibid., IV-4 - IV-5.
- <sup>74</sup>Department of the Army, FM 34-130, 2-52 - 2-54.
- <sup>75</sup>Ibid., 2-53.
- <sup>76</sup>Ibid., 2-54.
- <sup>77</sup>Ibid.
- <sup>78</sup>Department of the Army, FM 34-8-2, *Intelligence Officer's Handbook* (Washington, DC: GPO, 1998), 3-6.
- <sup>79</sup>Ibid., 3-9.
- <sup>80</sup>Department of the Army, FM 71-3, *Armored and Mechanized Infantry Brigades* (Washington, D.C.: GPO, 1996), I-3 - I-4.
- <sup>81</sup>Department of the Army, FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force and Company Team* (Washington, DC: GPO, 1992), I-39 - I-40.
- <sup>82</sup>Ibid., I-40.
- <sup>83</sup>Department of the Army, FM 71- 3, *The Infantry Brigade* (Washington, DC: GPO, 1995), I-5.
- <sup>84</sup>Department of the Army, FM 90-26, *Airborne Operations* (Washington, DC: GPO, 1990), 2-4.
- <sup>85</sup>

## CHAPTER 3

### RESEARCH METHODOLOGY

The methodology for this thesis consists of two major phases. Phase one consists of two steps: defining the problem and literature review and research. Phase two focuses on a detailed examination of the characteristics of the process when applied to operations, conclusions, and recommendations.

Phase one began with the definition of the problem or primary question of whether the U.S. Army's current MDMP for a time-constrained environment supports brigade-level operations. The next step was the determination of the U.S. Army's current doctrine on decision making. This research examined what principles the MDMP is built on and how the process has evolved. The literature review surveyed pertinent current U.S. Army manuals that discuss the MDMP and brigade-level operations and identified the U.S. Army's deliberate MDMP. It then identified the accelerated version of the MDMP by revealing what steps within the process had been altered or omitted to accelerate the MDMP. The review also scrutinized doctrine for any inconsistencies that arose from an examination of the different manuals. Finally, the literature review extended to military-related articles that discussed perceived weaknesses of the deliberate and accelerated MDMP.

Phase two, methodology, involves an examination of the characteristics and issues identified with the abbreviated MDMP to determine if brigade staffs encounter problems when this doctrinal process is implemented in a time-constrained environment. Data for this step are gathered from the performance of brigades involved in operations in a time-

constrained environment as exemplified by operations at the NTC and the JRTC as well as data from secondary research concerning tactical decision-making.

This study uses qualitative and to a small extent quantitative analysis as the research method. The nature of the subject and evidence examined incorporate the elements of a qualitative study as outlined by Elliot T. Eisner in his research manual, *The Enlightened Eye*. The current study is field focused, includes self as an instrument, is essentially interpretive in scope, focuses on details, employs multiple forms of evidence, and attempts to be of instrumental utility.<sup>1</sup> Also, the nature of most of the information examined, ranging from field observations, lessons learned from experience and in-depth studies, and personal interviews insistently put the research design in the area of qualitative methods. These sources of information do not lend themselves to be examined by empirical methods. This study uses information gathered from the three categories of data collection for qualitative methods that Michael Quinn Patton presents in his research manual, *Qualitative Evaluation and Research Methods*, which include in-depth, open-ended interviews, direct observations, and written documents.<sup>2</sup>

This study included a survey of officers who had served as brigade commanders between 1995 and 1999. This time period was chosen to examine the impact on brigade staffs of the new doctrinal abbreviated MDMP methods first presented in the 1995 CALL Newsletter and then followed up with the 1997 version of FM 101-5. This survey was both qualitative and quantitative in nature. It contained fourteen statements concerning the abbreviated MDMP that the officers were asked to indicate their extent of agreement or disagreement. Second, the survey contained four open-ended questions that asked respondents to comment on the strengths and weaknesses of the process and to discuss

procedures that they utilized during their command. Answers to all of these questions provided the basis for follow up in-depth and open-ended interviews. The purpose of the open-ended questions and the follow up questions was to allow the researcher to gather information from the point of view of the former brigade commanders without solely relying on preliminary questions that may only reflect a single predetermined point of view.<sup>3</sup> Finally, supplementary interviews extended to other key individuals who are currently involved with working on current doctrine

The survey of former brigade commanders reflects the quantitative method of this study. The results of the information gained from the first fourteen questions will be based on the responses of the former brigade commanders. The total population of officers who served as brigade commanders of Armor, Mechanized Infantry, Light, Airborne, and Air Assault Brigades and Armored Cavalry Regiments is estimated to be sixty-six. The number of officers who responded to the survey dictate the margin of error for results. For example if fifty of the sixty-six respond, then there is a ninety-five percent confidence level that there is a margin of error of about six percent. If twenty-two of the sixty-six respond, there is a ninety-five percent confidence level that the margin of error is about fourteen percent. If the error of margin is this high, the data may still be examined, but broad generalizations might not be adequately derived from this data.

This study includes direct observations by the author. From January 1997 to June 2000, the author was assigned as an OC for to the NTC at Fort Irwin California. While assigned to NTC, the author spent three years specifically assigned to the brigade trainers. This allowed direct observation of over thirty-two different brigade staffs from

units ranging from heavy forces, Armor and Mechanized Infantry Brigades, and Armored Cavalry Regiments, to light forces including Airborne and Air Assault Brigades. Each rotation included a brigade staff, which was faced with several continuous operations that created the time-constrained environment in which the abbreviated MDMP was implemented. Observation of the brigade staff during this period began with their deployment to NTC and ended three weeks later with the completion of their exercise. The scenarios were mostly high intensity conflicts, yet several also included operations ranging from humanitarian operations, dealings with civilians on the battlefield and other low intensity conflict operations. Altogether, the author observed approximately 210 planning processes within a three-year time frame.

Finally, information from written documents serves as an invaluable source of data for this study. Take Home Packets provided to units from JRTC, CALL and ARI provide the primary sources for these documents.

The first source of written data comes from rotational unit take home packets from the JRTC. The JRTC was chosen for several reasons. First, it is the only other CTC, other than the NTC, which allows brigades to deploy and conduct a wide range of operations against a dedicated opponent. Second, operations at the JRTC are time-constrained, which would provide an opportunity for brigades to conduct planning using the Accelerated MDMP process. Third, the JRTC has dedicated OCs who monitor and provide feedback to rotational units on the strengths and weaknesses of their operations. Each OC is a soldier who is well trained in the doctrine of his area of expertise and monitors the operations associated with that area. A summary of the feedback that the JRTC provides is documented in the unit's take home packet. This packet provides the

commander with a basis for future home station training for that particular unit. The unit take-home packets are examined to identify positive and negative trends concerning the planning process. Relevant research survey's the rotations for the past three to four years, depending upon the amount of material available.

A second source of written data comes from CALL. CALL publishes several documents that identify trends at the NTC and the JRTC. Those documents are examined, and information pertaining to brigade-level operations at NTC and JRTC is subjected to analysis. Because CALL has already done research to identify these trends, this thesis examines information going back possibly as much as seven years.

A third source of written information comes from secondary sources, including research already conducted on the subject. The ARI conducts research to maximize performance and readiness through advances in behavioral and social sciences. The Fort Leavenworth unit focuses on research to enhance command and control capabilities of the Army. Research for this thesis includes a review of these studies for pertinent information.

This study addresses the questions of quality and credibility with the assistance of triangulation. Michael Quinn Patton discusses triangulation in his research manual, *Qualitative Evaluation and Research Methods*, as a data analysis process to enhance quality and credibility of quantitative analysis. He presents four kinds of triangulation: methods triangulation, triangulation of sources, analyst triangulation, and theory or perspective triangulation.<sup>4</sup> This study uses analyst triangulation, triangulation of sources, and to a small extent, methods triangulation.

Triangulation involves the employment of two or more persons independently to look at the same data and then compare sets of observations.<sup>5</sup> This technique is primarily used to check the bias of the data presented as part of the author's observations. The author's observations are presented to several senior officers who were assigned to the NTC as senior OCs during the same time as the author. These officers observed the same units involved in planning and operations. The senior officers are asked to comment on whether these observations match what they saw. Their comments are included as part of this study to check for reliability and validity of the data collected.

Triangulation of qualitative sources involves "comparing and cross-checking the consistency of information derived at different times and by different means *within qualitative methods*."<sup>6</sup> This study involves comparing the author's observation with the survey and interview data. Many of the officers involved in the survey commanded the same brigades that the author observed while the author was assigned to the NTC. This study also includes information gathered from a multitude of sources and compares that data for consistency and patterns. Information initially is drawn from the author's observations and then cross-referenced with information from senior OCs, JRTC at Fort Polk, CALL, the ARI, and interviews with former brigade commanders and other key individuals.

Methods triangulation involves comparing data collected from qualitative methods to data gathered from quantitative methods.<sup>7</sup> The information gathered from the first fourteen questions of the survey represents information gathered from quantitative methods. This information is compared with data gathered from qualitative methods. This study includes the results of that comparison.

Content analysis also assists examination of data from the JRTC take-home packets and CALL products. When using content analysis, two potential problems arrive: reliability and validity. Ambiguity in word meanings, coding rules, and category definitions may cause reliability issues. Concerns with validity arise based on the degree that a content analysis variable measures what it is supposed to measure.<sup>8</sup> The issues associated with content analysis will be dealt with in a similar way that Major Jacob Garcia did in his thesis, *The Requirement For An Abbreviated Military Decision-Making Process In Doctrine* (1993).

The three types of reliability appropriate to content analysis are stability, reproducibility, and accuracy. Stability relates to the variance over time of the results of content classification. Reproducibility relates to the consistency of results when more than one coder codes the same text. Accuracy relates to the extent that the classification of text corresponds to a standard.<sup>9</sup>

Stability of the information in the observations by OCs can be assumed in that they collect information against the standard of current command and control doctrine. The FM 101-5 and the associated brigade operations FMs provide a framework for the collection of data associated with the MDMP. The OCs use doctrinal manuals associated with their specific area of expertise as a basis for comments.<sup>10</sup>

Reproducibility is provided in that all the OCs from each different team over an extended time use the same doctrine. There is always a chance that OCs may introduce their own bias when commenting on a unit; however, a single knowledgeable analyst using a separate instrument provides strong antidote. An OC watching a war game may comment that the unit did not conduct the war game correctly because it did not complete

all the steps. Another may comment that the unit conducted the war game correctly, but did not complete some of the tasks. A separate instrument reveals that the war game was conducted, but several steps were omitted, even though one OC's comment was potentially positive and the other's was potentially negative.<sup>11</sup>

Accuracy of the information must be assumed because of an established standard, FM 101-5. The only potential variations are those included in the associated brigade-level FMs. One will be able to determine if the OC complied with his understanding of doctrine by examining the content of their comments.<sup>12</sup>

The take-home packets do demonstrate reliability of information. The OCs use doctrine as a standard with the assumption that they are well trained in their Battlefield Operating System (BOS); thus, reliability can be determined because of stability and reproducibility.<sup>13</sup>

Validity of the analysis may come into question because of the lack of a standardized collection instrument used by the OCs. This means that the validity is considered face validity, which some researchers regard as the weakest form of validity. Face validity means the extent to which a category seems to measure what it is supposed to measure.<sup>14</sup> Use of a separate instrument is employed to strengthen validity. Information on unit performance comes from more than one annex of the take-home packets. The command and control, maneuver, intelligence and if available, trends annexes, are all examined for information. This adds to construct validity with reference to the measure of the information. Construct validity is added when a measure is correlated with some other measure.<sup>15</sup> If several annexes indicate a point concerning unit performance, than the author's separate instrument will have construct validity.<sup>16</sup>

Phase two of this study examines the key aspects or characteristics of the abbreviated MDMP. Phase one of this study identified the primary techniques used to abbreviated MDMP as: shortening the steps of the process, the commander taking a more active role, and consideration of fewer COAs to include even just a single, directed friendly COA. An additional aspect of the deliberate MDMP process identified in Phase one that remain in the abbreviated MDMP includes an over emphasis on synchronization versus flexibility. This leads to inconsistencies in guidance on consideration of the enemy within the abbreviated process.

Phase two involves research on the third and fourth questions concerning this study: do units implement the techniques doctrine advocates for abbreviating the MDMP process in a time-constrained environment and do brigades which follow these techniques encounter any consistent problems? This study examines data generated from units implementing the abbreviated MDMP to identify positive or negative patterns and consistencies associated with the aspects of the abbreviated MDMP. This study will attempt to determine if there are any shortfalls concerning the abbreviated MDMP that doctrine does not adequately address.

The conclusion portion of this study discusses the shortfalls and positive aspects of the process that affect a brigade's ability to conduct tactical decision making in a time-constrained environment. If shortfalls are found, this portion determines if these shortfalls are a result of doctrine. If positive aspects are found, the conclusion will highlight those aspects for future retention in doctrine. The conclusion further attempts to answer the primary question of whether the Army's current MDMP process for a time-constrained environment supports brigade-level operations. Finally, if shortfalls have

been identified, this study will include potential recommendations to correct any negative trends.

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<sup>1</sup>Michael Eisener, *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice* (New York: McMillan Publishing Co., 1991), 32-39.

<sup>2</sup>Micheal Quinn Patton, *Qualitative Evaluation and Research Methods* (Newbury Park, NY: Sage Publications, 1990), 10.

<sup>3</sup>Ibid., 24.

<sup>4</sup>Ibid., 464.

<sup>5</sup>Ibid., 468.

<sup>6</sup>Ibid., 467.

<sup>7</sup>Ibid., 464.

<sup>8</sup>Philip W. Weber, *Basic Content Analysis*. (Newbury Park: Sage University Paper Sage Publications, 1990), 15.

<sup>9</sup>Ibid., 17.

<sup>10</sup>Jacob A. Garcia, "The Requirement For An Abbreviated Military Decision-Making Process In Doctrine" (Master of Military Art and Science thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1993), 36.

<sup>11</sup>Ibid., 36-37.

<sup>12</sup>Ibid., 37.

<sup>13</sup>Ibid.

<sup>14</sup>Weber, 18.

<sup>15</sup>Ibid., 19.

<sup>16</sup>Garcia, 38.

## CHAPTER 4

### ANALYSIS

Chapter 4 consists of an analysis of information concerning the major aspects of conducting the abbreviated MDMP. This chapter builds upon information identified in chapter 2, "The Literature Review." Chapter 2 concluded that there is only one MDMP; however, doctrine allows for modifications when operating in a time-constrained environment. Although doctrine permits the commander to decide how he wants to shorten the MDMP, several techniques are specifically highlighted in doctrine. Chapter 2 identified three primary techniques for abbreviating the MDMP; increased commander's participation, the development of a single friendly COA, and the shortening the steps of the process. It also noted inconsistencies in doctrine on the degree of consideration of the enemy in an abbreviated planning process. The FMs did not agree on how many ECOAs were to be considered and how many to include in the war game.

Chapter 4 is intended to answer the last two secondary questions; Do staffs implement the changes to the process that doctrine dictates, and do brigades who follow this process encounter any consistent problems? It is structured to examine the three techniques and the doctrinal inconsistencies associated with consideration of the enemy the identified above in detail. First, overall observations from NTC, JRTC, and the survey concerning the MDMP are discussed. Then each of the three primary techniques (increased commander's participation, development of a single friendly COA, and shortening the steps) is examined with information from sources noted about in chapter 3. The last technique covered is consideration of the enemy in the abbreviated process. Chapter 4 concludes with an evaluation of the sources of data and a summary.

The survey results consist of information gathered from thirteen former brigade commanders. Information in the survey resulted from answers to standard questions, direct interviews, and E-mail responses on follow-up questions. The low number of officers contacted in the survey in relation to the total population of former brigade commanders implies that this information alone is not of a substantial quantitative significance to draw general conclusions. However, the information is included as qualitative evidence along with other information in an effort to establish patterns for analysis.

#### Overall Military Decision Making Process Trends

Overall, MDMP trends show that while the MDMP works even when abbreviated, however, major issues arise with regard to training and a clear understanding of the process by commanders and staffs. The survey revealed the MDMP worked as a method for planning and executing operations at the brigade level; however, training deficiencies exist with regard to the process. The CALL CTC Trends for both NTC and JRTC indicate a lack of training significantly impacts on staffs' abilities to implement the MDMP, especially in a time-constrained environment.

The survey results show the MDMP is accepted as a feasible method for developing and executing feasible plans in a time-constrained environment. None of the surveyed officers indicated that the process was impracticable. One of the officers did point out the potential for the process to produce stereotypical plans, for example, always developing a COA that resulted in a brigade formation of two battalions forward and one battalion back. This stereotype stems from the fact that the MDMP is a scientific or analytical method, and as such, is infinitely reproducible in recognizable variants.

However, this fact could be overcome by having trained commanders and staffs that clearly understood the art and science of war.<sup>2</sup>

The survey results indicate that a general lack of understanding and training on the part of commanders and staffs result in the poor performance of units that attempt to abbreviate or accelerate the MDMP in a time-constrained environment. Six of the thirteen surveyed officers said or indicated that the commanders and staffs do not adequately understand the MDMP, and that this problem is worsened when those staffs then try to abbreviate or accelerate the process. “The chief weakness is commanders and staffs do not understand the principles of the deliberate process and so when they take short cuts they often make dramatic mistakes or actually cause the ‘abbreviated’ process to take longer than if they took the deliberate approach.”<sup>3</sup> An additional six of the thirteen officers said or indicated that most commanders and staffs simply lack adequate training in the MDMP.

Colonel John Rosenburger, former 11th Armored Cavalry Regiment (ACR) commander at Fort Irwin (NTC Opposing Force Commander) noted that the OPFOR at the CTCs effectively use the MDMP. He stated, “The OPFORs [Opposing Forces] at our CTCs have mastered the deliberate planning process, have become adept at war gaming--the most important part of the planning process in my view--and can develop 3-4 courses of action, fully synchronized within six to 6-8 hours.”<sup>4</sup> He also stated, “The process will only be effective if it’s conducted by trained, experienced staff officers who really know their stuff. Untrained staffs who attempt to “abbreviate” the process are on a clear path to failure.”<sup>5</sup>

The CALL NTC trends from 4th quarter fiscal year 1994 (4QFY94) through 2QFY98 show MDMP as the No. 2 negative trend primarily because of the lack of training. NTC trends for 4QFY94 through 2QFY96 states, “Units that know and follow the Military Decision-Making Process (MDMP) are better synchronized at execution and can make knowledgeable decisions during the battle.”<sup>6</sup> It also says most observer controllers report that units have difficulty with the MDMP and that time is the biggest challenge. The lack of home station training emphasised on MDMP is noted as the problem.

The NTC trends from 1QFY96 to 2QFY98 further highlight brigade staff problems with MDMP. Specific problems reported are a lack of training, no staff standard operating procedures, and lack of doctrinal and practical staff experience in key staff positions.<sup>7</sup> “In fact, most AC brigade staffs state they have had little recent exposure to the Military Decision-Making Process (MDMP) at all.”<sup>8</sup> This lack of training is then compounded further:

Untrained staffs seek TTP [tactics, techniques, and procedures] as a method to facilitate staff planning shortcuts. However, most LTP brigade staffs lack doctrinal and practical staff experience required to apply TTP. In fact, planning TTP confuse, complicate, and frustrate untrained staffs.<sup>9</sup>

The key sticking point is that brigade staffs try to abbreviate the MDMP when they do not adequately understand the deliberate MDMP.

CALL JRTC overall trends for the MDMP were initially are positive and then more negative in recent years. The JRTC trends for 4QFY94 report that overall, brigade commanders and staffs understand the MDMP and incorporate the process into standard

operating procedures. Also noted is the fact that commanders adequately shorten the process when time is a limiting factor.<sup>10</sup> Later issues, however, show a decrease in staff MDMP skills. Comments for 4QFY97 and 1QFY98 state, “Staffs need to be trained in the military decision-making process (MDMP).”<sup>11</sup> This negative trend continues when it is reported in Trends for 4QFY98 to 1QFY99 that staffs do not understand or effectively conduct the orders process.<sup>12</sup>

#### More Participation By The Commander

Colonel John Rosenburger declared that the brigade commander and not the staff remains the key to victory in regards to planning. He must have a clear vision of the flow of the battle and how he can achieve his mission and defeat the enemy. Subsequently, he must provide this vision to his staff and his subordinates and guide the planning process so it sets the conditions he desires.<sup>13</sup> Consequently, his increased participation in the process when time is limited is critical for rapid planning and decision making.

Understanding how people habitually make decisions in a time-constrained environment helps clarify the importance of increased commander’s participation in the planning process. Dr. Gary Klein, a noted cognitive psychologist, has spent years researching decision-making in difficult situations. He is one of the developers of the naturalistic decision-making approach, and has helped ARI try to determine how decisions are made. His research revealed that in situations when time is lacking, most people use a recognition approach to making decisions. This is also referred to as recognition-primed decision making (RPD) or an “intuitive approach” to decision making and explains how people make intuitive decisions.

In RPD, a person uses “experience to recognize the key aspects of the situation, enabling a rapid reaction.”<sup>14</sup> The person uses his situation assessment skills to create a model of the current situation. He then examines his experiences to determine if it matches a similar situation. If it does, he will quickly imagine what will happen if he carries out the solution that worked in the former experienced situation for the current situation. If the outcome is positive, he adopts that action. If it is not, he tries to modify the action. If that does not work, he examines the next most similar situation from his experience and goes through the process again until he determines a feasible solution. The emphasis on RPD is a person’s situation assessment skills and the richness of one’s experience, and assumes experienced decision makers make good decisions.<sup>15</sup>

Two aspects of RPD and intuitive decision making must be remembered. First, RPD looks at satisfying the requirement, which means it does not necessarily pick the most optimal solution.<sup>16</sup> Second, intuitive decision making often requires a “safety check” especially when fatigue may impair the individual’s ability to assess the situation.<sup>17</sup> These aspects will be addressed later in this chapter.

The brigade commander should be the most qualified individual in the brigade to make intuitive decisions concerning brigade operations. This is based upon the assumption that within the brigade, he has had more training and experience than any of his key staff members. The Army Research Institutes study “The Human Dimension of Battle Command” shows that a combination of experience, knowledge, thinking and reasoning skills, the will to succeed, and interpersonal skills are required for effective battle command. There are qualities that flow not only from talent, but from years of

practice and experience.<sup>18</sup> Assuming the commander has a vast amount of experience and training, he is the most qualified individual to make intuitive decisions.<sup>19</sup>

Increased commander's involvement then allows him to use this ability to make rapid decisions and shorten the planning process. This is all based on the key assumption that the commander has the above-mentioned skills. If he does not, then reliance on intuitive decision making will not work.

At NTC, I observed that increased participation by brigade commanders in the planning and preparation phases was critical. Most of the time, the brigade commander was a very experienced individual. His ability to visualize the fight and to articulate the decisive point of the operation was critical to focusing the staff on key tasks required for mission accomplishment when time was short.<sup>20</sup>

Additionally important was the commander's issuance of clear and detailed guidance with enough detail early in the MDMP to drive the process. Sometimes the commander's initial guidance lacked specific details, which required him to revise his initial guidance in the middle of the process.<sup>21</sup> "I want a detailed reconnaissance and surveillance (R&S) plan" was a commonly heard phrase that did not specify what priorities would be designated for R&S planning. This departure impacted COA development by not initially focusing the staff on what details the commander felt were important. The commander might be more specific later in the process as he made adjustments, but these occurred after the staff had already focused on unimportant details and priorities or had wasted effort. Hesitation or altering guidance not based on new information or intelligence were disruptive and negatively impacted the MDMP.<sup>22</sup>

The brigade commanders I observed at the NTC increased their involvement in the MDMP in the way that best suited their unique abilities to command. The most common technique used was that either the commander directed the friendly COA or that he gave very specific guidance focusing the staff on a single COA. While most brigade commanders were not present during the war game, many would stop to observe portions of it to ensure the staff was adhering to his guidance during the process. Some commanders did sit in on the war game and felt that it allowed them the best method to synchronize the COA and aided them in visualizing the fight.<sup>23</sup> Most important, the commander would ensure he was available during the entire planning, preparation, and execution process either in person or via voice communications. Accessibility allowed him to rectify potential issues as soon as possible and prevented the need for formal briefings that required too much time.

As long as the commander had good situational awareness, understood the MDMP, could visualize the fight, and provide detailed guidance early, his increased participation effectively abbreviated the process. If he lacked any of these attributes, the planning process was doomed from the start.

The CALL JRTC trends generally show positive observations for increased commander's participation with the exception of commander's guidance for fire support. The JRTC trends from 4QFY94 to 3QFY96 contained positive trends for commanders' guidance and participation. "When time is limited, commanders do a good job of compressing the process."<sup>24</sup> Also included were comments from fiscal year (FY) 1995 and 1996 said that the commander's guidance assisted and focused the staff in the MDMP.<sup>25</sup> This comment was repeated in the JRTC Trends for 4QFY96 to 1QFY97.<sup>26</sup>

The one consistent negative comment regarding commander's guidance was the commander's guidance for fire support. The JRTC Trends for 4QFY96 through 3QFY97 stated, "The commander's guidance for fire support is frequently vague."<sup>27</sup> This trend refers to specifics, such as the use of nonstandard terminology and improper formats. This comment has been repeated in every JRTC trends starting from 4QFY96 until 1QFY99. The NTC trends do not contain any positive or negative comments regarding the commander's guidance.

The survey results indicated that increased participation by the brigade commander was key to the MDMP in a time-constrained environment. Of the seven officers specifically asked, all discussed the importance of increased commander's participation in the MDMP when time was short. Eight of thirteen officers surveyed included how they modified the MDMP when time was short to meet their specific requirements as a commander. All of the techniques discussed were within doctrine, and most of the eight officers indicated that their staff was well trained before they attempted to abbreviate or modify the process. Twelve of the thirteen said or indicated that the commander was the key figure in the planning process and that his competence was vital to successful planning. None of the officers said or indicated that the commander's participation in the MDMP was not important.

The survey results showed that the extent of the increased commander's participation varied. Eight of the thirteen surveyed officers noted the importance of either providing detailed guidance or actually developing the friendly COA. Two officers specifically discussed the commander's establishment of CCIR as critical, along with the need for detailed commander's guidance. Two other officers talked about the

need for the commander to be at the war game to identify where the branches and sequels to the plans were and to get a clear understanding of the decision points. Command presence would later save the staff considerable time as there was no need to back brief the commander on the war game results or adjustments required to the COA. The war game was limited to an acceptable timeframe, and he was able to ensure the staff adhered to his guidance the first time.<sup>28</sup>

This section concludes that increased commander's participation within the abbreviated MDMP can greatly enhance the brigade's ability to develop and execute a feasible plan. Commanders and staffs have successfully used this technique to abbreviate the MDMP. The RPD model describes how commanders can use their individual situation assessment skills to allow him to rapidly analyze data and make quick "intuitive decisions" or provide specific guidance, which can adequately focus and abbreviate the MDMP.

Problems with this technique can arise from issues with respect to the expertise of the commander. Associated with the RPD model is the need for a "safety check" and an understanding that quick decisions usually satisfy the requirement and not necessarily the optimal solution. This model only works when the basic assumption that the commander has the training, experience, and skills to effectively make intuitive decisions is true.

#### Developing Only One Friendly Course of Action

The ARI Spring 1995 Newsletter "Lessons Learned on Tactical Planning: Implications for Procedures and Training" discussed several observations concerning the standard tactical planning process. This article was based on an ARI Technical Report of 1993, which drew information from a myriad of sources, including combat situations

such as Desert Storm and the Arab-Israeli conflicts, CTC observations and interviews with former commanders.<sup>29</sup> The findings showed that in a time-constrained environment, the generation of two or more friendly COAs was inefficient and habitually not done.<sup>30</sup>

The technical report reported that:

Based on the review of several ineffective procedures, it was concluded that the most effective way to strengthen the planning and estimate process would be to shift the focus away from finding the best course of action (COA). Instead, emphasis could be placed on finding a good workable plan which matches the goals of the mission within the resource constraints of the situation: the time saved could then be spent on detailed planning.<sup>31</sup>

The increased time spent on detailed planning also included more time spent on contingency planning. Time saved could also be spent on other activities, like rehearsals and subordinate units' planning and preparation.<sup>32</sup>

The RPD model or intuitive approach to decision making provides the commander with an approach for developing a single friendly COA. The intuitive approach or RPD was earlier noted as a method decision making in a time-constrained environment. When the brigade commander uses RPD to provide the staff with a single friendly COA, his preference in turn provides needed time for more planning and improving the friendly COA. Otherwise, the staff frequently wastes time trying to develop and war game several distinct friendly COAs in a method that does not efficiently allow for the improvement of an optimal solution.<sup>33</sup>

Current Army doctrine acknowledges the use of initiative by the commander as part of Battle Command. Doctrine states, “Skilled judgment gained from practice, reflection, study, experience, and intuition often guides [Battle command] it. . . . In unclear situations, informed intuition may help commanders make effective decisions by bridging gaps in information.”<sup>34</sup>

The CALL NTC trends show a change in attitude concerning developing only a single COA instead of developing multiple COAs and selecting the best one as part of the abbreviated process. An observation under Negative Trends of the CALL NTC Trends Compendium for Course of Action development and war gaming in the third and fourth quarter of fiscal year 1995 (3-4QFY95) stated, “Most COAs are dictated by the commander or developed by one or two officers without staff input.”<sup>35</sup> The inference here is that having only a single COA developed, as part of the initial process, is detrimental to the process.

Later, however, both the NTC and the JRTC favor the development of a single friendly COA. A later observation in 1-2 QFY96 comments that although having the brigade commander dictate a COA to the staff is a form of abbreviating the MDMP, problems arise when staffs do not develop the COA with enough detail to synchronize the BOS.<sup>36</sup> Here it is not the development of a single COA that is the issue, but the lack of staff involvement in fully developing and synchronizing the COA. The JRTC also favors the development of a single COA. The “Leader’s Training Program and JRTC favor a focused or single COA because of time constraints and limited staff support.”<sup>37</sup>

The survey revealed that developing a single friendly COA was an acceptable way of abbreviating the MDMP. A total of eleven of the thirteen officers discussed only

developing a single friendly COA as part of abbreviating the MDMP. All the surveyed officers stated or indicated that the development of a single COA was the primary method in abbreviating the MDMP.

The methods for developing the COA varied. Five of the ten officers, who talked about how to develop the COA, said that the commander should provide the staff the friendly COA. Four of the ten discussed developing the COA with key primary staff officers. One of the ten discussed the possibility of the commander providing the staff a COA; however, the staff was encouraged to choose another if it seemed more feasible. Colonel Lynch talked about the importance of incorporating nonmaneuver staff members into the COA development process. The incorporation of the S-2, signal officer, and the logistics officer up front in the process was vital. “If the signal officer and logistics officer could not support the COA, then it would be unwise to proceed with it.”<sup>38</sup> As Brigadier General Thurman would often say regarding communications as part of the tactical operation, “If you can’t talk at the National Training Center, then you’re just camping!”<sup>39</sup>

Almost all of the 32 brigades I observed at the NTC chose to abbreviate the deliberate MDMP by developing only a single friendly COA. Time did not allow for the development of multiple blue COAs. Multiple COAs would have required additional war gaming associated with the determination of which blue COA was the best and then war gaming the selected blue COA against several ECOAs to fully synchronize the best blue COA against possible ECOAs. The NTC optempo did not permit the time required to do this effectively.

The brigade commanders used several techniques to initially develop a COA. The first technique involved the brigade commander simply providing the staff with a directed COA. The second technique involved the brigade commander developing a COA in conjunction with key members of his staff. Usually following the mission analysis brief, the brigade commander would go to a map that showed the area of operations and a SITEMP of the most likely ECOA and huddle with several members of the staff to develop a blue COA. The final technique was that the brigade commander would allow his staff to develop a single COA and would then follow the formal step of having them present it to him in a formal or informal briefing. The brigade commander would provide specific guidance following the mission analysis briefing, but would allow the staff to develop a COA.

A consistent problem that I observed at the NTC was the lack of staff integration as part of COA development. Brigade commanders were very comfortable focusing on the maneuver portion of the COA. Obviously, this was a direct result of the experience from the previous command of maneuver units. However, the brigade-level was the first level where a commander had to deal with major elements from every BOS. Many times brigade commanders were not very familiar with how to fully integrate the non-maneuver BOSs into the COA. Also, brigade commanders seldom had the time to direct a fully BOS integrated COA as part of his initial guidance. It was vital that the BOS subject matter experts add the detail required and contribute to COA development. Otherwise, BOS integration of the COA suffered.<sup>40</sup>

Even when the brigade commander directed the COA, sooner or later the staff had to be brought in to work the details. Although the executive officer, operations officer

(S-3), and fire support coordinator were usually involved in COA development; many other key staff officers were not involved early in the planning process. The signal officer rarely participated in the COA development until the very end, yet few individuals could be more important. Consequently, communications across the width and depth of the battlefield were a constant problem. Most of the time, the logistical planner or the S-4 was not involved in COA development. The R&S operations often suffered because of the lack of logistical support. Other key staff members not adequately included were the engineer, air defense officer, the military intelligence company commander, and the chemical officer. Most of the time these staff member were simply given the COA and told to make it work, without providing meaningful input. The result was a COA that poorly integrated all BOS elements.<sup>41</sup>

The second issue concerning staff involvement was not adequately including the S-2 in COA development. Often, if the S-2 were involved in COA development, he did not discuss enemy options and counters to friendly actions related to the ECOAs. The friendly COA usually focused on the most likely ECOA, and did not initially incorporate the flexibility to deal with several alternative ECOAs. No actions were incorporated into the COA to “modify, deny, or encourage” ECOAs. Sometimes S-2s simply did not understand their role in the process. If the brigade commander was very experienced, he could rectify this problem by visualizing the options open to the enemy and ensuring flexibility was built into the COA, but it was always good to have another opinion. The S-2’s lack of involvement in the COA development could be associated with a plan that lacked flexibility.<sup>42</sup>

Deficiencies in the staff also caused many problems. Many staffs were simply inexperienced. Staff members who were absent or who did not ask questions when they did not understand the COA, or who did not provide the commander with key details that impacted on the COA all negatively impacted the COA development process.

Finally, results of directly including the maneuver commanders in the process were mixed. If time was very short, directly including them in the process was beneficial. However, if more time was available, directly including them in the process could be detrimental. Developing a single COA meant at best an 80 percent solution, and directly involving them could be disruptive with “too many good ideas” being added.<sup>43</sup>

Developing a single friendly COA is an effective technique for abbreviating the MDMP. This is essentially can be a subset of the first technique. Units in a time-constrained environment that developed a single COA as opposed to several COAs were much better able to focus their planning effort and develop a flexible, detail plan. The problems associated with COA development appear to be the lack of staff integration to add required detail and flexibility to the COA. Again, increased commander’s participation is beneficial, but staff integration is still required. The lack of experience and training on the part of commanders or staffs sufficiently detracted from the process to render the single COA technique ineffective.

#### Shorten the Steps of the Military Decision-Making Process

The literature review revealed even in a time-constrained environment, doctrine stated there remained a single MDMP, and that while shortening steps was acceptable, omitting steps was not. This portion of chapter 4 contains an examination of research on the potential impact of abbreviating each of the seven steps and then a review of

information from CALL, the survey and the author's observations. This portion also emphasizes the fact that the MDMP is continuous and a fact that has impact that on the abbreviated process. The initial research concludes the seven steps of the MDMP can be shortened especially when incorporating the other two techniques already discussed.

The first step in the process is the receipt of the mission. This step is critical as it initiates the process. It may come in many forms. Traditionally, the receipt of a written mission or FRAGO from higher headquarters is seen as the formal portion of this step. However, this step may also come in the form of personal recognition of a situation that prevents the unit from accomplishing its mission. This could be in the form of a report from the S-2 to the commander that the enemy has changed his COA or a report of a change in the friendly situation, such as the loss of friendly combat power. These reports may come in written format or may come as a report via FM. In all instances, this step must take place to initiate the MDMP.<sup>44</sup>

The second step is mission analysis. Mission analysis is essentially the situation assessment. Before any actions are taken, the decision maker must have the best possible understanding of the current situation. In the "Overview of Army Tactical Planning Performance Research," Fallesen concludes, "A better understanding of the situation did lead to selection of a better course of action."<sup>45</sup>

Based on the earlier discussion in the section on more participation by the commander in this chapter of the commander's situation assessment skills, the understanding is that the commander is capable of developing his own intuitive feel for the battle. However, one must take into account those factors that detract from a commander's understanding of the situation. "Biases, limited perspectives, failure to

integrate disparate and conflicting information and failure to identify hidden, and often false, assumptions are common processes that insidiously influence the traditional approach [to decision making].”<sup>46</sup> Staff integration as a part of this step offers a way to counter these negative factors. Information examined from several different points of view can provide the commander with a broader view of the battlefield.

The concept of group think however, must be closely guarded against when integrating the staff. In *On the Psychology of Military Incompetence*, Dixon explains even when highly intelligent and dedicated people are integrated into the decision-making process the result is not always a quality product. He describes group think as having such symptoms as illusions of invulnerability, strong beliefs in a group’s morality that insulates it from consequences, underestimation of the enemy, rationalizing away contradictory information, and guarding against adverse information toward the group. These symptoms lead to accentuating those things that lead to group incompetence in decision making.<sup>47</sup>

This does not mean the commander must always rely on his staff to best understand the situation. Constantly relying on staff interpretations instead of the commander’s access to raw data may negatively affect his ability to develop a “feel” for the fight.<sup>48</sup> However, regardless of the method used prior to COA development, the commander will conduct a situation assessment or mission analysis, whether it is in the form of a formal briefing, a ten-minute update brief from key staff members via FM or a quick process within the confines of the commander’s head. To eliminate this step would not be feasible. Not having a clear vision of the situation would make COA development very difficult. But does shortening this step still make COA development feasible?

Studies suggest one of the ways people deal with decision making under stress is to limit the amount of information they examine. “Those strategies [for decision making] which process all of the choices on only limited number of attributes (e.g., the elimination by aspects or lexicographic strategies) yield the most accurate judgments under time pressure.”<sup>49</sup> Most commanders appear to make decisions on six to eight pieces of information.<sup>50</sup> Consequently, research has also shown that, “Under time stress, decision making performance deteriorated when more rather than less information was provided.”<sup>51</sup> Even under normal circumstances, current technology provides the commander with an almost unparalleled amount of information, which seems to make commanders reluctant to make decisions. “He either becomes overloaded or delays making a decision in the belief if he waits, he will receive the vital piece of information that tends never to come.”<sup>52</sup>

The CALL NTC trends reflect negative developments in staff integration for mission analysis, but do not reflect any detrimental observations related to shortened mission analysis. The NTC Trends for 4QFY94 to 2QFY96 commented that battle staffs were not developing detailed mission analysis briefs for the commander. The major reasons were the lack of staff integration as part of the MDMP and failure to provide the S-2 time to develop the required products for the process.<sup>53</sup> Comments noting the lack of the staff integration being included in the mission analysis step are included in every NTC trends bulletin up to the 1QFY98 and 2QFY98 issue.

The CALL JRTC trends address an initial lack of staff integration in the mission analysis, but these observations are later reversed. The CALL JRTC trends for 4QFY94 to 3QFY96 show battle staff planning and mission analysis as the No. three negative

trend for the command and control BOS. The comments primarily reflect a lack of staff integration.<sup>54</sup> Later, the comments in the trends for 2-3QFY97 declared, “Overall, brigade-level organizations have executed mission analysis to standard.”<sup>55</sup> Subsequent trends did not mention positive or negative trends for the mission analysis.

Many of the brigade staffs I observed at the NTC wrestled with the issue of providing analysis of the information versus simply relaying the information as part of the mission analysis step. Although, limiting the amount of information and the presentation time allotted per staff member shortened the mission analysis step, staffs many times either did not present critical pieces of information or presented general information that was uninformative. Some simply did not understand how to identify and present the few critical bits of information they needed to get to the brigade commander as part of mission analysis.

Many of the terrain briefings I saw at the NTC were notorious examples of the lack of analysis. Terrain features were identified as key or decisive terrain, but with no explanation. Terrain analysis was not tied to an understanding of how the enemy fights. Information provided usually failed to show the impact of the terrain either on key enemy capabilities or his capacity to array combat power and use its effects, the seven forms of contact, to accomplish his mission.<sup>56</sup> Sometimes terrain briefings were eliminated because “everyone knows the NTC battlefield.” While this may have been true of many of the more senior officers, many more were not familiar with the nuances of the NTC terrain. Many plans did not adequately take advantage of critical inter-visibility lines and unidentified or uncovered enemy reconnaissance infiltration routes.

The next step is COA development. Consideration of only one friendly COA abbreviates this step considerable; however, staff integration is very important here. Earlier, this chapter noted that a key aspect of intuitive decision making is the need for a safety net. The rationality of an individual making intuitive decisions can easily be affected by stress under battlefield conditions, including lack of sleep and fear. These and related conditions could have negative effects on the commander's thinking skills.<sup>57</sup>

Another potential issue with intuitive decision-making is predictability. "Two of the quickest ways to defeat are to fight yesterday's battle tomorrow and to become too predictable."<sup>58</sup> A commander could become very predictable to the enemy if he solves the same or similar tactical problems the same way every time. Therefore, a safety net is needed to guard against these two problems.

The battle staff can fill this need for a safety net.<sup>59</sup> The battle staff fills this role by their integration into the COA development and the COA analysis step. Eliminating these steps and going straight to the orders production could remove this critical safety net.

I observed many staffs at the NTC not completing COA development prior to going into the war game. Even when the brigade commander dictated the COA, specific details had to be worked out prior to war gaming and synchronizing the COA. These details, however, were not adequately developed initially in the COA development step. They were adjusted later. Most staffs did not conduct a hasty war game as noted in doctrine as part of the COA development step to flesh out the COA and add required details.<sup>60</sup>

For example, the coordination of airspace coordination areas and other airspace restrictions for artillery, aviation, close air support (CAS) and military intelligence units using unmanned aerial vehicles was almost always left until the war game. This situation existed even though there was ample information to develop an initial plan once the commander's guidance was complete and friendly unit dispositions were determined. The plan for the positioning critical signal nodes was usually not completed until the war game step, again even though an initial plan was needed early to support the R&S plan. Attempts to add details usually came during the war game step.

Often, during the war gaming step, when the focus should fall on synchronizing the BOS for the COA and on ensuring the required flexibility, I observed staffs still developing the initial COA. Earlier, this chapter addressed earlier the need for BOS subject matter experts to contribute to the COA development because of the brigade commander's potential lack of experience in dealing with certain BOS elements. Inadequate staff estimates, together with a failure of subject matter experts to address key issues, resulted in more time being spent during this step than required. This shortcoming also led to the staff ending this step prematurely to meet the planning timely line, even though critical actions had not been synchronized or considered.<sup>61</sup>

The next step in the MDMP is the COA analysis. Doctrine affirms this is the step the most time should be spent on during an abbreviated process, namely because of the need to synchronize the BOSs. Dr. Klein pointed out that decision making using the RPD model seeks to satisfy the requirement, which does not necessarily lead to the optimal solution. This is primarily why COA analysis is required. The single COA must be tested and modified to be able to defeat all feasible ECOAs, so an optimal friendly

COA can be created. Even if time is very short, the friendly COA must account for several enemy options, so the brigade can retain flexibility. Eliminating the COA analysis prevents the brigade from synchronizing the BOS and building the flexibility into the COA needed to optimize it against the enemy.

The CALL CTC trends show major problems exist for unit proficiency in war gaming skills. Both NTC and JRTC trends mirror the statement that brigade staffs are not trained and do not adequately understand how to conduct the war gaming step of the MDMP. The NTC trends show lack of war gaming skills in units remains a systemic problem. From FY94 through FY98, war gaming has been consistently cited in the top three negative trends that should be reversed, while there were no positive war gaming trend comments.<sup>62</sup> CALL materials assert that, “War gaming is the most difficult step in the Military Decision-Making Process (MDMP) for units to complete successfully. Units have continued to struggle with this training issue for the past 10 years.”<sup>63</sup> The limited time allocated to staffs for MDMP training as a complete staff is cited as one of the reasons for this deficiency.<sup>64</sup>

The CALL JRTC results also show a negative trend toward war gaming skills. JRTC Trends for 4QFY94 through 3QFY96 listed COA development and war gaming as Negative Trend No. four and stated, “War gaming is not universally understood and conducted by staffs to the degree and level necessary to ensure success.”<sup>65</sup>

Detailed examination of the take home packages of over thirty-three JRTC rotations between 1996 and 1999 showed one-third of the rotational units had problems with war gaming. The take home packages of eleven of the thirty-three rotational units stated that the brigade staffs conducted inadequate war gaming. The deficiencies

included: failure to war game or synchronize critical events; staffs displayed nonexistent disciplined war gaming skills; failure to observe doctrine; and overall there was a lack of adequate staff integration in the war game process. Only one rotational unit between 1996 and 1999 received a positive war gaming comment for proficiency.<sup>66</sup>

Most of the units I observed at the NTC tended to allocate the majority of the planning time to the war gaming step, although it was still shorter than what the deliberate process would require. The staff's understanding of war gaming was vital to the process and became the biggest obstacle. Arrival at the war game without the necessary tools because of inadequate staff estimates has already been discussed, yet was the most common shortfall in attempts to abbreviate this step. Other problems included staffs not following the action-reaction-counteraction format and not understanding the level of detail required for the process.

The amount of detail varied in the war game conducted by units at the NTC. Variations ranged from a lack of detail, in which critical items, such as casualty evacuation plans and comprehensive communication plans were excluded, to too much detail, in which S-3s essentially fought the battalion fight instead of simply resourcing it for success. Finally, S-2s would focus only on actions by enemy maneuver elements, without discussing or introducing combat multipliers in a way to support the enemy COA. Inexperience in war-gaming skills was a trend across the board for most units.<sup>67</sup>

A common complaint by units at the NTC was that there was not enough time to do the detailed war gaming required for an operation. This was certainly true when units did not concentrate on critical events, but simply tried to war game the entire plan. It was also the primary excuse for not war gaming against more than one ECOA. Yet, I

observed several brigade-level staffs who were able to synchronize several critical actions against several enemy COAs in a timely manner to produce a sufficiently detailed order for a synchronized and flexible plan. The problem of insufficient time was avoided when staff officers clearly understood what had to be accomplished in this critical step. Successful outcome also involved guidance by the commander on what events and areas assumed priority over all other events and areas. If commander's guidance was not specific, this step suffered.<sup>68</sup>

War game technique was not as important as understanding which critical events to cover and the level of detail needed. Although the box war-gaming technique was best used when time was severely limited, I observed well-trained staffs effectively use the belt and avenue-in-depth techniques by simply focusing on critical events. Successful units usually had a competent and well-trained staff and a commander and primary staff officers who clearly understood the MDMP and drove the process continuously.

Although doctrine states that eliminating steps of the MDMP is not an approved option when accelerating the process, this is not the case for the formal step of COA comparison. If a single friendly COA is developed, there is no need to compare it against any others. During the COA development step, this step may in fact take place out of sequence. As the commander develops his COA, it may be tested by a hasty war game between the commander and his staff. The war game may determine the COA is not feasible or does not account for critical actions the brigade must address. At this point, the commander may continue to seek other COAs until he finds one that is feasible. During this time, he has in effect conducted a COA comparison.

The COA approval also becomes at best an informal act. To ensure the modified COA retains his intent: the commander may have the staff informally brief him on the result of the war game, or, if he has sat through the war game, he may have already ensured this. If so, COA approval becomes at best a very quick briefing to the commander prior to orders production.

Finally, orders production cannot be eliminated, as the requirement to provide subordinates with their new mission and its details is the primary reason for the process. This step may take many forms to include a formal order or a written or verbal FRAGO.

The survey results indicated the major prerequisite to abbreviating the steps was first understanding the deliberate process. Prior coverage in this chapter recounted the survey observations noted in the earlier section on the overall MDMP. Six of the thirteen officers said most that commanders and staffs did not adequately understand the deliberate MDMP and therefore were unable effectively to abbreviate the process. An additional six officers simply said that most commanders and staffs did not adequately understand the deliberate MDMP. It would seem logical to conclude that all respondents would also agree that understanding the deliberate process was a prerequisite to being able to effectively abbreviate it as well. I also observed during my work at the NTC, that shortening the steps to the MDMP was effective only when the Brigade Commander and staff clearly understood the deliberate process.

The survey results varied on which step should take priority during the accelerated process; however, most acknowledged that the war game took considerable time. Of the twelve officers surveyed on which step should take priority during an accelerated MDMP, seven said war gaming, three said mission analysis, two said COA

development, and one said orders production to ensure maximized planning and preparation time for subordinate units. Of the twelve officers surveyed on which step required the most time for staffs, nine responded it was the war game.

Although many respondents thought war gaming was the most important step, several did not. Colonel Chamberlain said that while war gaming is a good tool for educating an inexperienced staff on tactics, the place of war gaming in actual execution is overrated. He said to focus the flexibility of the friendly COA so it will deal with several ECOAs is initially built into it at the COA development step. The war game then simply focuses on synchronizing the BOSs and not a constant second-guessing of what the enemy would do.<sup>69</sup>

Doctrine is clear when it stresses that the MDMP is continuous. Even after the last step has been completed for the planning phase, the staff will need to constantly reenter the MDMP during the preparation and execution phase.<sup>70</sup> It is vital that the commander and staff understand this. Abbreviating the process does not terminate the process. A substantial amount of the staffs I observed at the NTC struggled with the need to continue the process. Once the order was published, many staffs did not effectively continue to refine or update their plan based on changes in the enemy or friendly situation. They did not reenter the MDMP until after execution had begun. The result was that late changes to the plan were not synchronized and were often overcome by friction accompanying execution.

Throughout the process, the need arises for a unit to reenter the MDMP. As described earlier the mission receipt step usually in the traditional form of receipt of a written mission or FRAGO from higher headquarters begins the formal process.

However, once planning begins, the need to reenter the process usually comes in the form of recognition of a situation that prevents the unit from accomplishing its mission.

Running estimates by the staff are very important for this recognition of when to begin the process.

Problems units at the NTC encountered with regard to reentering the MDMP were primarily caused by the lack of running staff estimates during both the preparation and execution phase. Critical milestones were not adequately established or monitored. For example, during the preparation phase of defensive operations, units usually did not keep closely monitor the engineer effort prior to execution. Consequently, plans were not adjusted for incomplete defensive positions or obstacle. During preparation and execution, the R&S plan was seldom revised based on answers or lack of answers to PIR.<sup>71</sup>

Overall, there was little methodology by the rotational units at the NTC for recording and implementing changes to the plan based on new information. Battle update briefs in tactical operation centers were held, and current information updated, yet they ended with neither the executive officer nor anyone else providing focus for future actions. Discussion rarely covered anticipation and focus on the next step to retain the initiative and to prepare for the next major decision point. What is the enemy going to do in the next fifteen, thirty or forty-five minutes, and what can we do to counter it now, were questions not asked during these briefs. Colonel Bartley remarked, "Our command posts do not understand the critical part they play in making this work. All they do is receive data and it stops there. No analysis done, no recommendations made to the

commander, no integration or synchronization of resources so a decision can be executed.”<sup>72</sup>

There was a basic tendency to assume the plan goes out the window at the line of departure mentality, thus setting the stage for starting from scratch instead of continuing plan refinement. Many times this departure was the result of waiting for that “key piece” of information or for the complete picture to come into view. Hesitation in reentering the process often resulted in major changes to the COA when the process was eventually reentered. Hence, the appearance of the self-defeating fallacy that the planning process was not worth the effort.<sup>73</sup>

At first the process appears inflexible because it seems linear, yet it is possible to exit and reenter the process at any step. The continuation of the running estimate by the staff and the execution of staff drills allowed units to effectively exit and reenter the process. These actions were critical aspects of building flexibility into the MDMP. Techniques such as formal and informal targeting meetings, CAS drills, Army Airspace Command and Control (A2C2) meetings, and staff huddles were essentially versions of the abbreviated MDMP that facilitated on-going process.

One interviewee, Colonel Daniel French, talked about the importance for the brigade commander of always going over the “what ifs.” His technique was to bring an officer from the S-2 section with him in his assault command post and constantly solicit his views. Even though the S-2 officer was relatively inexperienced, his point of view was sufficiently different to cause the brigade commander to question and reexamine the situation in altered perspective. This process forced Colonel French to keep an open mind when considering the situation and different enemy options.<sup>74</sup>

The MDMP can be made more effective by abbreviating the overall numerous steps of the process. This technique also goes hand in hand with increased commander's participation and development of a single COA. Units that shortened the steps of the MDMP without violating the basic requirements of the process such as, understanding the basic, deliberate process, providing true analysis to the commander, and incorporating detailed staff integration throughout the process were able to develop feasible plan in a relatively short time. Also, commander's guidance is critical in focusing the planning effort and identifying those steps and events he wants emphasized.

Most units encountered problems by shortening the steps because they were not able to do the "so what" sifting of information, integrate the staff, or did not fully understand the deliberate MDMP. Staff integration is critical to act as the safety check for the commander and to add the refinement required to build an optimal plan. Staff integration cannot be deleted. Finally, those commanders and staffs, who lack a thorough understanding of the MDMP and are not well practiced in critical aspects of the process, such as war gaming, are not effective in abbreviating the MDMP.

#### Consideration of the Enemy

The literature review revealed that doctrine was not clear on the degree to which consideration of the enemy must figure in an accelerated process. At times, the doctrine seemed to focus on synchronizing the plan, potentially at the expense of considering multiple enemy COAs. The IPB process drives the MDMP; therefore, it is important to understand how the enemy is considered during the MDMP to determine potential shortfalls. Techniques for consideration of the enemy during the abbreviated MDMP affect the unit's ability to develop a flexible plan.

Colonel Rick Lynch, Commander of 1st brigade of the 4th Infantry Division, relates his NTC experience in the book *66 Stories of Battle Command*.<sup>75</sup> His account of the battle for the Siberian Ridge describes how the enemy executed a COA against his brigade for which he had not planned. The outcome was the destruction of his unit. Focusing on the “most likely enemy course of action is not enough. According to Colonel Lynch, “Unless you have the opportunity to call the enemy personally and ask them what they think they are going to do, nobody knows.”<sup>76</sup> Therefore, the commander and his staff must in the words of General LaPorte, III Corps Commander, “pick up the red pen first.”<sup>77</sup> A commander and his staff must first understand the enemy’s capabilities, vulnerabilities, options, and decision points before beginning to build a plan.<sup>78</sup>

A constant problem for staff planning is the lack of attention to the enemy. In Jon Fallesen’s 1993 ARI report “Overview of Army Tactical Planning Performance Research,” he notes several reoccurring deficiencies with regard to incorporating in the planning process a consideration of the enemy. He discusses incomplete consideration of the enemy and their capabilities during situation assessment. He notes that a fear of wrong predictions often leads to no predictions at all.<sup>79</sup> He also notes the lack of contingency planning and the adoption of a reactive “wait and see” strategy.<sup>80</sup> A later ARI report in 1994 emphasized the failure to adequately consider enemy intentions and capabilities as significant issues as well as a lack of contingency planning.<sup>81</sup>

Major Guillermo Rodriguez concluded in his 1991 School of Advanced Military Studies monograph that the IPB process was sound. However, he also perceived that poor staff procedures and a lack of command emphasis hampered IPB application. He

examined CALL records on every level from battalion to division and determined that the major areas of concern were lack of command involvement, in addition to lapses in education and training on the IPB process.<sup>82</sup>

The CALL CTC trends suggest that problems exist with application of the IPB process to the MDMP because of S-2 failure to portray multiple ECOAs. The complex of problems seems to be training related. Overall, S-2s have problems with ECOA development, and both CTCs noted that S-2s do not produce key IPB products, including event templates and matrices to show multiple ECOAs.

The CALL NTC trends show major problems with the application of the IPB process and the development of key IPB products. The CALL NTC trends from 4QFY94 to 2QFY96 identified threat evaluation, ECOA and SITEMP development, and application of the IPB process as major deficiencies. The bulletin said while S-2s understood the IPB process there was “a *huge* breakdown in the application and communication of the IPB products within the military decision making process (MDMP).”<sup>83</sup> Of particular note was that “S-2s seldom produce an event template with a matrix” or “a critical events list.”<sup>84</sup> These observations were repeated in the “CALL NTC Trends for 3QFY96 through 2QFY97”. Additional remarks were that S-2s did not develop multiple ECOAs, brigade S-2s rarely produced event templates, and overall that S-2s did not understand the use of event templates and event matrices.<sup>85</sup> These observations were repeated yet again in the Trends for 3QFY97 through 2 QFY98.<sup>86</sup> All of these bulletins noted the lack of training for the S-2s and the commanders and their staffs as the main reason for this deficiency. CALL NTC trends stated, “While the Intelligence School and Center teaches Intelligence Preparation of the Battlefield (IPB)

*concepts* well, the *specific application* of the IPB process, what products must be produced by whom, when, and to what standard are not clearly articulated anywhere except the Combat Training Centers.”<sup>87</sup>

The CALL JRTC trends also show major problems with portraying multiple ECOAs. The JRTC trends from 4QFY94 to 3QFY96 reveal that the initial IPB products are satisfactory. However, as the rotation progresses, S-2s do not adequately update their products.<sup>88</sup> Also noted was the fact that event templates are not developed and S-2s do not consider multiple ECOAs.<sup>89</sup> The JRTC Trends for 4QFY96 to 3QFY97 assert that S-2s understand the IPB process but have problems depicting ECOAs.<sup>90</sup> Subsequent trends include both positive and negative comments concerning ECOA development and SITEmps. The latest trends bulletin for JRTC states that, although brigade S-2s have improved in their doctrinal templating of the threat, they still fail to develop adequate event templates that show multiple ECOAs.<sup>91</sup>

The primary cause of inflexible plans being produced by the rotational units I observed at the NTC was the focus on a single ECOA during the planning phase. When the S-2 finished briefing the most likely ECOA, many commanders and staffs seemed to focus solely on that ECOA and develop, war game, and synchronize a plan to defeat that single ECOA at the exclusion of all other ECOAs. Friendly COAs were often developed on the basis of the SITEmp for the most likely ECOA, instead of reference to an event template showing several ECOAs and enemy decision points. The result was that friendly COAs were war gamed against only a SITEmp of the most likely ECOA, without any inclusion of an event template in the process.<sup>92</sup>

Many times, the brigade commanders I observed at the NTC provided guidance to war game against only the most likely ECOA or only against the most likely and most dangerous ECOA. However, no guidance was adequately given or actions adequately incorporated to “deny, modify, or encourage” enemy options during the war game. Many units simply did not seek to enhance flexibility in their plans by reducing the enemy’s flexibility. Little effort was devoted to examining several ECOAs and implementing measures to limit enemy options and to shape the battlefield, so the enemy would go where friendly forces wanted him to go. Instead, the war game focused on only one or two ECOAs, leaving other options unexamined. The units had a hard time understanding how to make the enemy conform to friendly will and building capacity into their plans.<sup>93</sup>

This problem of inflexible plans was highlighted by the change in OPFOR tactics. To reflect current threats, the OPFOR was allowed to be less predictable in their tactics than the old-style Soviet threat. Many units still tried to portray the enemy as a predictable templatable threat. Trouble stemmed from dealing with an adaptable enemy that was more capabilities based. Staffs failed to understanding basic tactics that would allow them to contend with a capabilities-based OPFOR.<sup>94</sup>

Problems with planning against a single ECOA that I noted also continued in the preparation and execution phases of an operation. Many rehearsals discussed only a single enemy option, without considering even a minor array of enemy options. The most common attitude was to wait until execution, then adjust the plan, often when it was too late. Even when indicators arose that the enemy was not implementing the most likely ECOA, the staffs would continue to fight the plan, rather than make a serious attempt to resynchronize it.<sup>95</sup>

Does the doctrine adequately incorporate consideration of the enemy into the abbreviated MDMP? Does the current focus on primarily two ECOAs, which often degenerates into considering only the most likely ECOA, adequately allow the commander to develop and execute a flexible plan? In attempting to answer these questions, this study now reexamines the key IPB products and the timing of their introduction into the process.

A major issue is the lack of use of an event template as part of the mission analysis step of the MDMP. The SITEMPs alone do not adequately show the ECOAs to the commander. The FM 101-5 asserts that during the mission analysis step, the SITEMPs are used to portray likely ECOAs.<sup>96</sup> However, one must understand what SITEMPs represent. As noted in chapter 2, the SITEMPs represent a “snap shot in time” that usually depicts a critical event in an ECOA. Several SITEMPs could be constructed for a single ECOA to show several key events.<sup>97</sup> However, a SITEMP does not necessarily depict enemy decision points. SITEMPs also do not show what prior decisions the enemy had to make to arrive at this critical event.

An ECOA sketch shows the decisions the enemy must make to accomplish a particular COA, but would not show what other actions he would take if he were denied that particular option. The event template and the event matrix describe the enemy commander’s decision points in relation to multiple ECOAs with reference to time and the terrain. The event template essentially becomes the enemy decision support template (DST) and is vital to understanding the full range of enemy options. Use of the event template shows planners where the ECOAs deviate and helps units identify and develop branch plans.<sup>98</sup>

Not showing event templates during the mission analysis step will impede the commander's full understanding early in the planning process of the enemy decision points and the full range of enemy options. The FM 101-5 says, "The event template is not required for the mission analysis briefing. However, it should be done prior to the staff's COA development as it will help them identify where specific enemy activities may occur."<sup>99</sup> Almost all of the S-2s I observed at the NTC did not show an event template as part of the mission analysis step and did not use it at all during the war game step.

The problem that arises is what is shown to the brigade commander during mission analysis is only critical snapshots in time of the ECOAs that do not allow him to understand what options the enemy can employ. Although the event template may be displayed at a later step, the process lapses into a reactive mode. The brigade commander's situation assessment is potentially limited to critical events of individual ECOAs prior to the enemy's desired end state. The commander may not see critical enemy decision points in time and space that show how and why the enemy would execute any of his several options. The enemy's critical capabilities are not adequately displayed to show how he would support his own decision points leading up to the close fight.

Failure at the outset to understand enemy options in time and space means the MDMP process begins in a reactive mode. In an abbreviated MDMP in which the commander immediately begins COA development after mission analysis, the friendly COA tends to focus on defeating the enemy at a time and place of the enemy's choosing. By not showing enemy decisions and capabilities in time and space during the mission

analysis, the COA development does not begin in a proactive mode. This facilitates a friendly COA that denies the enemy options and forces the enemy to encounter the brigade at a time and place of the friendly commander's choosing.

Although a time-constrained environment might not allow the S-2 to develop an event template or to consider all feasible ECOAs, the thought process is what is most important. The ten-minute intelligence update for the commander must include not only what the enemy is doing now and what he may do next, but also what options and decision points remain viable. Only when the friendly commander understands this can he begin to anticipate enemy actions and take friendly actions to deny the enemy options. This requirement becomes the basis for maintaining the initiative once the operation has begun.

Prior consideration of all feasible ECOAs is critical to the planning process. This study has already showed that if the commander uses an intuitive approach to determine his COA, the COA might be adequate at best, but not optimal. If the commander fully understands all enemy options early in the planning process as part of his situation assessment, it becomes easier to determine a COA that shapes the battlefield to his choosing. War gaming becomes proactive as critical shaping events are considered and synchronized, and as the commander is able to "hedge his bets" on the most likely ECOA by denying the enemy options. Contingency planning is enhanced as enemy decision points are highlighted. Also, prediction of enemy events becomes much easier for the S-2.

This chapter noted earlier in that planners usually fail to predict potential enemy events. This problem is amplified when only one or two ECOAs are considered. "The

SITEMPs and ECOAs are ‘hypotheses’ to be tested by the S-2.’’<sup>100</sup> If the enemy has a third option, when only two ECOAs are considered, the S-2’s hypothesis is incomplete. Therefore, during execution, if the enemy reverts to the third option, the S-2 may not see how the enemy is using his combat multipliers to shape the battlefield. Consequently, any predictions of future enemy actions becomes very difficult. Uncertainty then leads to a lack of action. When all feasible ECOAs are considered, it becomes easier to see how the enemy would use his combat multipliers to shape the battlefield to his advantage. When these indicators are reflected on the event template and event matrix and included in the R&S plan, it becomes easier to read the enemies actions and predict his next step.

Examination of multiple ECOAs is also required to guard against human bias. Many S-2s fall into the trap of always examining information in a light to confirm their most likely ECOA instead of looking for countervailing indicators.<sup>101</sup> Studies conducted by researchers Tolcott, Marvin, and Lehner stated that analysts tended to weigh more heavily the evidence confirming their earlier predictions than information disconfirming them.<sup>102</sup> Research by T. Sheridan also showed operators failed to consider information inconsistent with earlier formulated hypotheses.<sup>103</sup> When information is evaluated against several options their biases may be easier to overcome.

Major Carl Alex describes in his 2000 Masters of Military Arts and Sciences thesis how decision point tactics are a function of the MDMP using key decision aids. The NTC OPFOR uses decision point tactics to build a single COA that incorporates sufficient flexibility to defeat several ECOAs, not just the most likely and most dangerous ECOAs. NTC OPFOR does this by using key decision aids, such as the decision support template (DST), decision points (DPs), and Event Template. These

decision aid products are execution centric, focused on use during execution and not tied merely to planning and preparation of the operation.<sup>104</sup> Major Alex states:

Of all the IPB products, the event template is the most important product. As defined in FM 101-5, the event template represents a sequential projection of events that relate to space and time on the battlefield and indicate the enemy's ability to adopt a particular course of action. The event template is a guide for collection and reconnaissance and surveillance planning. The event template is the one product of the IPB process that influences the DST.<sup>105</sup>

As discussed in chapter 2, the event template tied to an event matrix shows the enemy's decision points and allows a commander to understand what critical events the enemy commander must do to adopt a COA.

While it seems not everyone endorses the need to identify more than two ECOAs, most commentators agree on the importance of the event template. Based on his observations at JRTC, Lieutenant Colonel Flynn says that time constraints for battalion and brigade S-2s make it impractical to develop more than the most likely and most dangerous ECOAs. But he emphasizes the use of the event template as the bases for developing these ECOAs. He also says, however, that the S-2 must be able to depict branches to these two ECOAs if time permits.<sup>106</sup> The most recent JRTC LTP observations on MDMP in a time-constrained environment asserts that, "The enemy event template must be as complete as possible prior to the mission analysis brief." This technique can save time.<sup>107</sup>

Survey analysis indicated several important issues concerning understanding the enemy and COA development. Four of the surveyed officers were specifically asked why most friendly COAs are reactive instead of proactive with regard to enemy. All responded that most commanders and staffs do not understand and are not trained on how to adequately deny enemy COAs by being proactive. Several officers also highlighted the dangers inherent in considering only a single ECOA when planning. Colonel Dempsey said, “If the commander doesn’t understand that flexibility is a function of depth and arrays his forces against a single enemy COA, the unit will be defeated.”<sup>108</sup> Colonel (retired) Fontenot explained that while a commander may war game against a single ECOA, he must understand the large degree of risk he is incurring.<sup>109</sup> Colonel Robinette commented that while he considered two ECOAs, the most likely ECOA was never what was the easiest or most obvious option for the enemy. He noted that his experience with the World Class OPFOR taught him that it was never used the most likely avenue of approach.<sup>110</sup>

There appears to be a tendency to abbreviate the process by limiting consideration. Limiting the number of ECOAs considered is not necessarily beneficial to the overall MDMP and the brigade incurs high risk when it does so. The IPB process works and there are doctrinal products and procedures for developing an early, comprehensive understanding of the enemy’s COAs. However, the application of those procedures is not adequately incorporated into the MDMP. This shortcoming is amplified by a lack of training and understanding on the part of commanders and staffs. The result is a reactive versus proactive approach to planning and execution of the mission.

### Conclusion

The intent of chapter 4 is to answer the last two secondary questions; do staffs implement the changes to the process that doctrine dictates, and do brigades who follow this process encounter any consistent problems? To accomplish this, this study made extensive use of information from a diverse database. Information was gathered from personal observations and a survey of former battalion commanders to CALL CTC trends and extensive studies conducted by ARI and other related research agencies. The intent is to gather information from these diverse sources to identify overall trends and not rely on a single source of information.

Brigade commanders and staffs do implement the changes to the MDMP as proscribed in doctrine to abbreviate the MDMP in a time-constrained environment. Brigade commanders and staffs utilize the three primary techniques as described in doctrine to effectively abbreviate the process. Well-trained and experienced brigade commanders and staffs are able to focus the planning effort by directing their focus to a single friendly COA and shortening the steps of the MDMP.

The problems encountered by commanders and staffs that follow the doctrinally proscribed abbreviated MDMP are associated with training and consideration of the enemy. Those commanders not experienced and trained to the degree needed to utilize an intuitive approach to decision making as required in the abbreviated MDMP do not effectively contribute to the process. Those staffs that are not fundamentally sound in their understanding of the deliberate MDMP are not able to effectively abbreviate the process. Finally, the focus on a single ECOA as described in some doctrinal manuals leads to inflexible plans where friendly forces quickly lose the initiative and are defeated.

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<sup>2</sup>Colonel (Retired) Doug Tystad, former commander 3rd Brigade/1st Infantry Division, interviewed by the author, 21 November 2000, written notes, Fort Leavenworth KS.

<sup>3</sup>Colonel (Retired) Greg Fontenot, former commander 1st Brigade/1st Armored Division, interviewed by the author, 14 December 2000, written notes, Fort Leavenworth KS.

<sup>4</sup>Colonel John D. Rosenburger, former commander 11th Armored Cavalry Regiment, letter to the author, 7 December 2000.

<sup>5</sup>Ibid., I would also add that because CTC OPFORs are able to go through the process of tactical war fighting much more frequently than other units, their soldiers are able to build up a vast amount of tactical experience. Clearly their soldiers have a better understanding of the MDMP and tactical war fighting as a result of that experience.

<sup>6</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Analysis 4QFY94 through 2QFY96," No. 97-3, Fort Leavenworth, KS, 1997, 34.

<sup>7</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Compendium 3QFY97 through 2QFY98," No. 99-1, Fort Leavenworth, KS, 1999, 102.

<sup>8</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Analysis 1QFY98 and 2QFY98, No. 98-14, Fort Leavenworth, KS, 1998, 70.

<sup>9</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Compendium 3QFY97 through 2QFY98," 102.

<sup>10</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96," Fort Leavenworth, KS, 1996, P-22.

<sup>11</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Trends 4QFY97 and 1QFY98," No. 98-20, Fort Leavenworth, KS, 1998, 42.

<sup>12</sup>Center for Army Lessons Learned, "CTC Trends for JRTC 4QFY98 and 1QFY99," No. 00-2, Fort Leavenworth, KS, 2000, 67.

<sup>13</sup>John D. Rosenburger, "Coaching the Art of Battle Command," *Military Review* 76, no. 3 (May-June 1996): 33.

<sup>14</sup>Gary A. Klien, "Strategies of Decision Making," *Military Review* 69, no. 5 (May 1989): 58.

<sup>15</sup>Ibid., 58- 62.

<sup>16</sup>Ibid., 60.

<sup>17</sup>Charles D. Rogers, "Intuition: An Imperative of Command," *Military Review* 74, no. 3 (March 1994): 41.

<sup>18</sup>Stanley Halpin, ed., *The Human Dimension of Battle Command: A Behavioral Science Perspective on the Art of Battle Command*. (Fort Leavenworth: U.S. Army Research Institute for the Behavioral and Social Sciences, 1996) 25.

<sup>19</sup>Rogers, 41.

<sup>20</sup>My observations as an observer controller at the National Training Center from 1997-2000; and Lieutenant Colonel Michael Wadsworth, former brigade operations officer trainer, E-mail to the author, 18 February 2001.

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<sup>21</sup>Lieutenant Colonel John Chere, former NTC observer controller and RS-3 for the 11th Armored Cavalry Regiment, interview by the author, October 2000- June 2001, written notes, Fort Leavenworth, KS.

<sup>22</sup>Lieutenant Colonel John Chere, interview the author; and observations from the author's experience while assigned as an Observer Controller at the National Training Center from January 1997 to June 2000.

<sup>23</sup>Colonel John Bartley, former Senior Brigade Trainer at NTC, interview by the author, 21 January 2001, written notes, Fort Leavenworth, KS; and author's observations.

<sup>24</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96," P-22.

<sup>25</sup>*Ibid.*, P-23.

<sup>26</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Trends Compendium 4QFY96 and 3QFY97," No. 98-7, Fort Leavenworth, KS, 1998, P-16.

<sup>27</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96," N-56.

<sup>28</sup>Colonel Rick Lynch, former commander 1st Brigade / 4th Infantry Division, interview by the author, 9 January 2001, written notes, Fort Leavenworth KS; and Brigadier General Peter Chiarelli, former commander 3rd Bde / 2nd Infantry Division, phone interview by the author, 18 January 2001, written notes, Fort Leavenworth, KS.

<sup>29</sup>"Lessons Learned on Tactical Planning: Implications for Procedures and Training," *U.S. Army Research Institute for the Behavioral and Social Sciences Newsletter* (Spring 1995): 1; available from <http://www.ari.army.mil/lesslear.htm>; Internet; accessed 26 November 2000.

<sup>30</sup>Jon J. Fallesen, *Overview of Army Tactical Planning Performance Research*. Technical Report 984. (Alexandria: U.S. Army Research Institute for the Behavioral and Social Sciences, 1993), 24-25.

<sup>31</sup>"Lessons Learned on Tactical Planning: Implications for Procedures and Training," 1.

<sup>32</sup>*Ibid.*, 2.

<sup>33</sup>John F. Antal, "It's Not the Speed of the Computer that Counts! – The Case for Rapid Battlefield Decision-Making." *Armor* 107, no. 3 (May-June 1998): 14-15.

<sup>34</sup>U.S. Army Command and General Staff College, Student Text 3-0, *Operations*. Fort Leavenworth, KS, 2000, 5-1 -- 5-2.

<sup>35</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Compendium 3QFY96 through 2QFY97," No. 97-17, Fort Leavenworth, KS, 1997, N-135 Command & Control BOS.

<sup>36</sup>*Ibid.*, N-137 Command and Control BOS.

<sup>37</sup>Center for the Army Lessons Learned, "Newsletter: Joint Readiness Training Center Leaders Training Program Observations," No. 01-4, Fort Leavenworth, KS, 2001, 10.

<sup>38</sup>Colonel Rick Lynch, interview by the author.

<sup>39</sup>Brigadier General J.D. Thurman, former commander 2nd Brigade/3rd Infantry Division, letter to the author, Fort Leavenworth, KS, 7 November 2000.

<sup>40</sup>Colonel John Bartley, interview by the author; and Lieutenant Colonel Michael Wadsworth, E-mail to the author; and author's observations.

<sup>41</sup>*Ibid.*; and author's observations.

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- <sup>42</sup>Ibid.; Lieutenant Colonel John Chere, interview with author; and Lieutenant Colonel Michael Wadsworth, E-mail to author.
- <sup>43</sup>Lieutenant Colonel John Chere, interview with author; and author's observations.
- <sup>44</sup>Colonel (Retired) Charles Soby, former director of CTAC at Fort Leavenworth, interview by the author, September 2000 -- May 2001, written notes, Fort Leavenworth KS; and Lieutenant Colonel Kevin McEnery, former executive officer 3rd Bde/4th Infantry Division, interview by the author, 19 January 2001, written notes, Fort Leavenworth KS.
- <sup>45</sup>Overview of Army Tactical Planning Performance Research, 22.
- <sup>46</sup>Jon J. Fallesen, *Overview of Practical Thinking Instruction for Battle Command*, Technical Report 1685, (US Army Research Institute for the Behavioral and Social Sciences, Fort Leavenworth Research Unit, KS, November 1995) 4, quoted by Deborah Reisweber, "Battle Command: Will We Have It When We Need It?," *Military Review* 77, no 5, (September -- October 1997), 49-59.
- <sup>47</sup>Norman Dixon, *On the Psychology of Military Incompetence* (New York: Basic Books, 1976), 399.
- <sup>48</sup>Stanley Halpin, ed., *The Human Dimension of Battle Command: A Behavioral Science Perspective on the Art of Battle Command*, 7.
- <sup>49</sup>Kenneth R. Hammond, and James K. Doyle, *Effects of Stress on Judgement and Decision Making* (Alexandria: U.S. Army Research Institute for the Behavioral and Social Sciences, 1997) Text-fiche, 73.
- <sup>50</sup>Brigadier General (Retired) Huba Wass De Czege, comments during his work with the Battle Command Training Program, quoted by Mark Eastman, Major, former Battle Command Training Program observer controller. Interview by the author, 9 November 2000, written notes, Fort Leavenworth, KS.
- <sup>51</sup>P. Wright, "The Harrased Decision Maker: Time Pressure, Distractions, and the Use of Evidence," *Journal of Applied Psychonlogy* (1974) 59, quoted in Patricia A. Jacobs and Donald P. Graver, "Human Factors Influencing Decision Making" (Monterey: US Naval Postgraduate School, 1998), 7.
- <sup>52</sup>Charles D. Rogers, "Intuition: An Imperative of Command," *Military Review* 74, no. 3 (March 1994): 38.
- <sup>53</sup>Center for Army Lessons Learned, "National Training Center (NTC) Trends Analysis 4QFY94 through 2QFY96," 40-42.
- <sup>54</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96," N-59 - 61.
- <sup>55</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Trends Compendium 4QFY96 and 3QFY97," P - 20.
- <sup>56</sup>Lieutenant Colonel John Chere, interview with the author; and Colonel John Bartley, interview with author; and Lieutenant Colonel Michael Wadsworth, E-mail to the author; and author's observations.
- <sup>57</sup>Ibid., 41.
- <sup>58</sup>"New Directions for Tactical Decision Making: Practical Thinking Instruction" *U.S. Army Research Institute for the Behavioral and Social Sciences Newsletter* (Winter

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1995): 1; available from <http://www.ari.army.mil/newdir.htm>; Internet; accessed 26 November 2000.

<sup>59</sup>Rogers, 41.

<sup>60</sup>Colonel John Bartley, interview with the author; and author's observations.

<sup>61</sup>Lieutenant Colonel John Chere, interview with the author; and author's observations; and Colonel William Knoebel, former Senior Brigade Trainer at NTC, E-mail to the author, 14 February 2001.

<sup>62</sup>Dr. Dale Steinhauer, data from JRTC Take Home Packets for rotational units, information gathered from Center for the Army Lessons Learned database, Fort Leavenworth, KS, September -- December 2000.

<sup>63</sup>Center for Army Lessons Learned, "CTC Trends National Training Center (NTC) 1QFY98 through 2QFY98," 78 Command & Control BOS.

<sup>64</sup>*Ibid.*, 76 Command & Control BOS.

<sup>65</sup>Center for Army Lessons Learned, "Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96," N-64.

<sup>66</sup>Steinhauer, data from JRTC Take Home Packets for rotational units.

<sup>67</sup>Author's observations.

<sup>68</sup>Lieutenant Colonel John Chere, interview with the author; and Lieutenant Colonel Michael Wadsworth, E-mail to author; and author's observations.

<sup>69</sup>Colonel Edwin Chamberlain, former commander 3rd Brigade/4th Infantry Division, interview by the author, 12 December 2000, written notes, Fort Leavenworth KS.

<sup>70</sup>Colonel John Bartley, interview with the author.

<sup>71</sup>Author's observations; and Colonel John Bartley, interview with the author; and Lieutenant Colonel Michael Wadsworth, E-mail to author.

<sup>72</sup>Colonel John Bartley, interview with the author; and author's observations.

<sup>73</sup>Lieutenant Colonel John Chere, interview with the author; and author's observations.

<sup>74</sup>Colonel Daniel French, former commander 3rd Brigade/4th Infantry Division, interview by the author, 30 January 2001, written notes, Fort Leavenworth KS.

<sup>75</sup>Adela Frame and James W. Lussier, eds., *66 Stories of Battle Command* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2000) 69-71.

<sup>76</sup>*Ibid.*, 71.

<sup>77</sup>*Ibid.*

<sup>78</sup>Colonel Rick Lynch, interview by the author.

<sup>79</sup>Jon J. Fallesen, *Overview of Practical Thinking Instruction for Battle Command*, Technical Report 1685, (US Army Research Institute for the Behavioral and Social Sciences, Fort Leavenworth Research Unit, KS, November 1995) 4, quoted by Deborah Reisweber, "Battle Command: Will We Have It When We Need It?," *Military Review* 77, no 5, (September -- October 1997): 20-23.

<sup>80</sup>*Ibid.*, 25-26.

<sup>81</sup>Halpin, 28.

<sup>82</sup>Guillermo A Rodriguez, "Intelligence Preparation of the Battlefield: Is It Worth the Effort." (School of Advanced Military Studies monograph, US Army Command and General Staff College, Fort Leavenworth, KS, 1999), 35-37.

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- <sup>83</sup>Center for Army Lessons Learned, “National Training Center (NTC) Trends Analysis 4QFY94 through 2QFY96,” 4.
- <sup>84</sup>*Ibid.*, 5.
- <sup>85</sup>Center for Army Lessons Learned, “National Training Center (NTC) Trends Compendium 3QFY96 through 2QFY97,” N-12 – 23. Intelligence BOS.
- <sup>86</sup>Center for Army Lessons Learned, “National Training Center (NTC) Trends Compendium 3QFY97 through 2QFY98,” 16 – 25.
- <sup>87</sup>Center for Army Lessons Learned, “National Training Center (NTC) Trends Compendium 3QFY96 through 2QFY97,” N-8 Intelligence BOS.
- <sup>88</sup>Center for Army Lessons Learned, “Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96,” P-1 – N-1.
- <sup>89</sup>Center for Army Lessons Learned, “Joint Readiness Training Center Priority Trends 4QFY94 and 3QFY96,” N-1.
- <sup>90</sup>Center for Army Lessons Learned, “Joint Readiness Training Center Trends Compendium 4QFY96 and 3QFY97,” N-1 – P-2.
- <sup>91</sup>Center for Army Lessons Learned, “CTC Trends for JRTC 4QFY98 and 1QFY99,” 1 – 10.
- <sup>92</sup>Colonel John Bartley discussed the lack of event templates, DSTs, and other key tools that prevented us from identifying branches and sequels to the plan. This was also observed by the author.
- <sup>93</sup>Colonel John Bartley, interview by the author; and Colonel William Knoebel, E-mail to the author; and author’s observations.
- <sup>94</sup>Lieutenant Colonel John Chere, interview by the author; and author’s observations.
- <sup>95</sup>Colonel John Bartley, interview by the author; and author’s observations.
- <sup>96</sup>Department of the Army, FM 101-5, *Staff Organization and Operations*. (Washington, DC: GPO, 1997), 5-6.
- <sup>97</sup>Department of the Army, FM 34-130, *Intelligence Preparation of the Battlefield* (Washington, DC: GPO, 1994), 2-45.
- <sup>98</sup>Lieutenant Colonel Michael Wadsworth, E-mail to author.
- <sup>99</sup>Department of the Army, FM 101-5, 5-6.
- <sup>100</sup>Brigadier General (Retired) Huba Wass De Czege, “New Paradigm Tactics” (lecture presented to the Advanced Warfighting in the Digital Division class, Fort Leavenworth, KS, 23 January 2001).
- <sup>101</sup>Colonel Edwin Chamberlain, interview with the author.
- <sup>102</sup>M. A. Tolcott, F.F. Marvin, and P.E. Lehner, Expert decisionmaking in evolving situations, *IEEE Transactions on systems, Man, and Cybernetics* (1989), 19(3), 606-615, quoted in Jon J. Fallesen, *Overview of Army Tactical Planning Performance Research*. Technical Report 984. (Alexandria: U.S. Army Research Institute for the Behavioral and Social Sciences, 1993), 29.
- <sup>103</sup>T. Sheridan, “Understanding Human Error and Aiding Human Diagnostic behavior in Nuclear Power Plants,” *Human Detection and Diagnosis of Systems Failures* (1981), quoted in Patricia A. Jacobs and Donald P. Graver, “Human Factors Influencing Decision Making” (Monterey: US Naval Postgraduate School, 1998), 7.

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<sup>104</sup>Carl A. Alex, “Process and Procedures: The Tactical Decision-Making Process and Decision Point Tactics” (Master of Military Art and Science thesis. U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2000), 73-81.

<sup>105</sup>Ibid., 28.

<sup>106</sup>Lieutenant Colonel Michael T. Flynn, How Intelligence Can Clear the Fog of War, “News from the Front”(Center for Army Lessons Learned, Fort Leavenworth, KS, July-August 2000), 4.

<sup>107</sup>Center for the Army Lessons Learned, “Newsletter: Joint Readiness Training Center Leaders Training Program Observations,” 2.

<sup>108</sup>Colonel Marty Dempsey, former commander 3rd Armored Cavalry Regiment, E-mail to the author, 6 December 2000.

<sup>109</sup>Colonel (Retired) Greg Fontenot, interview by the author.

<sup>110</sup>Colonel Stephen Robinette, former commander 1st Bde/1st Infantry Division, E-mail to the author, 21 November 2000.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

This purpose of this thesis is to help brigade-level commanders and staffs make rapid decisions in a time-constrained environment in a mid-to-high-intensity conflict. This was to be accomplished by establishing a primary question: Does the Army's current MDMP for a time-constrained environment support brigade-level operations?<sup>1</sup> Chapter 1 discussed the need for rapid decision making on today's battlefield and established the parameters for this study. Subsequent chapters were structured to answer the primary question by addressing the four related secondary questions:

1. What is the Army's current MDMP?
2. What changes are implemented to the MDMP when conducted in a time-constrained environment?
3. Do staffs implement the changes to the process that doctrine dictates?
4. Do brigades that follow this process encounter any consistent problems with developing effective plans?

Chapter 2 comprised a literature study made to determine exactly what is the Army's doctrinal MDMP for a time-constrained environment. Chapter 2 determined that the Army has a single MDMP that is not replaced, but simply modified when time is limited. The examination of FMs describing the Army's doctrinal MDMP and brigade-level FMs concluded that, while the commander had the ability to adjust the MDMP for his situation, most manuals agreed on three major techniques to abbreviate the MDMP. However, there was disagreement on techniques for consideration of the enemy.

Chapter 3 addressed methodological issues related to scrutinizing data and validity of conclusions, especially answers to the last two questions. Data came from a variety of sources, including the author's NTC observations; CALL observations and recommendations from NTC and JRTC; data collected from interviews with former brigade commanders; and related studies conducted by ARI and other institutions. The primary methodology utilized for this study was an approach emphasizing the triangulation of trends resulting from data analysis.

Chapter 4 examined in detail both the three agreed upon doctrinal techniques for abbreviating the MDMP and the problems associated with the doctrinal techniques for consideration of the enemy. Overall, chapter 4 concluded that well-trained commanders and staffs could and do effectively apply the primary three techniques for abbreviating MDMP. However, chapter 4 highlighted consistent problems associated with considering only a single ECOA throughout the process, and concluded that this was not a viable technique.

This study concludes that, overall, the doctrinal abbreviated MDMP does support brigade-level operations in a time-constrained environment; however, doctrine does not adequately address techniques for consideration of the enemy when time is limited.

Specific conclusions related to this primary question are addressed below.

#### Conclusion One

The abbreviated MDMP incorporates the advantages of intuitive decision making while retaining the advantages of the rational decision making model. Although the commander retains the ability to adjust the MDMP for his situation as he best sees fit, three major techniques are consistently discussed in doctrine. These three techniques

involve taking advantage of the intuitive decision making model to focus the planning effort. Increased commander participation and shortening the steps of the process are meant to focus the MDMP by leveraging an experienced commander's intuitive abilities for situation assessment. Developing only a single COA streamlines the process by taking advantage of the RPD model, in which an experienced commander can rapidly assess a situation and develop a feasible solution.

At the same time, the rational decision model remains the basis from which these changes are implemented. This model relies on staff integration at the brigade level, which is critical to guard against the disadvantages of intuitive decision making. Staff integration provides the safety check against poor intuitive decisions and provides the expertise required to fill gaps in the commander's expertise for refinement of an optimal plan. The MDMP is the vehicle that allows the staff to accomplish those tasks in COA refinement and later in war gaming. Without staff integration, the intuitive process is subject to the commander's biases and gaps in knowledge, and if the process goes unchecked and unaugmented, an increased potential for failure could occur.

#### Recommendation

The current model for MDMP and the three doctrinal techniques for abbreviating the MDMP should be retained. The current process is versatile enough to be adjusted to meet the requirements for different situations without having to use a completely different process. The brigade commander's ability to restructure the MDMP as he best sees fit to abbreviate it when time is limited should also be retained; however, the brigade commander should use one of the three doctrinal techniques as a basis for his changes.

This allows the abbreviated MDMP to take advantage of both the rational and intuitive decision making models.

Also, recommend that FM 101-5, *Staff Organization and Procedures*, and other related manuals stress the importance of staff integration in the abbreviated process. Staffs must understand their role is especially important in the abbreviated process to help fill in the gaps in the commander's expertise and to provide the safety check against poor intuitive decisions.

### Conclusion Two

The key prerequisites for implementing the abbreviated MDMP for brigade-level operations are: (1) Mastery of the MDMP by the brigade command and his staff; and (2) Retention by the commander of the required intuitive decision-making skills for warfare. The deliberate MDMP is a versatile process that works and can be used as the basis for supplementing the intuitive decision making model for a time-constrained environment. It is critical, therefore, that those who use these processes have the skills required for both.

The deliberate MDMP is especially helpful to inexperienced staffs. "The advantages for a linear sequential model are that it can help provide those individuals without experience ways to generate some knowledge to help resolve problems and provide a map for orchestrating multiple staff and echelons."<sup>2</sup> However, shortcuts cannot simply be taken with the process. This thesis determined that before one can abbreviate the MDMP, commanders and staffs must fully understand the deliberate process. Brigade commanders and staffs must understand the risk associated with deleting and shortening steps of the deliberate process. Then, measures can be taken to mitigate that

risk when planning is abbreviated. Inexperienced brigade commanders and staffs cannot effectively implement an abbreviated MDMP, without leading to shortcuts that are detrimental to the planning process.

The doctrinal abbreviated MDMP also requires that the commander has the necessary skills required for intuitive decision making. This thesis showed that the three primary techniques which doctrine consistently discusses for abbreviating the process are related to the intuitive decision making model, the RPD. However, before these techniques can be implemented, the brigade commander must be an expert at his craft and must have the experience and skills required to rapidly assess situations and to develop an initially feasible solution. Without this experience and skill, reliance on the brigade commander for intuitive answers to accelerate and focus the MDMP will not work.

### Recommendation

This study raised several issues that should be the basis for further study. First, this study concludes that brigade commanders and staffs must have an understanding of the deliberate MDMP to apply the abbreviated MDMP. This raises the issue of whether current training is adequately absorbed by commanders and staffs prior to serving at the brigade level. Will they have a sufficient understanding of the deliberate MDMP so they can apply the abbreviated MDMP? For example, do the officer basic and advanced courses adequately train officers in the understanding of the MDMP, and what training occurs at home station to reinforce this understanding and prepare them to apply the abbreviated MDMP?

The second associated training question deals with training of commanders. This study concluded that a prerequisite for applying the abbreviated MDMP at brigade level is that brigade commanders must have the required intuitive decision-making skills relating to their craft. This understanding would also seem to apply to all levels of command utilizing the abbreviated MDMP. Studies suggest that experience alone is insufficient; a person must also have thinking, reasoning, and metacognitive skills to be a good intuitive decision maker.<sup>3</sup> This realization raises the issue of whether current training models facilitate the development of intuitive decision making skills for commanders. This paper recommends all of the above-mentioned training-related questions (as appropriate) for further study.

### Conclusion Three

Focusing on a single ECOA is a high-risk measure when abbreviating the MDMP and can have adverse consequences throughout the process. However, doctrine is not clear on how to mitigate this risk. Unless one has actual knowledge of the enemy plan or the enemy has taken actions to deny himself a single or a set of COAs, the enemy retains the ability to conduct several ECOAs. A unit focusing on a single ECOA, while excluding other ECOAs runs the risk of choosing the wrong one and having to make major changes during mission execution.

The brigade commander's full understanding of the enemy's situation is critical to the development of a flexible plan. Simply providing the commander with individual ECOAs during mission analysis is not enough. It is important that he has a good understanding of as many feasible ECOAs as possible. Limiting consideration of the ECOAs to only the most likely ECOA is a high-risk move. Time may prevent the S-2

from developing the complete set of feasible ECOAs; however, limiting the number of ECOAs considered can be detrimental to the planning process. It is also critical that the brigade commander understands the decisions, criteria for those decisions, and capabilities that allow the enemy to implement various options. The commander must understand all these elements early in the planning process, because his understanding lays the groundwork for COA development.

Only when the brigade commander has a full understanding of a full range of ECOAs, enemy decisions, decision criteria, and capabilities can he develop a flexible plan. This realization is especially important during the abbreviated MDMP, when time is limited and when the commander will probably direct the friendly COA, soon after mission analysis. Understanding the full range of ECOAs, decisions, and capabilities provides the commander the keys to building a plan that can encourage, modify, or deny enemy options. Full consideration is also the first step in developing a plan that begins with friendly forces setting the pace of the fight and seizing and maintaining the initiative throughout the operation.

Doctrine stresses the need for flexible plans but does not provide specific answers on how to treat ECOAs within an abbreviated MDMP. Brigades habitually abbreviate the MDMP by considering and war gaming only a single ECOA. Consequently plans are developed and synchronized against a single ECOA, but lack the inherent flexibility to adequately address either multiple ECOAs or the measures that facilitate rapid planning changes. When major changes must be made during execution, unit responsiveness suffers, and the initiative is lost to the enemy.

## Recommendations

Doctrine must more clearly address how to consider multiple ECOAs in an abbreviated MDMP. Specific examples of techniques to consider multiple ECOAs in both the deliberate and abbreviated MDMP should be included in FM 101-5, *Staff Organization and Procedures*, and FM 34-130, *Intelligence Preparation of the Battlefield*. Brigade-level manuals should either refer to these examples or include them in their discussion of planning. Doctrine does not have to be totally rewritten or created. Doctrinal tools and products currently exist that can provide planners with the techniques to consider multiple ECOAs throughout the planning process. The appendix of this thesis provides an example of a technique using current doctrinal tools and products. This study recommends including the technique in the appendix in FM 101-5 and FM 34-130 as a technique for considering multiple ECOAs throughout the process, while using current doctrinal products and procedures.

Also, recommend that FM 101-5 specifically discuss the need to incorporate actions to deny, modify, and encourage enemy options when developing a friendly COA, and show a methodology to portray multiple ECOAs on a single product to supplement this process. The technique in the appendix provides an example on how to do this. Most of the interviewed former brigade commanders said that commanders and staffs are not trained in developing a friendly COA from the stand point of denying enemy options and imposing their will on the enemy from the start. This understanding is key, so that the brigade begins the operation by seizing and retaining the initiative throughout the operation.

#### Conclusion Four

Doctrine is not consistent in addressing techniques for consideration of the enemy in an abbreviated process. This thesis determined in the literature review that doctrinal manuals are not consistent on techniques for considering the enemy when time is limited. The IPB manuals stress consideration of multiple ECOAs even in a time-constrained environment. The MDMP manuals talk about consideration of multiple ECOAs, but do not provide adequate “how to” details or techniques in an abbreviated format. Brigade-level manuals, however, agree that consideration of only a single ECOA is acceptable and do not stress consideration of multiple ECOAs in an abbreviated format.

#### Recommendation

Doctrine must be rewritten to be consistent across the board with regard to addressing multiple ECOAs throughout the MDMP. This study recommends doctrine should retain the current importance of addressing multiple ECOAs and clearly state that importance in FM 101-5, *Staff Organization and Procedures*, especially with regard to the abbreviated MDMP. Further, all brigade-level staff related FMs should emphasize that focus on a single ECOA throughout the planning process is a high-risk measure and not a preferred method for abbreviating MDMP.

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<sup>1</sup>The definition of the word support in regards to MDMP supporting brigade-level operations for the purpose of this thesis is defined as providing a process for gathering and organizing information, making integrated decisions, and preparing and disseminating orders that have adequate information for execution.

<sup>2</sup>“New Directions for Tactical Decision Making: Practical Thinking Instruction,” *U.S. Army Research Institute for the Behavioral and Social Sciences Newsletter* (winter 1995): 2; available from <http://www.ari.army.mil/newdir.htm>; Internet; accessed 26 November 2000.

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<sup>3</sup>Stanely Halpin, ed., *The Human Dimension of Battle Command: A Behavioral Science Perspective on the Art of Battle Command* (Fort Leavenworth: U.S. Army Research Institute for the Behavioral and Social Sciences, 1996) 22-24.

<sup>4</sup>

## APPENDIX

### TECHNIQUE FOR CONSIDERATION OF MULTIPLE ECOAS IN THE MDMP

A dilemma identified in this study is how to visualize, in a time-constrained environment, multiple ECOAs with the minimum products early in the planning process that can be easily understood by the commander and his staff with the goal of building a flexible COA. Doctrine provides the necessary tools and products that can provide planners with the techniques to consider multiple ECOAs throughout the planning process. The key product to use for this procedure is the event template. This appendix provides an example on how to use the event template to portray multiple ECOAs, assist in friendly COA development, and focus the war-gaming effort when time is limited.

The scenario is an attack by an enemy motorized rifle regiment (MRR) against a defending U.S. mechanized infantry brigade at the NTC. The terrain depicted is the central part of the National Training Center as illustrated in figure 3. Figure 4 shows the available enemy forces for the operation.

The S-2 begins his analysis of the enemy by identifying the enemy's objectives and mission or criteria for success. The enemy mission is to penetrate the friendly defense. Next, the S-2 examines the terrain, available enemy forces, and enemy doctrine to determine feasible ECOAs. If the S-2 does not know the enemy doctrine, he must simply consider what are the most effective uses of the available enemy capabilities along with the terrain that would allow the enemy to accomplish his mission. The resulting products are basic ECOA sketches that show how the enemy would use his forces and combat multipliers to accomplish his mission and the critical tasks associated with each ECOA in relation to the terrain. The following four pages describe the feasible

ECOAs available to the enemy commander for mission accomplishment. Each figure contains a sketch and a discussion of the ECOA. The S-2 should develop these during the mission analysis step and brief them to the commander at the mission analysis brief.

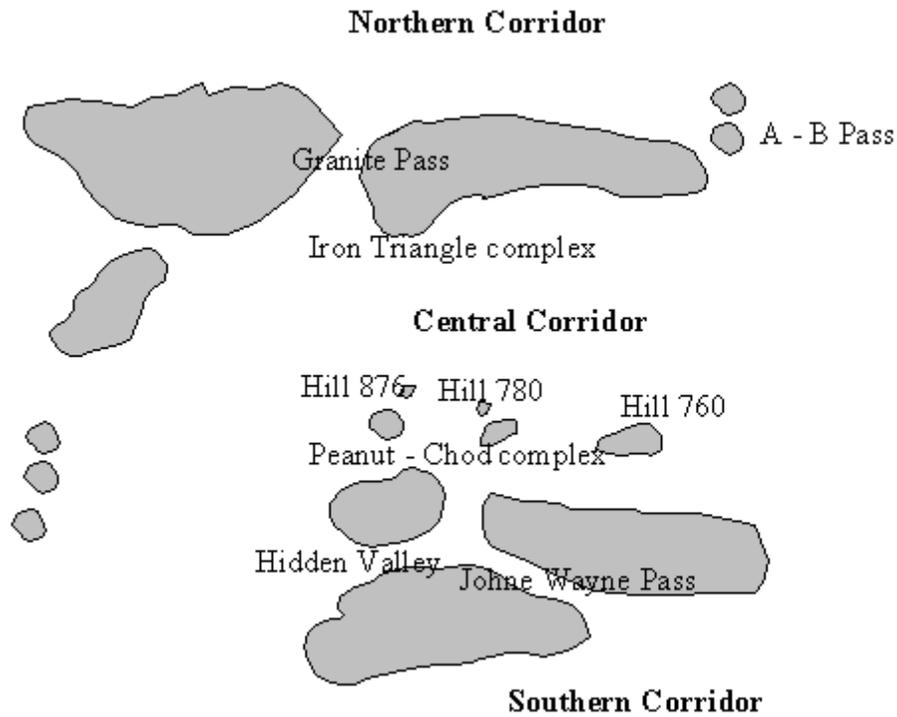


Fig. 3. NTC terrain names

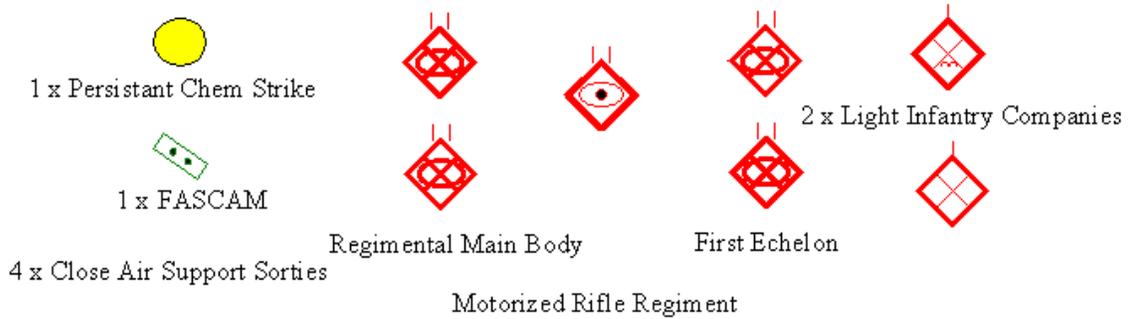


Fig. 4. Enemy Order of Battle

### EOCA 1 Penetration Northern Corridor

Critical tasks for this COA: The passes at the entrance and the exit of the northern corridor must be secured and the Northern Corridor must be clear of Blue forces so the Regimental Main Body can rapidly move through the corridor. Blue forces in the central corridor must be fixed. The point of penetration at the exit to the Northern Corridor must be isolated to protect against counterattacks by the Blue reserve.

Airborne infantry are inserted deep to secure the A-B pass at the end of the Northern Corridor. Dismounted infantry infiltrate to seize the Iron Triangle complex. This provides the enemy key terrain from which it can fix Blue forces along the north wall and protect the eastern flank.

The lead northern motorized rifle battalion (MRB) secures Granite Pass and fixes Blue forces along the north wall in the Central Corridor. The lead southern MRB fixes Blue forces in the Central Corridor. The Blue reserve is attrited and delayed by enemy CAS and deep fires to prevent it from influencing the point of penetration. Deep fires place chem and FASCAM along the southern exit to A-B pass to secure the southern flank of the penetration and delay the commitment of the Blue reserve.

The Regimental Main body penetrates along the northern corridor.

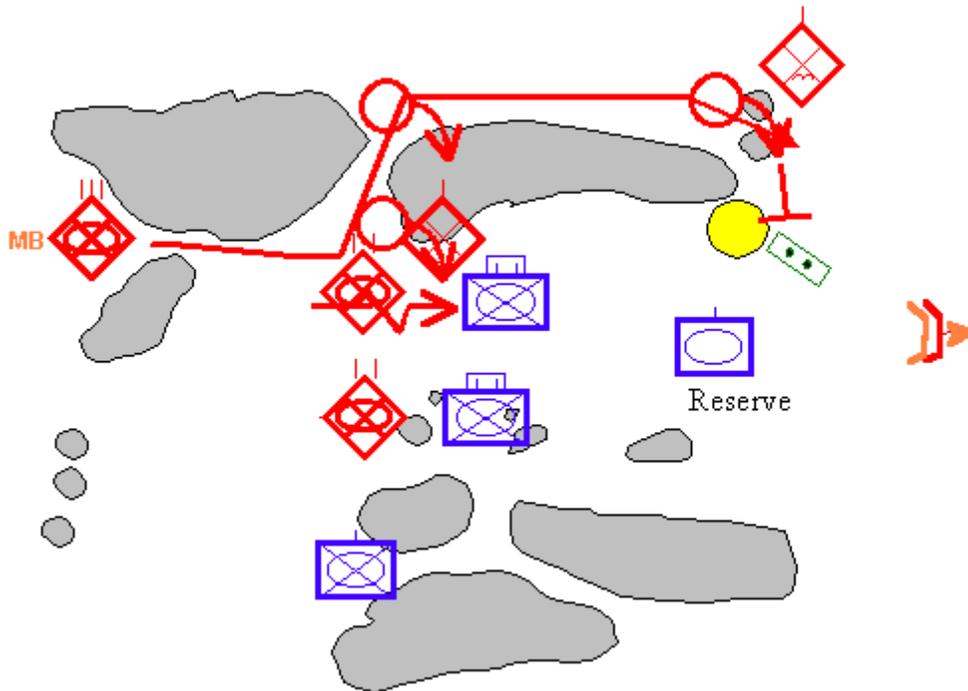


Fig. 5. ECOA 1.



### ECO 3 Penetration South Wall, Central Corridor

Critical tasks for this COA: The Peanut-Chod complex must be seized to create the point of penetration along the south wall. The three hill masses running along the southern part of the Central Corridor must be secured to protect the northern flank. Blue forces in the northern part of the Central Corridor must be fixed.

Airborne infantry are inserted deep to secure hill 760 to protect the northern flank of the penetration. Dismounted infantry infiltrate to seize the Peanut-Chod complex to facilitate the creation of the point of penetration.

The lead northern MRB fixes Blue forces in the northern part of the Central Corridor. The southern MRB creates the point of penetration along the southern wall. Engineers employ a situational minefield to block counterattacks from Blue forces in the Southern Corridor. The Blue reserve is attrited and delayed by enemy CAS and deep fires to prevent it from influencing the point of penetration. Deep fires place chem and FASCAM along the eastern edge of hill 760 to protect the northern flank against counterattack from the Blue reserve.

The Regimental Main body penetrates along the south wall of the Central Corridor.

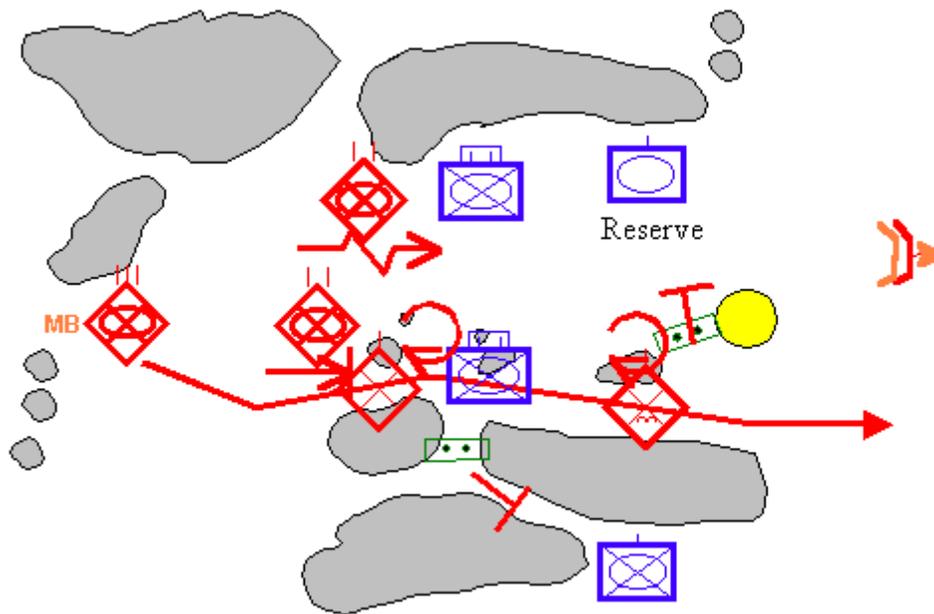


Fig. 7. ECOA 3.

## EOA 4 Penetration Through Hidden Valley - John Wayne Pass

Critical tasks for this COA: Hidden Valley and John Wayne Pass must be clear of Blue forces and obstacles. Blue forces in the Central Corridor must be fixed.

Airborne infantry are inserted deep to secure the eastern exit of John Wayne Pass and clear it of any obstacles. Dismounted infantry infiltrate to seize the Peanut-Chod complex to protect the northern flank and fix Blue forces along the south wall.

The lead northern MRB fixes Blue forces in the northern part of the Central Corridor. The southern MRB fixes Blue forces in the southern part of the Central Corridor and clears Hidden Valley of Blue forces and obstacles. Engineers employ a situational minefield to block counterattacks from Blue forces in the Central Corridor and protect the northern flank. The Blue reserve is attrited and delayed by enemy CAS and deep fires to prevent it from influencing the point of penetration. Deep fires place chem and FASCAM along the southern edge of the Central Corridor to protect the northern flank against counterattack from the Blue reserve.

The Regimental Main body penetrates through Hidden Valley - John Wayne Pass into the Southern Corridor.

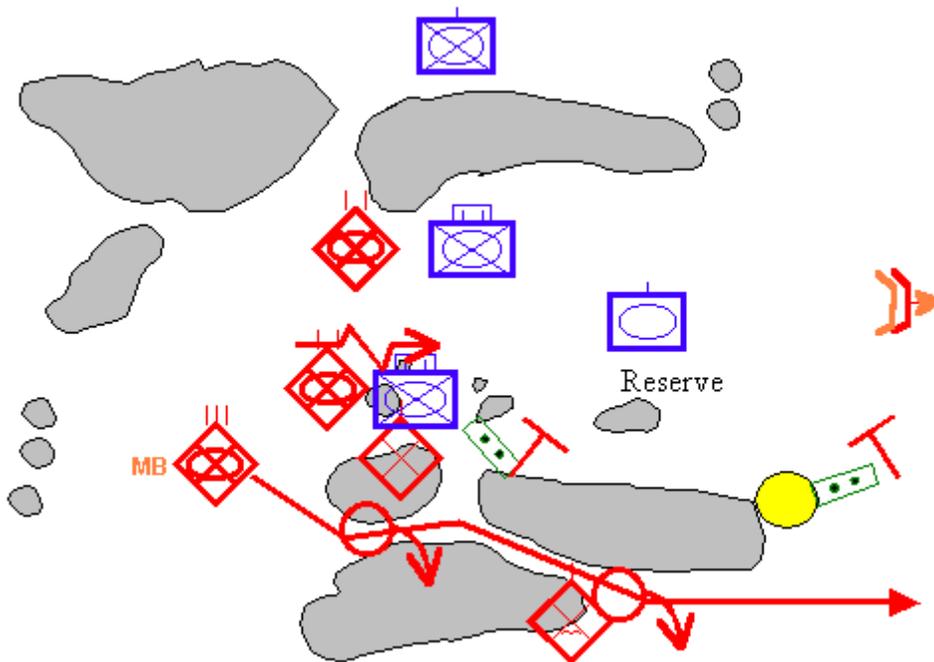


Fig. 8. EOA 4.

Notice that each ECOA also has a unique friendly COA assigned to it. While this may not be part of the normal SITEMP or ECOA sketch, it is important to understand that the COA the enemy adopts will in part depend upon what COA the friendly force adopts. Assuming the enemy has some knowledge of how the brigade will defend as a result of his reconnaissance effort, he will attempt to penetrate where the friendly forces are perceived weakest. Always remember that the enemy is conducting his IPB of his opponent, while the friendly forces are doing the same to him.

Unless the enemy has taken some action, it is very difficult to determine which is the most likely or most dangerous ECOA, therefore, all feasible ECOAs must be considered at this point. To always rely on what the enemy has consistently done in the past as the most likely COA sets the friendly commander up for potential deception by the enemy. The deception effort is a very important element of the enemy's plan, and to become predictable is a quick way to defeat.

Until the friendly commander has determined a COA and disposition for his forces on the battlefield, it is also very difficult to determine what is the most dangerous ECOA. Once the friendly commander has determined a COA, the easiest way to determine which is the most dangerous ECOA is to identify the ECOA that attacks the friendly COA at its weakest point. This becomes the initial most dangerous ECOA.

When a complete set of ECOAs has been determined, the next step is to combine them into a single product. The event template graphically highlights the differences of the individual ECOAs and shows all the ECOAs on a single product. The S-2 takes each of his ECOA sketches and places the key enemy tasks and events in relation to the terrain on a single overlay. He must also look for and establish where the enemy must make a

decision on the ground to commit to each particular COA. The initial result is a product that shows multiple ECOAs on a single overlay (figure 9).

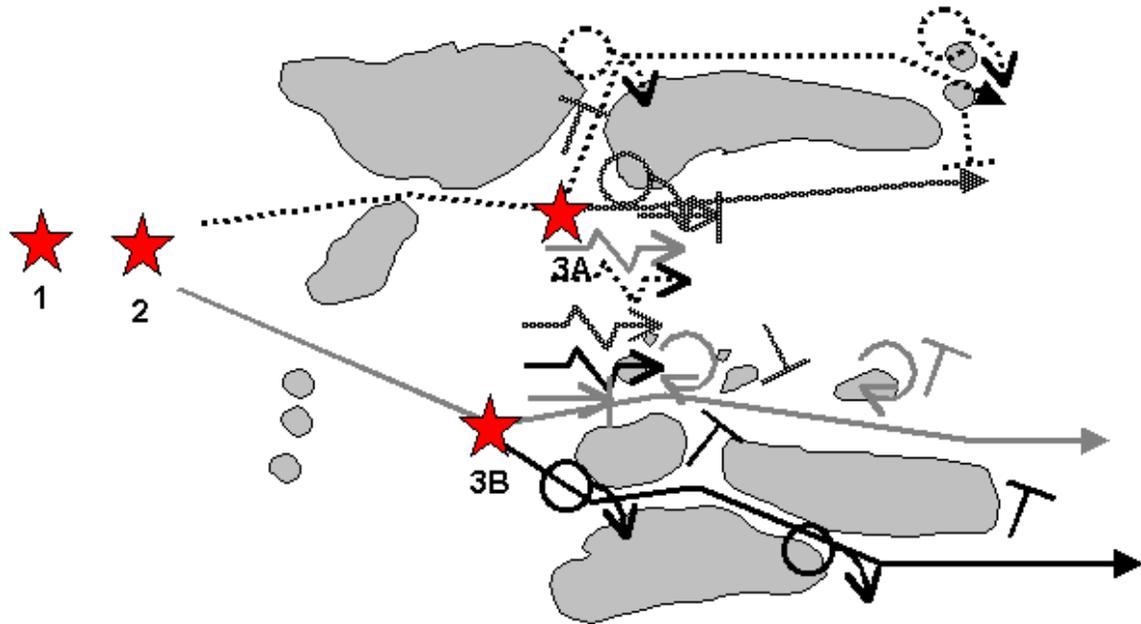
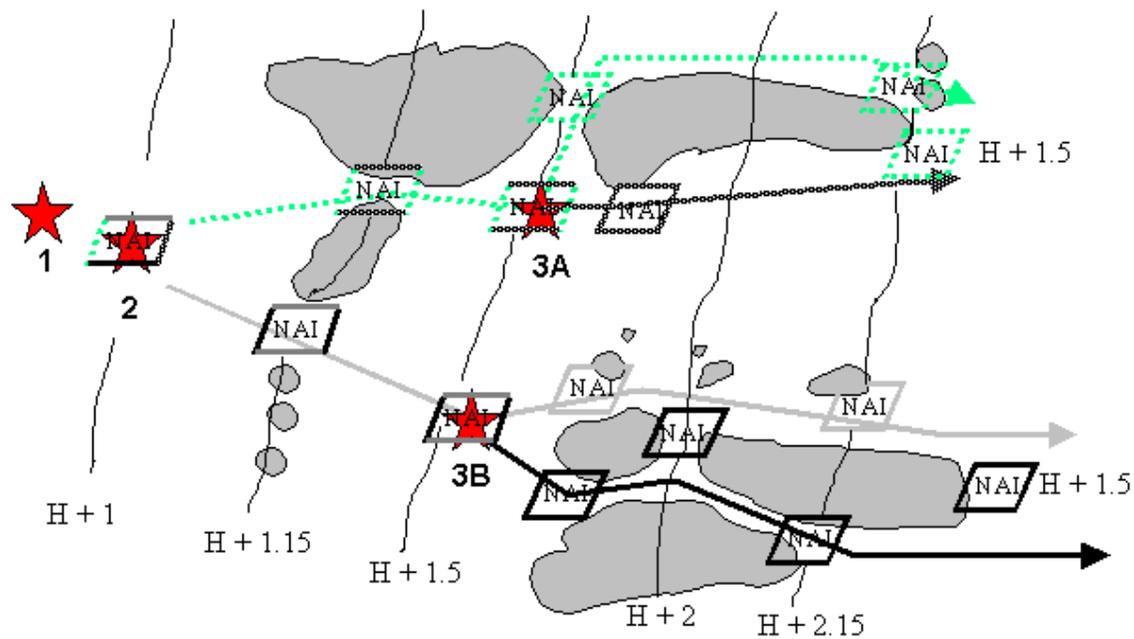


Fig. 9. Event template graphically showing critical tasks associated with each ECOA.

Next, the S-2 determines the criterion that causes the enemy to adopt a particular ECOA at specific times and places on the ground. Specific criteria for each enemy decision point are usually tasks that must be accomplished using enemy capabilities to adopt a particular ECOA. NAIs are assigned to areas where activity will confirm or deny the criteria established to make the decision. The focus is on the key differences between the ECOAs. In this example, the use of dismounted infantry, chemical and artillery delivered family of scatterable mines (FASCAM) strikes, and other situational obstacles highlight the key differences among enemy options in shaping the battlefield



Enemy Decision Point 1: Employment of dismounted and airborne infantry.

Criteria: Based on initial intelligence reports on the location of Blue forces and what avenue of approach is least protected by Blue forces, the enemy commander narrows his options for the point of penetration. He chooses the employment that best supports one or two of the COAs that he has developed. Infiltration routes follow the most protected and stealthy route.

Enemy Decision Point 2: Initial selection of the point of penetration in the north or south.

Criteria: First, based on early intelligence reports, employment of first echelon forces will be IAW the COA/COAs selected for employment of dismounted infantry. Updated intelligence will refine where the enemy perceives Blue to be weak. The second criterion is based on the success or failure of the dismount infantry and first echelon MRBs. The Regimental Main Body will reinforce success.

Enemy Decision Point 3A: Initial selection of the point of penetration by the Regimental Main Body in the north. This is also the trigger point for employment of deep CAS and Fires on blue reserves and employment of battlefield shapers like chem and FASCAM.

Criteria: Control of Granite and A-B passes along with the fixing of blue forces in the Central Corridor dictate the regiment penetrates in the northern corridor. Control of the Iron Triangle complex along with blue forces being fixed in the south dictates a north wall penetration.

Enemy Decision Point 3B. Initial selection of the point of penetration by the Regimental Main Body in the south. This is also the trigger point for employment of deep CAS and Fires on blue reserves and employment of battlefield shapers like chem and FASCAM.

Criteria: Control of hill masses along the south wall and the successful fixing of friendly forces in the north dictate a south wall penetration. Control of Hidden Valley and John Wayne pass and the successful fixing of friendly forces in the Central corridor dictate a southern penetration into the Southern corridor.

Fig. 10. Event template with explanation of enemy decision points.

to support his COA. The addition of time phase lines adds the element of time, specifically when the enemy needs to make key decisions. The advantages of this product for R&S planning and understanding enemy actions are obvious. (figure 10).

However, how can this product assist the commander in developing a COA? The S-2 shows the commander the ECOA sketches and initial event templates (figures 5-9) to the commander as part of the mission analysis brief. Accompanying these products is also the discussion of the enemy's decision points and criteria for those decision points as produced for the revised event template (figure 10). Armed with a single product that can graphically show multiple ECOAs (figure 9), the commander can easily develop a COA that has the flexibility to address multiple ECOAs.

Understanding critical enemy tasks and capabilities allows a commander to see what must be done to deny, modify, or encourage these ECOAs. When the commander develops a COA, he identifies which key tasks associated with the individual ECOAs he wants to affect to deny, modify or encourage that particular ECOA. For example, denying the enemy's ability to seize A-B pass prevents the enemy from executing the northern corridor ECOA. The friendly commander can do this by either incorporating actions of the reserve or blocking it as an avenue of approach. Denying the enemy the ability to seize the Iron Triangle complex prevents him from executing the Central Corridor North Wall option. Blocking the John Wayne pass or simply preventing the enemy from seizing it prevents him from executing the southern corridor option.

The result is that the commander encourages the enemy to opt for the Central Corridor South Wall option. Now the commander is on the way to making the enemy conform to his will so that he can fight him at a time and place of his own choosing.

Eliminating options for the enemy allows the commander to put the decisive point for his COA on the South Wall of the Central Corridor and focus on defeating the enemy there (figure 11).

Another technique to deny, modify, and encourage ECOAs is to focus on key capabilities that allow the enemy to implement these key tasks associated with individual ECOAs. For example, all of the ECOAs require that friendly forces in the Central Corridor be fixed to prevent them from maneuvering on the Regimental Main Body. The first echelon maneuver forces provide capability for the enemy to fix these friendly forces. Rapid defeat or destruction of the first echelon denies the enemy the option of adopting any of the proscribed ECOAs. Deep fires are required to isolate the point of penetration and attrit and delay commitment of the reserve for all the ECOAs.

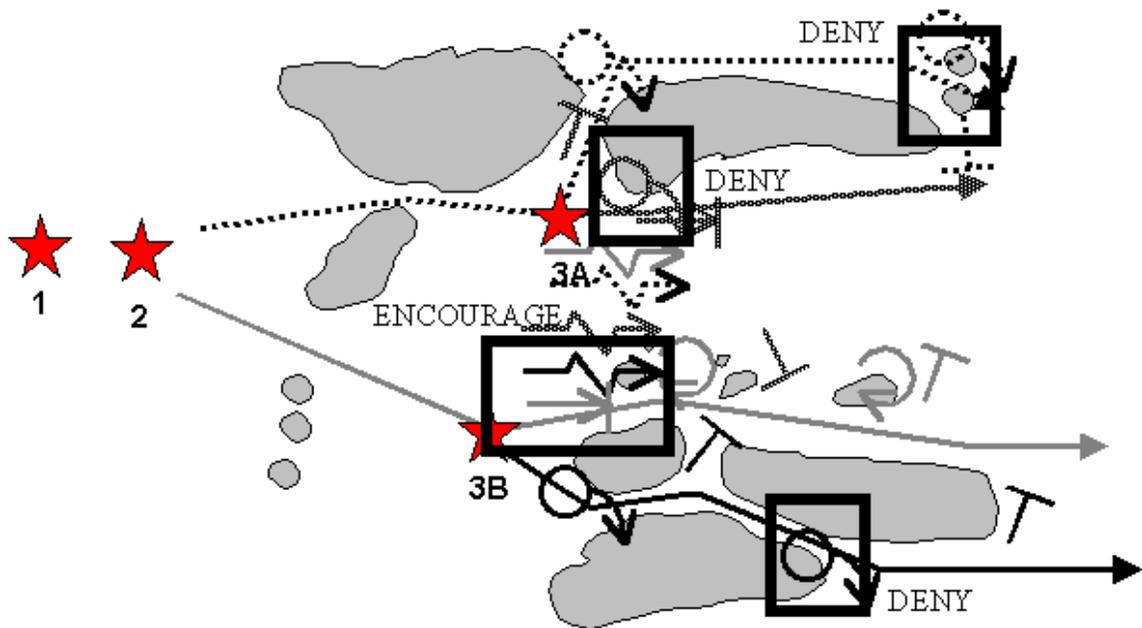


Fig. 11. Highlighted areas where the friendly COA incorporates actions to deny, modify and encourage ECOAs.

Deep airborne infiltration of light infantry is critical for all but the Central Corridor North Wall option. Elimination or restriction of any of these capabilities will affect the enemy's ability to carry out the affected ECOAs.

Now that the commander is able to address multiple ECOAs in the friendly COA development, he can also use the event template to focus his the S-2 and the war-game effort. After the commander has decided which critical enemy tasks or capabilities he wants to influence and where these would be located, he can direct the S-2 to produce SITEMPs of those critical events. Figure 11 highlights the four enemy events that require SITEMPs. The S-2 now is focused for further analysis, and brings those directed SITEMPs to the war-game along with the event template.

The commander also uses the event templates to provide focus on what and where the critical events are that must be war-gamed and synchronized. In situations when time is limited, the best way to rapidly accelerate the COA analysis step is to focus the war game effort on critical events instead of war gaming the entire operation. Again, figure 11 highlights four critical events that must be war gamed and synchronized. The staff can adopt the box technique to focus on synchronizing actions in the three areas highlighted for the two northern ECOAs and the Southern Corridor ECOA to deny the enemy those options. Then the staff can focus on the decisive point, the box in the Central Corridor South Wall, where the enemy is encouraged to go.

The staff can now utilize the war gaming technique they believe to be most suitable. The box technique can be used if time is extremely limited to strictly focus on the events in the box as identified in figure 11. The staff could also use the belt technique

to initially focus on the events in the box, and then examine all avenues of approach at that critical time. Using either technique allows the staff to focus on synchronizing the BOS on a few critical events, while still considering all feasible ECOAs.

### Conclusion

Full consideration of the enemy is critical to the development of flexible plans. Only when the commander has as complete an understanding as possible of the enemy situation and COAs, can he develop a plan to make the enemy conform to his will, so that he can fight him at a time and place of his choosing. The event template is the key product that the S-2 can produce and use to ensure that multiple ECOAs are considered throughout the MDMP. So informed, the commander can build a flexible plan, and if need be, focus the war-gaming effort. Providing the commander with the event template during the mission analysis step allows him to rapidly determine what he must do to the enemy to deny, modify, or encourage the enemy's options. When time is short, the use of the event template throughout the remainder of the MDMP facilitates focusing the planning effort on critical events, without having to exclude all but only the most likely and most dangerous ECOAs.

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