



**A Monograph
by
Major Anton E. Massinon
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ABSTRACT

COURSE OF ACTION DEVELOPMENT IN SUPPORT OF CAMPAIGN PLANNING by Major Anton E. Massinon, USA, 72 pages.

This monograph highlights the lack of a doctrinal course of action development process for creating campaign plans. Such a process is needed due to the inexperience of both senior leaders and middle-grade staff officers with the operational level of war. The difficulty with developing an operational level course of action development process to use in support of campaign planning lies in the nature of operational art itself and its fitting more in the domain of art than that of science. This monograph accepts the challenge and uses both theory and existing doctrine to develop an operational level process similar to the familiar tactical level course of action development process.

The research presents the basic foundation of terms, definitions, and relationships associated with campaign planning. The current lack of an operational level decision-making process is examined and a process resulting from previous research is offered to fill the void. The first step of this process, mission analysis, generates the products necessary to initiate course of action development. These are surveyed and the sometimes misunderstood relationship between mission analysis and estimates discussed. A new way to view the estimate process is proposed to clarify this relationship. The most difficult step of mission analysis faced by the operational commander and planner, translating strategic aims into military end states, guides the monograph into the course of action development step of the decision-making process.

The views of both Jomini and Clausewitz on campaign planning and current campaign planning doctrine are used to modify the foundation of an operational level course of action development process provided by the current tactical level process. The result is an eight step process as follows: 1) Select Operational Objectives; 2) Generate Conceptual Possibilities; 3) Determine Sequence of Tasks for Each Objective; 4) Identify Forces to Achieve Each Task; 5) Phase the Campaign; 6) Design Theater Organization; 7) Prepare Course of Action Statement and Sketch; and 8) Conduct Course of Action Review.

The proposed operational level course of action development process provides a systematic organization of thought, potentially saves valuable planning time, is consistent with joint doctrine, applicable to each level of campaign planning, and integrates operational design concepts. It provides a tool for future campaign planners to educate themselves and ease the development of judgment and imagination.

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I. DEFINING THE PROBLEM

"In the application of what appear to be simple concepts, students and practitioners of operational art often find themselves guided by little more than intuition. While intuition certainly has its place, a modicum of logic should guide our thinking about the important relationships between the fundamental concepts of operational art and the application of the military element of power for strategic purposes."¹

Campaign planning has long been a technique used by commanders to synchronize multi-service actions or to sequence several related operations. General Ulysses S. Grant planned simultaneous offensives against the South as his plan for the 1864 campaign.² During World War II, campaign planning was essential to synchronize the actions of joint and combined forces. As a result, in 1946 the Joint Chiefs of Staff directed that a study of joint overseas operations be prepared by a carefully selected joint board of 50 officers. The resulting publication, while never fully approved as expressing joint doctrine, was used for instruction at the National War College and the Armed Forces Staff College in the late 1940s and early 1950s.³

During the Vietnam War, campaign planning became virtually replaced at the theater level by the Department of Defense directed Joint Operation Planning System (JOPS). This system focused on standardizing formats and preparing joint plans using automatic data processing equipment.⁴ As a consequence, campaign plans as broad statements of a theater commander's vision did not have a resurgence until the 1980s and the 1986 publication of the Army's AirLand Battle doctrine focusing on the operational level of war.

Unfortunately, recognition of operational art and campaign planning in the mid-1980s did not coincide with further doctrinal development, education, or execution by senior military leaders. An Army War College study published in 1988 examined the planning processes at unified, subunified, combined, and Army

component headquarters. The study found that campaign plans were not only not being used but that

"campaign planning is not integrated into existing planning processes because of a lack of doctrinal guidance on campaign planning. There is no defined process for preparing a campaign plan. As a result there are differing views of campaigns and campaign plans. Similarly, there is no clear understanding of who should prepare a campaign plan and vagueness about what a campaign plan should do."⁵

The study concluded that only doctrinal guidance detailing a campaign planning process and specifying who should write campaign plans could resolve the confusion.

Today much of that confusion has been resolved by publication of both joint and Army doctrine concerning the development of campaign plans. Joint Pub 5-00.1, JTTP for Campaign Planning, provides a process for developing a campaign plan, examines the relationship between campaign plans and the Joint Operations Planning and Execution System (JOPES), and specifies what commands prepare campaign plans.⁶ The Army's draft Field Manual 101-5, Command and Control for Commanders and Staff, echoes the information found in the joint publication. Both doctrinal manuals discuss a campaign planning process based on integrating doctrinally defined operational concepts and design elements.

In 1992, prior to the publication of these doctrinal manuals, Major Patrick Stallings, a School of Advanced Military Studies student, published a research monograph which concluded the operational decision-making process as exemplified in the JOPES planning process does not adequately integrate operational concepts into the design of campaign plans.⁷ Stallings proposed an operational decision-making process based upon the tactical process that ensures operational concepts are considered.

Unfortunately, neither the doctrinal campaign development process nor Stallings' proposed decision-making process provide any guidance on developing an

operational course of action that incorporates operational concepts. Both processes ensure operational concepts are "considered," but do little for showing how they facilitate development of a feasible, acceptable, and suitable operational course of action. Course of action development is assumed by both processes and therefore relies on the knowledge, experience, and intuition of the commander and staff officer.

This monograph fills this void by proposing an operational-level course of action development process akin to the Army's doctrinal tactical-level course of action development process.⁸ Is it possible to create a conceptual course of action development process for the operational level of war? Such a process is needed because of the inexperience among both senior leaders and middle-grade officers who must perform operational command and staff duties in an environment characterized by a variety of complex operations from the familiar to the wholly new -- including combined operations, unconventional campaigns, guerrilla wars, drug wars, peacekeeping and peace enforcement operations.

The difficulty with developing a course of action development process for the campaign planning process lies in the nature of operational art itself and its fitting more in the domain of art than that of science.⁹ The design and conduct of campaigns is termed operational art because it is overwhelmingly influenced by the genius, imagination and judgment of those who practice it. The practice of operational art may not be subject to the rigors of rote education or scientific application; however, the intent of creating a course of action development process is to provide another tool for the operational planner and commander to "educate the mind ... or, more accurately, to guide in [their] self-education"¹⁰ and ease the development of judgment, imagination, and even genius.

II. CAMPAIGN PLANNING

Within the last ten years the resurgence of operational art and campaign planning as a subject worthy of study by military professionals has produced a proliferation of articles and studies discussing operational concepts, processes and terminology. Within these there exists a basic core of campaign planning terms, definitions, and relationships. The current doctrinal understanding of this core of campaign planning knowledge forms the foundation from which a campaign planner works.

The Operational Level of War, Operational Art, and Campaigns

There is a fundamental difference between the operational level of war and operational art--"one is form while the other is content."¹¹ The operational level of war is "a *perspective* of warfighting in which tactical events are linked to strategic consequences. Hence, the operational level holds the middle ground between strategy and tactics."¹² Operational art is an *intellectually creative activity* oriented on the application of military resources to achieve strategic aims in an environment characterized by friction, chance, and a thinking, reacting opponent. Operational art is defined as "the employment of military forces to attain strategic or operational objectives in a theater through the design, organization, and conduct of campaigns and major operations."¹³ The campaign is defined as "a series of related military operations aimed to strategic objectives within a given time and space."¹⁴ More simply, a campaign is the linking of required events by the military commander to achieve an identified, specific end state within a given time and place. Campaigns create the military conditions necessary to achieve the desired strategic goal, and, in essence, become the operational level commander's intellectual tool for executing

operational art.¹⁵ The nature of modern warfare makes contemporary campaigns normally joint and combined.

The Campaign Plan

The campaign plan is the way by which the operational planner translates strategic aims into operational and tactical action to be achieved within a specific medium. The current doctrinal definition of a campaign plan is "a plan for a series of related military operations aimed to accomplish a common objective, normally within a given time and space."¹⁶ This definition is so general that it could apply to any military plan of action at any level of war from the strategic to the tactical. Since a campaign is "aimed to strategic objectives," the plan of campaign should be focused on this common *strategic* objective. The key element missing in the current definition is this relationship of campaign plans with the strategic level of war and the fact that "campaigns are conducted to achieve national strategic objectives."¹⁷ Within the framework of the campaign plan, the operational planner must answer three questions:

- (1) What military conditions must be produced to achieve the strategic objectives?
- (2) What sequence of actions will most likely produce those conditions?
- (3) How will resources be applied to accomplish that sequence of actions?¹⁸

The nature and characteristics of a campaign plan are found in JCS Pub 3-0, Doctrine for Unified and Joint Operations, which provides the fundamentals, or tenets, of a campaign plan. A campaign plan:

- provides broad concepts of operations and sustainment to achieve strategic military objectives in a theater of war or operations; serves as the basis for all other planning and clearly defines what constitutes success;
- provides an orderly schedule of strategic military decisions; displays the commander's vision and intent;
- orients on the enemy center of gravity;

- phases a series of related military operations;
- composes subordinate forces and designates command relationship; and
- synchronizes air, land, and sea efforts and is joint in nature.¹⁹

The value of the campaign plan lies in the unity of effort it creates by communicating the commander's vision to subordinates thus eliminating, or at the very least reducing, duplication which wastes assets and creates the potential for greater loss of life and equipment as well as the potential for failure.

Hierarchy of Campaign Plans

Operational art and therefore campaign plans are not associated with any specific level of command.²⁰ However, campaign plans are generally prepared at one of three levels of command. At the highest level, combatant commander prepares one or more theater campaign plans to achieve the theater of war strategic aims. These campaign plans address all the elements of available national power and are based upon the Commander in Chief's (CINC's) overall theater strategy. Any other campaigns are subordinate to the CINC's theater campaign plans.²¹

When the CINC's theater of war becomes too large for effective command and control, the CINC has the option to establish theaters of operations. Each commander of a theater of operations may prepare a subordinate campaign plan which supports the overall CINC's theater campaign plan. A subordinate campaign plan for a theater of operations is only prepared by a joint force commander when assigned a strategic objective and operations are sufficient in scope to require phasing.²² Subordinate campaign plans generally focus on the application of the military element of power.

At the lowest level, joint task force commanders assigned a strategic objective may prepare a campaign plan if operations are broad enough in scope to require phasing. In all cases, component commanders of a combatant commander, a theater

of operations commander, or a joint task force commander prepare supporting major operation plans in support of each phase of the theater or subordinate campaign plan.

The defining criteria for preparing a campaign plan are twofold: first, a campaign plan is only prepared by commanders with strategic objectives; second, a campaign plan is only prepared by commanders with the authority to compel synchronization of air, sea, and land efforts in phased operations at the operational level.²³ Conversely, a joint force commander or a component commander prepare major operations plans when the focus is on achieving operational objectives and/or they have single service authority.²⁴

Types of Campaigns

Conceptually, campaigns have many different purposes. They can be either theater campaigns or subordinate campaigns based upon the level prepared as described above. These campaigns may then be described based upon timing as simultaneous or sequential. Simultaneous theater campaigns occur within different theaters of war as during World War II with campaigns in the Pacific and the European continent. Simultaneous subordinate campaigns occur within the same theater of war when executed by subordinate commanders in support of the overall theater campaign plan. Sequential campaigns are either enabling campaigns or terminating (war ending) campaigns.²⁵ Enabling campaigns achieve strategic objectives which are not designed to end the war, but rather to establish the necessary conditions for a follow-on campaign, the war-terminating campaign, which is designed to end the conflict. Grant's Vicksburg campaign is a good example of an enabling campaign.

The initial draft Joint Publication 5-00.1, Doctrine for Joint Campaign Planning, defined two types of theater campaigns: continental and maritime. Continental campaigns are "conducted to preserve or restore territorial integrity of friendly nations; seize enemy territory required for advantageous conflict termination; destroy enemy war-supporting infrastructure; or destroy an opponent's means to conduct military operations."²⁶ Maritime campaigns are "conducted to establish or maintain necessary sea control over areas that provide our enemies strategic reach and to destroy enemy forces that threaten friendly operations, [including] protecting strategic lines of communication; suppressing enemy seaborne commerce; seizing and defending advance naval bases; and conducting land operations essential to the campaign."²⁷ Based upon current joint doctrine, there is no definition of a theater air campaign. Rather the application of air power is viewed as a distinct subordinate operation conducted to support a continental or maritime campaign.

This void in doctrine and the catalyst provided by service perspectives of the air operations conducted during Operations Desert Shield and Desert Storm have raised the issue of whether or not an "air campaign" should exist in joint doctrine. Based on the doctrinal definition of a campaign, an air campaign was not conducted in Southwest Asia. Air operations were not designed to achieve a strategic objective, rather they were conducted as major operations (phases) of the overall theater campaign.²⁸ This does not mean an "air campaign" cannot exist.

With the current technology available the United States has the capability to wage, in a pure sense, an air campaign, the joint application of air power to achieve a strategic objective. Although history provides no examples of an air campaign as defined by current joint doctrine; this does not mean that future operational planners should not consider the potential of an air campaign. Air power is a relatively new

force. Given the right environment and strategic political-military situation (a situation made more possible by a national military strategy based upon force projection of an increasingly smaller ground force), the application of air power to achieve a strategic objective may be a possibility worthy of future consideration.

Paraphrasing the doctrinal definitions of both the continental and maritime campaigns, a definition of an air campaign is offered: Air campaigns are conducted to establish or maintain necessary control of the airspace that potentially provide our enemies strategic reach and to destroy enemy forces that threaten friendly operations, including protecting strategic air lines of communication, suppressing enemy airborne commerce, seizing and defending advance air bases, destroying enemy war-supporting infrastructure, and destroying an opponent's means to conduct military operations. Noticeable here is the potential requirement for both land and possibly naval operations as a significant contributor to a successful air campaign.

The concept of an enabling campaign makes the possibility of such an air campaign even greater. For example, if achieving air supremacy within a regional conflict is determined to be necessary to accomplish the ultimate strategic aim, establishing air supremacy against a formidable opponent may be determined to be an intermediate strategic objective. An enabling air campaign would plan the necessary military (not just air) operations required to establish the condition of air supremacy required by a terminating (war-ending) campaign plan.

Campaign plans are not only for the conduct of operations in war. The end of the cold war and emergence of a new world order create many opportunities for the further use of joint military force to achieve strategic objectives. The Army's own doctrine recognized this potential with the inclusion of the term Operations Other Than War (OOTW).²⁹ As these operations are contemplated, it is easy to see that

future military campaigns may be defined by terms such as peacekeeping, peace enforcement, counterdrug, and humanitarian aid. These campaigns, developed outside of the traditional environment of war, will be significantly more difficult because the planner will be forced to make more planning assumptions.³⁰

The Campaign Plan and JOPES

The Joint Operation Planning and Execution System (JOPES) is the "integrated joint conventional command and control system used to support military operation monitoring, planning, and execution."³¹ JOPES' main role is the integration of computer software support into the decision-making process. The focus of JOPES is at the combatant commander's (CINCs) who use it to determine the best method of accomplishing assigned tasks and for directing and coordinating the necessary actions.

JOPES consists of two processes (see Appendix A). The first, deliberate planning, is conducted during peacetime to produce operation plans (OPLANs), contingency plans (CONPLANs), or concept summaries in response to taskings in the Joint Strategic Capabilities Plan (JSCP) or CINC initiative. These plans are prepared and held on the shelf for a crisis situation. Crisis action planning, the second process, produces operations orders in response to a specific conflict involving the United States. In crisis action, a CINC modifies an OPLAN, expands a CONPLAN or concept summary, or develops a plan from a no-plan situation for initial deployment and early phases of an operation.

A theater campaign plan is related to JOPES but not a component of the JOPES process. Campaign plans are not normally created until the execution phase of the JOPES crisis action planning process "once the actual threat, national guidance, and available resources become evident."³² During the deliberate planning process, the CINC may include "the equivalent of the 'Plan of Campaign' or theater outline

plan within the concept of operations of joint operation plans prepared in response to JSCP assignments."³³ (See Appendix B.) A theater outline plan provides an unrestrained conceptualization of how to achieve a strategic objective and can be viewed as a contingent campaign plan.³⁴

When a crisis occurs which may entail the deployment of military forces the Chairman of the Joint Chiefs of Staff (CJCS) issues a warning order. The CINC and his staff develop courses of action based upon an existing OPLAN or CONPLAN if available and the CINC makes his course of action recommendation to the National Command Authority (NCA) in the Commander's Estimate. Once a decision is reached by the NCA, the CJCS issues an alert order providing the CINC with "the essential elements necessary for constructing a campaign plan."³⁵ (See Appendix C.)

Campaign planning then takes a comprehensive view of the CINC's theater of war and defines the framework in which the NCA selected OPLAN fits. The campaign plan as an overarching document provides purpose and a common objective to a series of off the shelf OPLANs. (See Appendix D.)

The Campaign Planning Cycle

Joint Pub 5-00.1, JTTP for Campaign Planning, describes a campaign planning cycle that "portrays an orderly series of actions and events that occur in the campaign planning process."³⁶ (See Appendix E.) The cycle is driven by receipt of a JOPES formatted warning order providing strategic guidance from the National Command Authority (NCA) relative to achievement of strategic aims as currently expressed in national security strategy and national military strategy within the context of the current crisis. The campaign mission is derived including what is to be done, what resources are available, and what obstacles may prevent mission accomplishment. As part of the mission derived step, the campaign commander

develops his intent. This intent provides the vision for the campaign and includes the campaign's purpose, the desired result, and the method to achieve that result.

The study of the situation is a continuous process which begins with the development of the CINC's strategic estimate, leads then to the development of the CINC's theater strategy, and concludes with development of the commander's estimate which reflects analysis of various courses of action to accomplish the assigned mission. The formal JOPES formatted commander's estimate is provided to the NCA in record form as soon as possible (normally within 72 hours).

The study of the situation enables the planner to define and assign priorities to objectives which is the next step in the cycle. Necessary tasks are then identified to achieve the selected objectives. Following the selection of objectives, the commander's concept, the core of the campaign plan, synchronizes joint forces to conduct concentrated and decisive military operations. The commander's concept is based upon the operational concept, the logistic concept, the deployment concept, and the organizational concept.

Finally, tasks for subordinates are determined based upon the selected objectives and the intended synchronization of available forces. Supporting plans are then developed by supporting CINCs, subordinate commanders, and coalition partners. The resulting campaign plan is then subjected to continued, detailed review to ensure that is both feasible and adaptable.

For an operational planner, the campaign planning cycle presents three problems. First, the doctrinal campaign planning cycle is oriented solely on the combatant commander's preparation of a theater campaign plan. Development of a strategic estimate, theater strategy, and the JOPES formatted commander's estimate are not functions of a theater of operations commander nor a joint task force

commander preparing subordinate campaign plans. The campaign planning cycle has little utility for subordinate commanders and their operational planners.

Secondly, the campaign planning cycle only visualizes the big picture of events which occur during campaign plan development by focusing on the interaction between the NCA, the theater commander, and subordinate and supporting commanders. It is not oriented on the actions and events which occur within the operational level staff and the process of developing of a campaign plan. Unfortunately, this big picture view provided by the campaign planning cycle is the only doctrinal process currently available for an operational planner and operational staff to use as a guide for campaign plan development.

The campaign planning cycle also over-simplifies the complexity of the campaign planning process. The campaign planning cycle is described and depicted as a sequential process of discrete events; the necessary interaction between the events and the potential for the steps to overlap, to occur concurrently, and to return to a previous step is overlooked. For example, as the first step following receipt of strategic guidance, the commander must derive the mission and commander's intent. The mission may be derived from the guidance received, but commander's intent requires the detailed study of the situation offered only by the next step of the cycle. This step, situation study, requires the development of a commander's estimate which analyzes and makes recommendations on selection of a course of action. All of this before objectives and commanders concepts have been considered. Existing OPLANs or CONPLANs may be available but may not be appropriate to meet the current situation. In that case, courses of action cannot be developed without considering objectives, tasks, and concepts for operations, logistics, deployment, and organization. It appears that the "cycle" was developed to be synchronized with the

planning processes of JOPES and has very little to do with an orderly process of decision-making for preparing a campaign plan and, again, little utility for the operational planner.

Recognition of the importance of the operational level of war and the importance of campaign planning has resulted in significant improvements in both joint and service doctrine. However, doctrinal shortfalls still remain. Some of those have been noted: the doctrinal definition of a campaign plan is too general; doctrine does not recognize the potential existence of an air campaign; the campaign planning cycle is oriented on the interaction between the theater commander and the NCA through JOPES; and the campaign planning cycle does not support development of a subordinate campaign plan.

III. AN OPERATIONAL DECISION-MAKING PROCESS

Since campaign plans are not a component of the JOPES process, JOPES should not be used as a substitute for an operational decision-making process and the development of campaign plans. In a monograph published in May 1992, Major Patrick Stallings examines the adequacy of doctrinal decision-making procedures for the operational level of war. Titled What to Do, What to Do? Determining a Course of Action at the Operational Level of War, his monograph compares the tactical decision-making process as delineated in the Command and General Staff College (CGSC) Student Text (ST) 100-9, The Tactical Decision-making Process, with the operational decision-making process represented by the Joint Operation Planning and Execution System (JOPES). In his findings Major Stallings proposes a new operational decision-making process.

Major Stallings finds that the tactical decision-making process (see Appendix F) ties tactical concepts into a systematic analysis framework, establishes a common approach and procedures to decision-making, and offers very specific guidance on how to develop courses of action. From his examination of joint doctrine for the development of campaign plans, specifically the JOPES deliberate planning process,³⁷ Major Stallings makes the following findings: the operational decision-making process has no common set of procedures that ensures operational design concepts are integrated -- operational design concepts are either "ignored, inconsistently defined, or dispersed amongst current joint doctrine;"³⁸ and the advantages gained by a common approach in the tactical decision-making process are nonexistent at the operational level due to the lack of any detailed guidance.

Major Stallings concludes that the detailed guidance offered by the tactical decision-making process creates a common approach to decision-making that breeds familiarity and common understanding and helps to avoid confusion. This familiarity creates a common focus as well as speeding up the process. As a result of his research, Major Stallings proposes a new operational decision-making process (see Appendix G) based upon three key improvements:

(1) The operational decision-making process must have clearly delineated and defined points for the exchange of information and guidance.

(2) The operational decision-making process must have a rigorous mission analysis procedure to provide the operational decision-maker all the information he requires to give good planning guidance to his staff.

(3) The operational decision-making process must tie operational concepts into the course of action development and analysis process.³⁹

The main value of this proposed operational decision-making process is it can be separated from JOPES and is therefore easily adopted by operational commanders from the CINC level down to the lowest level joint task force commander. The

proposed process also provides an operational decision-making process that integrates operational design concepts into each step of the decision-making process.

However, this proposed process falls short in understanding the relationship between JOPES and campaign planning. Campaign planning is not done within JOPES, but rather is conducted outside of the JOPES process. Campaign plans provide the purpose and a common objective to a series of off the shelf OPLANs and CONPLANs developed within JOPES. An operational decision-making process should not be linked to JOPES.

The problem is that there is not an operational decision-making process anywhere that is comparable to the tactical decision-making process. JOPES is primarily oriented on the exchange of information between a combatant commander, the strategic leadership, and supporting and subordinate commanders through the design of common automated data processing systems. The campaign planning cycle is oriented toward compatibility with JOPES. Both JOPES and the campaign planning cycle suffer from the same major fallacies -- both are aimed at the CINC level and the creation of theater campaign plans; and both do little to facilitate the course of action development process and campaign design. Neither process is easily oriented to the creation of a subordinate campaign plan either by a theater of operations commander or a joint task force commander.

This proposal, like our current joint and Army campaign planning doctrine, does not solve the problem of how operational courses of action are developed. Operational courses of action are developed by the intuitive and experienced operational level planner and commander, both still rare in today's military.⁴⁰ What is needed is a complete process integrating the operational design concepts identified during mission analysis into development of a course of action. Thus, one of the

main advantages of the tactical decision-making process -- specific guidance on how to develop courses of action -- still remains unavailable within the proposed operational decision-making process. What is required is an operational course of action development process to support the operational planner in the campaign planning process following the completion of mission analysis.

IV. MISSION ANALYSIS

Successful analysis of the mission is essential to the development of an effective campaign and its selected course of action. The products of mission analysis provide the basis for course of action development, and course of action analysis. Consequently, a poor mission analysis leads to an ineffective campaign plan which may not be possible to correct.⁴¹

Definition, Purpose, and Method

Mission analysis is not defined in doctrinal publications. Analysis is the separation of a whole into its component parts; an examination of a complex, its elements, and their relations.⁴² Mission analysis therefore should involve the separation of the mission into its component parts and an examination of their relationships. Our doctrine for planning joint operations describes the purpose of mission analysis as "the analysis of assigned tasks to determine mission and to prepare guidance for subordinates."⁴³

Mission analysis separates the mission into the tasks to be accomplished, both specified and implied, the purpose to be achieved, and key factors that may influence operations.⁴⁴ The relationships between these component parts are considered and a restated mission results. Each staff section participates in the procedural method generally taken to arrive at the restated mission: analysis and understanding of higher

commanders mission and intent (applies to subordinate campaign plans prepared by theater of operations and joint task force commanders); identification of facts (including constraints and restraints) and assumptions; determination of specified and implied tasks; and finally selection of essential tasks to achieve the stated purpose.

Mission Analysis Products

The restated mission is the primary product of mission analysis and ends the mission analysis step of the decision-making process. A mission statement includes both the required task and the purpose and must clearly indicate the action to be taken along with the reason for that action.⁴⁵ A task is essentially an assigned job or function.⁴⁶ The restated mission then must communicate the task (what) assigned by higher authority and its contribution (why) to the mission of the higher commander. The mission statement does not include routine or inherent tasks.⁴⁷ The significance of the mission statement is that it provides the broad focus for the conduct of all operations conducted within the framework of the campaign plan. The restated mission is not the only product of mission analysis. Other products include the commander's planning guidance, initial staff estimates (less course of action analysis), and tentative identification of potential operational design concepts.

The second product of mission analysis, commander's planning guidance, has a twofold purpose. First, it provides the commander's staff with enough preliminary guidance to focus staff estimates on the information important to the commander and begin development of courses of action; second, it communicates information necessary so subordinate commanders can begin planning. Planning guidance may be extremely specific, detailed, and focused or vague and ill-defined depending upon the situation, the commander and staff's experience, and, perhaps most importantly, the planning time available. Planning guidance will always include commander's intent.⁴⁸

Planning guidance may also include additional information on necessary assumptions, anticipated enemy courses of action, nuclear and chemical warfare, political and psychological considerations, friendly and enemy operational design concepts, combined operations, risk factors, deception objectives, priorities, operational reserve planning, theater organization, tentative courses of action, potential defeat mechanisms, and planning schedules.⁴⁹

Commander's intent is essential. Where the mission statement provides a broad focus to the conduct of operations, the commander's intent narrows that focus. Commander's intent is the stated commander's vision for the conduct of the campaign and must consist of three components: the purpose of the campaign; the end state with respect to the relationship between the force, the enemy, and terrain; and the method used to achieve that end state.⁵⁰ Within the methodology section, the commander may choose to include the level of operational risk he is willing to assume and specify the defeat mechanism (for war campaigns) to achieve the end state. Although not required, including these critical concepts of the commander's vision assists the staff in formulating courses of action and ensures their dissemination to subordinate and supporting forces. The most difficult aspect of developing the commander's intent at the operational level is translating strategic aims into military end states.

Initial staff estimates less course of action analysis are the third product of mission analysis. The essential information required by the commander to develop his commander's intent and planning guidance are provided by preparation of initial staff estimates. Development of staff estimates and the associated study of the situation involving gathering information and intelligence are not part of mission analysis but are an ongoing process that is conducted concurrently with mission

analysis and continues throughout the planning process. For the staff of a theater commander, situation study begins during peacetime with the development of the theater strategy. During conflict, situation study becomes focused in support of campaign plan development. Post conflict situation study reviews the effect of the conflict results on the theater strategy. For a theater of operations commander or a joint task force commander, study of the situation may not begin until receipt of the mission and the beginning of mission analysis. Today, the likelihood of the latter is greater given a current national military strategy based upon force projection and is demonstrated by our recent experiences such as the deployment of a joint task force to Somalia.

The final product of mission analysis is the identification of potential operational design concepts. Doctrinal concepts of operational design include center of gravity, lines of operation, culminating points, decisive points, and arranging operations.⁵¹ The importance of these concepts requires their integration into each step of the decision-making process as well as their inclusion as elements considered and identified within each staff estimate.

Estimates of the Situation and Their Link to Mission Analysis

An estimate of the situation is a logical process of collecting and analyzing relevant information affecting the military situation and, within the constraints of available time and information, making a recommendation or decision as to the course of action to be taken to accomplish an assigned mission.⁵² Estimates of the situation consist of both staff estimates and the commander's estimate.

Within their particular field of expertise, staff officers produce staff estimates analyzing relevant information and intelligence to determine whether the mission can be accomplished, use this analysis to assist with development of potential courses of

action, and then make recommendations as to which course of action can best be supported and available resources employed.⁵³ The development of staff estimates is a continuous process. The commander uses the staff estimates in the preparation of the commander's estimate and the decision as to the course of action.

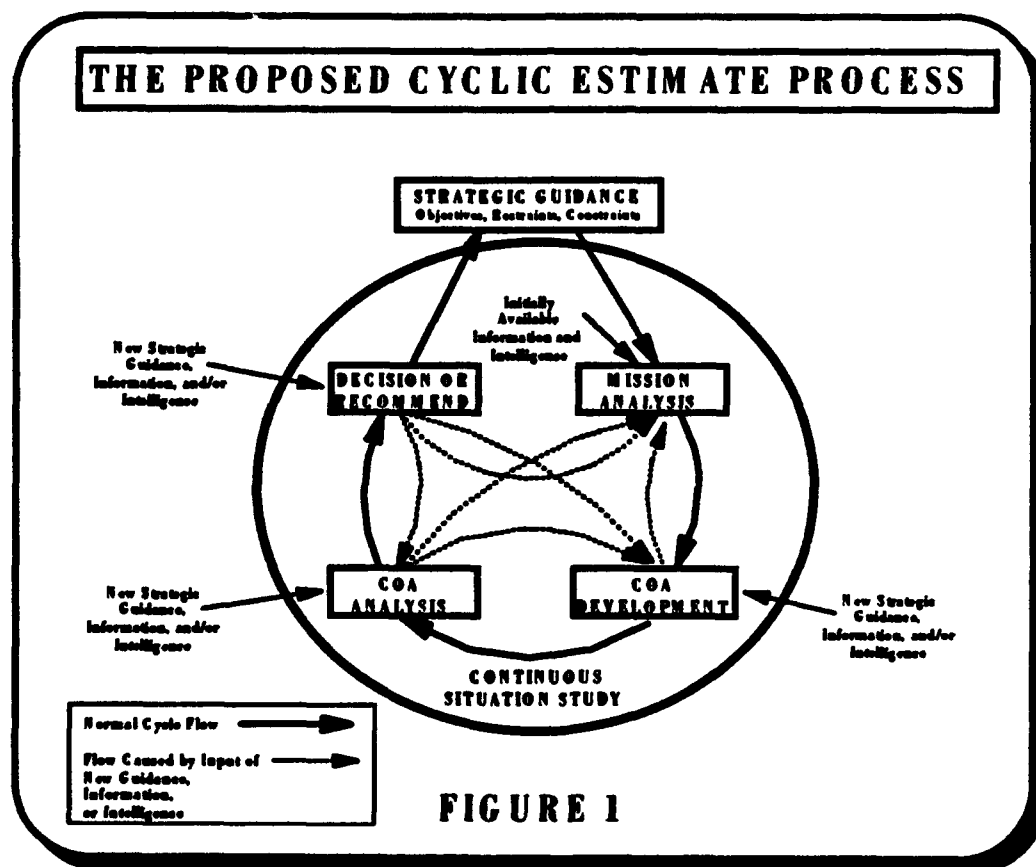
The estimate process for both staff estimates and the commander's estimate consists of four steps: (1) mission analysis; (2) course of action development; (3) course of action analysis; and (4) decision (or recommendation).⁵⁴ Amazingly this looks exactly like the major steps of both the tactical decision-making process and the operational decision-making process proposed by Major Stallings. In fact the estimate process is simply another term for the military decision-making process.⁵⁵

Mission analysis is a component of the estimate process. Estimates are not a component of mission analysis. Unfortunately this simple relationship is sometimes misunderstood by planners, commanders, and doctrine writers.⁵⁶ During the mission analysis phase of the estimate process, staff officers *begin* development of staff estimates. One of the products of the mission analysis step discussed above were *initial* staff estimates less course of action analysis. Unlike mission analysis which has a clearly defined end point, the approval of a restated mission; development of staff estimates does not end with an approved course of action. Staff estimates continuously analyze the impact of new guidance, information and intelligence upon the campaign throughout the planning process and execution.

This misunderstanding of equating staff estimates as a component of mission analysis may be caused by the conceptual view of the estimate process represented by the diagrams of the tactical decision-making process and the proposed operational decision-making process. (See Appendices F and G.) These diagrams reflect a lock-step process that proceeds in step by step sequential order. In actuality the

estimate process is a continuous cycle in which receipt of new information may require a return to a previous step of the process. Joint Pub 5-0 states that "key factors must be continually reviewed to see whether they remain relevant."⁵⁷ This continual receipt and review of new information and intelligence as well as the potential receipt of new or modified strategic guidance creates the cycle's continuity.

To better understand the estimate (decision-making) process, the importance of the cyclic continuity of the process and the potential for returning to previous steps based upon receipt of new guidance or significant information and intelligence must be clarified. This is conveyed by the proposed cyclic estimate process in Figure One.



This diagram makes situation study the operative environment in which the estimate process is accomplished. At any point during the process, receipt of new or modified strategic guidance should cause the reinitiation of the process by a return to

mission analysis to revalidate the decisions already made or determine new concepts for execution and achievement of the new guidance. Development of new, significant information or intelligence, on the other hand, may cause a return to any previous step in the process depending upon the significance of the new fact.

The utility of viewing the estimate process, and therefore the operational decision-making process, as cyclical in nature can be demonstrated by consideration of a phenomenon facing military leaders today -- "mission creep".³⁸ Current doctrine states that mission analysis ends with the approval of a restated mission. This is true as long as the strategic guidance including strategic objectives, restraints, and constraints do not change. During Operation Desert Storm the strategic objectives provided by the NCA remained constant. However, as noted by events in Somalia, a change in the strategic guidance should prompt a return to mission analysis.

During this re-analysis of the "new" mission, the staff and the commander must revalidate the existing course of action, ensuring that objectives (ends), operational concepts (ways), and available forces (means) are still in agreement. If not, then alternative courses of action must be developed and analyzed and a new course of action decided upon for execution. Recognition of the estimate process as a cycle within an environment of continuous situation study prevents changes in strategic guidance from slowly expanding the mission to new objectives without a return to mission analysis and validation of the balance between ends, ways, and means.

Translating Strategic Aims Into Military Endstates

Describing the military end state answers the first question faced by the operational planner: "What military conditions must be produced to achieve the strategic objectives?"³⁹ The most difficult aspect of developing the commander's

intent at the operational level is translating strategic aims into military end states. It is hard because it is a creative process that is more art than science.

The operational commander uses the resources of all elements of power made available in the strategic guidance to gain an advantage relative to the enemy. Determining the advantage necessary to use as leverage to achieve the strategic aim is the object of the military endstate. To achieve this advantage, the operational commander must understand the nature of the conflict from the viewpoint of all participants and particularly the viewpoint of the enemy. This may sound simple, but Vietnam provides an excellent example where a failure to understand the nature of the conflict from the enemy perspective caused an operational failure.

In addition to considering the nature of the conflict, the operational commander must ensure that the end state is in consonance with the strategic guidance and any imposed restraints and constraints.⁶⁰ Translating strategic aims into military end states during a total war such as World War II is relatively easy -- unconditional surrender equals total destruction of the enemy's capacity and will to continue fighting.⁶¹ Operations Desert Shield and Desert Storm demonstrate another example of strategic leadership providing constant and specific strategic objectives. Unfortunately this is not always the case and may pose a problem as the strategic guidance provided may not be specific or may change during the conflict.

The current status of United States foreign policy, the lack of a national security strategy, and the increasing impact of the media on foreign policy decisions increase the potential for the NCA to provide constantly changing, ill-defined, and ambiguous strategic objectives. In this case, the operational commander must use existing national and theater strategies to help focus the strategic guidance into realistic, achievable strategic objectives; translate these objectives into military end

states; and then, through a dialogue with the NCA, have these strategic objectives and military end state approved.⁶² Additionally, operational commanders have a responsibility to highlight strategic aims which cannot be accomplished due to insufficient or incompatible forces provided by the various elements of power.⁶³

Another difficulty an operational commander may face are strategic objectives that are given a political or diplomatic "media spin" in order to be palatable to either or both the national and international public -- in other words presented as a just cause.⁶⁴ In this case, it is imperative that the operational commander understand the nature of the actual strategic objectives as related to the interests of the nation.

The introduction of operations other than war (OOTW) in Army doctrine recognizes that military forces engaged in operations other than war may not be designated the lead agency in attaining strategic objectives.⁶⁵ FM 100-5 states that military end states "include the required conditions that when achieved attain the strategic objective *or pass the main effort to other instruments of national power to achieve the strategic end state (emphasis added).*"⁶⁶ In these situations, military forces establish the conditions necessary for another element of national power to be decisive, much like the military expects the other elements of power to establish the conditions necessary for the successful application of military power. Military end states designed for OOTW campaigns may not be end states at all, but rather may be the establishment of particular conditions for a specified period of time.

Finally, as operational commanders translate strategic objectives into military endstates, the effect of that endstate on the post hostilities phase of the conflict must be considered. Operation Just Cause in Panama provides an example where the military end state's impact on post hostilities was not considered until late in the campaign.⁶⁷ Planning for war termination and its connection to the military endstate

will only be effective if accomplished in an interagency context. Consequently, operational planners must educate civilian participants in the merits and methods of a campaign planning approach to conflict; ensure regular coordination during plan development, assessment, and revision processes; and create clear procedures for passing the lead between the military and civilian agencies.⁶⁸

Conflict termination must be an element of campaign planning flowing logically from a clearly articulated military end state and strategic aims. Suggestions for operational war termination planning include:

- Identification of a distinct war termination phase in the campaign planning process.
- Emphasizing a regressive (backward planning) approach to campaign development.
- Defining the operational conditions to be produced during the terminal phase of the campaign.
- Considering establishing operational objectives that exceed the baseline political strategic objectives.
- Considering how efforts to eliminate or degrade the enemy's command and control may affect efforts to achieve particular objectives.
- Considering the manner in which the tempo of the terminal phase of an operational campaign affects the ability to achieve strategic objectives.
- Viewing war termination not as the end of hostilities but as the transition to a new post-conflict phase characterized by both military and civilian problems.⁶⁹

Determining the military end state and ensuring that it accomplishes the strategic objectives are the critical first steps in the operational planning process. The military end state created by the operational commander during mission analysis may be refined or modified at any time during the process but is essential for moving to the next step of the decision-making process -- course of action development.

V. AN OPERATIONAL COURSE OF ACTION DEVELOPMENT PROCESS

The final two questions -- what sequence of actions is most likely to produce the desired military end state; and how should the commander apply military resources within established limitations to accomplish that sequence of actions -- still remain to be answered. The development of a course of action identifies the "how to" and "with what" the commander "must do" to achieve the desired end state.

Components of an operational course of action development process can be found in doctrinal manuals; yet an overall conceptual process that integrates operational design concepts is not clearly articulated for the student of campaign planning or the inexperienced operational level planner. Perhaps by integrating aspects from each of the theoretical and doctrinal foundations of campaign planning and using the tactical level course of action development process as a framework, a proposed operational course of action development process can be created. The validity of such a process can be verified by satisfactorily meeting the following criteria: the process must provide a rigorous organization of thought; save valuable planning time; be consistent with joint doctrine; be applicable to each of the three levels of campaign planning; and integrate operational concepts.⁷⁰

Developing an Operational Course of Action Development Process

The theoretical foundations of an operational course of action development process are provided by the views on campaign design of the two classic theorists Clausewitz and Jomini. Clausewitz and Jomini differed extensively in their views for developing campaign plans. Clausewitz proffered a flexible, intuitive campaign design process. Jomini stressed a more rigid campaign design system.⁷¹

Clausewitz focused on five basic elements required for each campaign: the moral or intellectual and psychological qualities and influences; the physical or size, composition, and capabilities of armed forces; the mathematical or lines of operation and supply; the geographical or regional influences; and the statistical or support and maintenance.⁷² The challenge for the campaign planner is to resolve the unique confluence of these elements in an environment characterized by a thinking enemy and the uncertainty caused by both the fog and friction of war.⁷³ For Clausewitz, this requires a thought process for campaign design rather than a set of principles.

Clausewitz further admonished the campaign planner to select and then focus on a campaign objective which puts the opponent at a disadvantage either by attacking his capacity to wage war or his will to fight.⁷⁴ The concept used to select this objective is the center of gravity, the source of moral cohesion and the hub of power normally embodied in the enemy's main fighting forces.⁷⁵ For Clausewitz, correctly identifying the center of gravity posed the key problem for the campaign planner.

Jomini advocated a systematic approach, characterizing campaign planning as merely "the art of making war on the map."⁷⁶ Campaign planning required the application of a system of geometric principles that left the planner three simple choices for operational maneuver: right, left, or directly to the front.⁷⁷ This operational maneuver was decided upon based upon a methodical study of the theater of war and the selection of a base of support, objective points, decisive points, and lines of supply.

The doctrinal foundation for development of an operational course of action development process is found in Joint Pub 5-00.1 which provides two potential models for the development of an operational course of action development process. The first consists of the second and third questions faced by the operational planner:

what sequence of actions will most likely produce the end state conditions; and how will resources be applied to accomplish that sequence of actions? The second consists of the third thru fifth step of the campaign planning cycle: select objectives, develop the commander's concept, and determine tasks for subordinates. Neither of these two models meet the requirements for an operational course of action development process. The questions asked of the operational planner are insufficiently detailed to develop a complete operational course of action. The campaign planning cycle is not an orderly nor rigorous process and is oriented to the theater level and JOPES. Neither model integrates consideration of operational design concepts.

Yet both models have utility for developing an operational course of action development process. The first model, the operational planner questions, recognizes that actions must be sequenced and related toward achieving the desired end state prior to determining how resources will be applied toward accomplishing those sequenced actions. The second model, the campaign planning cycle, demonstrates the importance of identifying objectives prior to development of an operational concept and reinforces the idea that applying resources to tasks is one of the final steps of developing a campaign plan.

Although focused on the tactical level of war and ground maneuver forces, the tactical course of action development process offers a potential contribution to the development of an operational level process as the framework in which to build the process. The tactical course of action development process described in Army doctrine consists of six steps as described below:

Step One. Analyze relative combat power. This step is a largely subjective assessment of both the tangible and intangible factors affecting combat power. Combat force ratios are considered relative to the strengths and weaknesses in each of the dynamics of combat power (maneuver, firepower, protection, and leadership) to

gain insight into friendly capabilities, enemy vulnerabilities, and potential operations for both friendly and enemy.

Step Two. Generate conceptual possibilities. Using the commander's guidance, the staff brainstorms conceptual possibilities for accomplishing the mission.

Step Three. Array Initial Forces. The mission, higher commander's intent, avenues of approach, and enemy courses of action are considered to determine the forces necessary to accomplish the mission. Forces are arrayed by determining the ratio of friendly units required based upon the task and the size of the avenue of approach, determining the forward edge of the battle area (defense) or the line of departure/line of contact (offense), and developing a deception story.

Step Four. Develop the Scheme of Maneuver. The initial array of forces is refined by reevaluating the effect of terrain, the enemy, and the force ratio; accepting risk; considering the impact of force shortages or using uncommitted forces; and by evaluating types of possible operations. Objectives and targets are identified to support a defeat mechanism that ensures the course of action's success. Location of the main and supporting efforts are determined. Finally, obstacles and fires are integrated with maneuver.

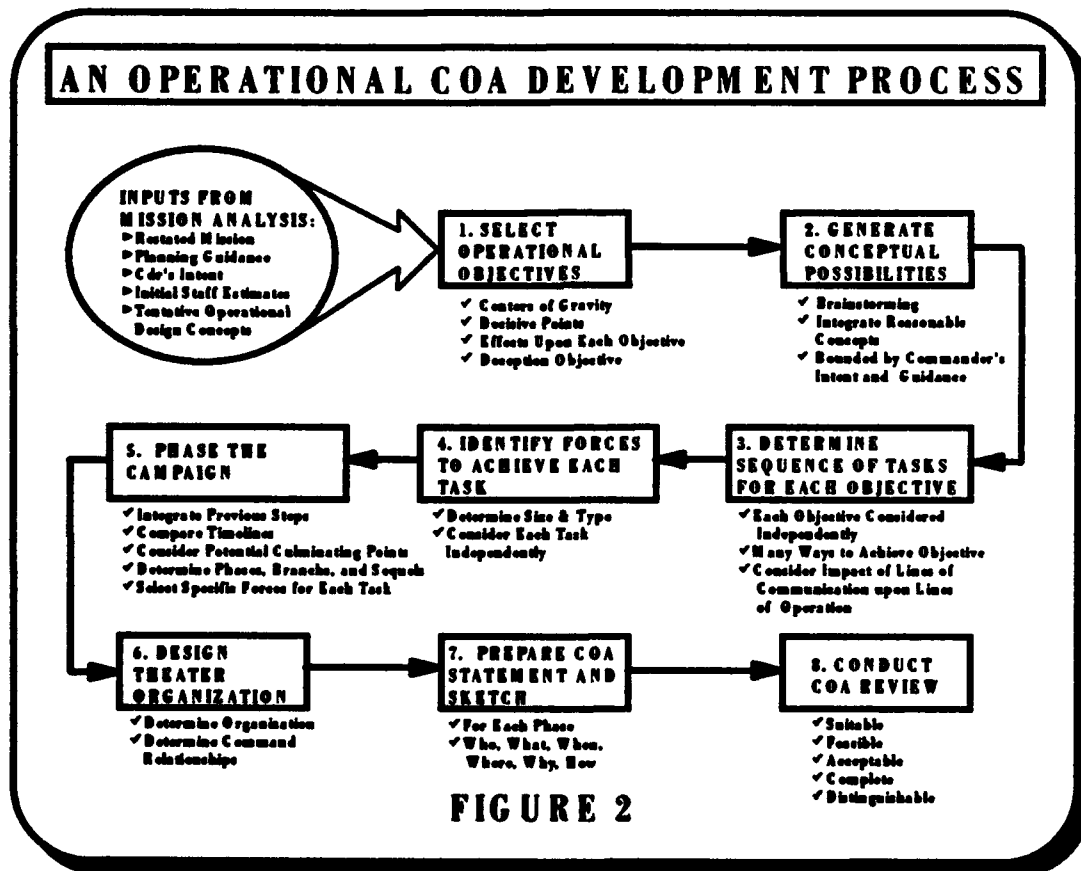
Step Five. Determine Command and Control (C^2) Means. Subordinate headquarters are allocated over forces (task organization). Maneuver control measures and fire support coordination measures are determined.

Step Six. Prepare Course of Action Statement and Sketch. The statement and sketch must clearly portray how the unit will defeat the enemy. The statement clarifies how major subordinate maneuver units will execute the higher commander's mission. The sketch includes planning headquarters and unit boundaries, allocated forces, control measures, and identifying features (cities, rivers) and avenues of approach.⁷⁹

Using the tactical course of action development process as a framework and incorporating theoretical and doctrinal considerations as described above, a potential operational level course of action development process can be created.

The Proposed Course of Action Development Process

For the purpose of developing a tool for the operational planner the course of action development process shown in Figure Two appears methodical. Because it is both depicted and discussed as a step by step process it would seem a more systematic approach similar to that favored by Jomini. However, the actual thought process associated with the application of such a process may require the steps to overlap and at times to be applied somewhat simultaneously as each impacts upon the other. This is more in line with the conceptual process countenanced by Clausewitz.



Each step of this proposed operational level course of action development process is discussed in detail below. Throughout the application of this process the operational planner must continuously recall the commander's intent and planning

guidance for the conduct of the campaign. Planners should not consider themselves constrained by the intent and guidance, but any deviation deemed necessary or prudent should immediately be brought to the attention of the commander and modified intent and/or guidance obtained.

Step One. Select Operational Objectives. Selection of objectives is a critical element of operational design. Objectives focus the efforts of the entire force on efficiently establishing the conditions necessary to achieve the strategic aim and reach the desired end state.⁷⁹ Selection of objectives is based upon consideration of the strategic aim; desired military end state; enemy capabilities, intentions, and expectations; any restraints and constraints imposed; and the means available or justified. While the strategic aim must be considered when developing objectives, objectives may not be directly associated to achieving the strategic aim, but rather may establish the conditions necessary to accomplish subsequent objectives which are directly associated with the attainment of the strategic aim.

Joint Pub 1-02 defines an objective as "the physical object of the action taken, for example, a definite tactical feature, the seizure and/or holding of which is essential to the commander's plan."⁸⁰ Objectives and the desired *effect upon those objectives* are identified which will provide the leverage needed to impose our will on the enemy and create the desired end state. This leverage is gained by influencing the enemy's capacity or will to continue the conflict. Consequently, objectives will tend to fall into one of four categories: the enemy's forces (both will and capacity), the enemy's economy, the enemy's will to fight (either the government or the people), and advantageous terrain.⁸¹ Potential effects upon objectives include destroy, defeat, disrupt, neutralize, seize, occupy, or defend.

Effects upon objectives are normally keyed to influencing an enemy center of gravity while protecting friendly centers of gravity from enemy influence.⁸² The concept of center of gravity has many different interpretations but is central to the operational design of campaign plans.⁸³ Determination of centers of gravity is situationally dependent. The enemy's center of gravity is based upon an assessment of enemy force capabilities and intentions, and friendly vulnerabilities. The enemy's center of gravity is that force or element of power which he intends to direct against friendly vulnerabilities. The friendly center of gravity is the force intended to be employed against enemy vulnerabilities.⁸⁴ The direct attack of enemy centers of gravity is normally an inefficient use of military force since the enemy will likewise attempt to protect his centers of gravity from opposing force influence. Consequently, centers of gravity are influenced through actions taken against decisive points.

Jomini described decisive points as exerting a "marked influence upon the result of the campaign."⁸⁵ Decisive points may include selected military forces, functional nodes (C², logistics, intelligence, air defense, media, political), or a geographic location. Selection of decisive points depends upon an assessment of the contribution of the point to the power of the identified enemy center of gravity and the points vulnerability to attack. Where centers of gravity are determined based upon enemy *intentions*, decisive points are determined based upon enemy *expectations*. Those points contributing to the power of the center of gravity that the enemy expects to be attacked or which will provide a positional advantage to friendly forces will be defended within the limitations of the enemy's capabilities. Those points which remain vulnerable, or can be made vulnerable, and that have a significant effect upon the enemy's center of gravity are selected as decisive points.⁸⁶

Jomini noted the difficulty lies in recognizing these points.⁸⁷ It might be added that recognizing when those points change is perhaps even more difficult. Selection of centers of gravity and decisive points requires the operational planner to view the conflict through the enemy's eyes. Ethnocentrism caused by cultural bias and ignorance must be avoided at all costs. This places a heavy premium on foreign area specialists and operational intelligence. Centers of gravity and decisive points may change during the conflict because they are not only based upon enemy capabilities but also upon the enemy's intentions and expectations. Consequently, operational intelligence must use the expertise of foreign area specialists to focus on an understanding of the regional and cultural influences on changing enemy intentions, objectives, and expectations as the conflict develops; operational planners must be aware of the significance of those changes to the selection of operational objectives.

Finally, the quality of the objectives selected will have a direct impact on the quality of the campaign plan. Using Clausewitz' dictum that "the moral is to the physical as three to one," objectives should be selected which capitalize on moral effects whenever possible. Moral effects are recognized whenever the enemy is surprised by the object of the attack, the method of attack, or by the effectiveness of the attack. The selection of unexpected objectives with the intent to maximize moral effects is the basis of B.H. Liddell Hart's "indirect approach."

Once the objectives are defined, they are then prioritized. Priorities are determined based upon the relationship between the objective, the end state, and the strategic aim; realistic expectations as to what can be accomplished given the available forces and any imposed restraints and constraints; as well as planning guidance from the commander.⁸⁸

Before leaving this step the operational planner uses the analysis of enemy intentions and expectations to determine a deception objective. Deception reduces the uncertainty and error associated with estimating the intentions and expectations of an uncooperative enemy. Employing deception as part of a campaign provides operational commanders the ability to influence enemy perceptions of operational intent and strategic ends, induce incorrect enemy conclusions and decisions about friendly forces being allocated to fight, and induce incorrect enemy conclusions about force dispositions. All this to predispose the enemy to adopt a posture that is operationally exploitable.⁸⁹

The deception objective is selected to confirm the preconceived notions of the enemy and reinforce, from the enemy's perspective, the enemy's estimate of friendly force intentions and expectations.⁹⁰ Confirming the enemy's perception of friendly force intentions causes him to adopt courses of action consistent with the friendly force estimate of his intentions and expose his center of gravity to increasingly higher levels of risk. A deception objective does not state what friendly forces are tasked to do, but rather states the action or nonaction desired of the enemy. A deception objective statement consists of five elements: who will perform the action (which enemy commander); what act is to be performed; when will it be performed; where will it be performed; and whom is the target to affect (not friendly forces).⁹¹

Step Two. Generate Conceptual Possibilities. Using the commander's intent and planning guidance, the staff brainstorms conceptual possibilities for achieving each defined operational objective. During this process the staff must remain unbiased and open-minded. Brainstorming is a "free-wheeling mental activity whose greatest strength is its serendipitous, idea-building effect; it requires time, imagination, and creativity."⁹²

Conceptual possibilities generated during brainstorming are then further explored to determine if they meet the objectives within the means available and the imposed restraints and constraints. Developed concepts may be mixed, changed, modified, or shelved; time must not be wasted on concepts outside the bounds of the planning guidance.

Step Three. Determine a Sequence of Tasks for Each Objective. Based upon the concepts developed in step two, identify the tasks required to achieve the desired effect upon each operational objective. *Use a backward planning process* to consider all the tasks required from achieving the effect upon the objective to the initial movement of forces. This is facilitated by considering potential lines of communication identified in the initial logistic estimate and comparing them to the lines of operation created by the selection of operational objectives. Moving back along the line of operation from the operational objective, identify tasks including the types of maneuver required to achieve the desired effect simultaneously considering deployment and sustainment tasks as well as operational tasks. During this step, additional intermediate operational objectives may be recognized. If so, re-prioritize objectives and determine necessary tasks to accomplish the intermediate objectives.

There are many ways to achieve the desired effects upon an objective. Tasks are defined as jobs or functions which can be equated to force operational capabilities such as offensive operations (envelopment, turning movement, infiltration, frontal, penetration), defensive operations (mobile, area), amphibious operations, air and sea blockades, air superiority operations, close air support, interdiction, naval superiority operations, civil affairs, psychological operations, airlift, sealift. Achievement of an objective may be accomplished through application of several different capabilities or a combination of capabilities.

New situations within a changing world environment, increasing reliance on combined operations, and the acceptance of new missions, for example peace keeping and peace enforcement, will require a greater flexibility of mind. Planners must avoid a strict reliance on the Army concept for the application of military power, derived and oriented toward conventional, mid-intensity conflicts.⁹³ Doctrinal reliance on quick, decisive victory and overwhelming force is not the correct solution to every situation. It must be remembered that doctrine is not prescriptive, but rather is a guide that must not bind the planner's thinking.

However, whenever possible, doctrinal terms must be used to describe required actions. These doctrinal terms communicate a common understanding of the intentions of each action, the subordinate functions required, and guide the resultant behavior of the force assigned the action. For example, a mission of "take down" the airfield assigned to a force during wartime operations probably has a different connotation from "take down" the airfield during a peacekeeping operation. Using doctrinal terms can ensure that the actions intended in the plan are the actions taken during execution.

Step Four. Identify Forces to Achieve Each Task. Using the sequence of tasks from step three, the planner identifies the type and size of forces required to achieve each task. Designation of specific, named forces is not made during this step. Each task is considered independently of the requirements identified for each of the other tasks.

The type of force required (Army, Navy, Marine, Air Force, Special Operations, Interagency) is determined by the nature of the task -- land warfare, maritime warfare, air warfare, special operations warfare, operations other than war -- and the forces identified as available. The size of the force required (corps,

division, wing, squadron, battle group, amphibious readiness group, marine expeditionary force or brigade) is determined by a comparison of friendly and enemy force ratios and capabilities. This task is difficult, at best. It requires a subjective assessment by the operational planner based upon both tangible and intangible factors affecting accomplishment of the task.

Several methodologies currently exist to simplify this analysis for the planner. These include the relative combat power model presented in ST 100-9, the methodology proposed by Colonel Wass de Czege in his unpublished paper, "Understanding and Developing Combat Power," and the model presented in the draft FM 101-5.³⁴ The first is an entirely quantifiable methodology that only includes a physical comparison of opposing forces. The latter two methodologies are not entirely quantifiable but include both moral and physical aspects of force comparison. In the end the determination of size of force required is a subjective decision made by the planner, but the basis of that decision must include both physical and moral strengths and weaknesses of the opposing forces.

Step Five. Phase the Campaign. This step arranges the achievement of all tasks in a logical order to maintain the initiative and attain the military end state and also refines the selection of forces by designating specific forces for each task. It requires the operational planner to think through the depth of the planned campaign in both time and space from the beginning to the end state and beyond to post hostilities. This is accomplished by comparing and integrating decisions already made in previous steps.

The sequence of tasks and required forces to achieve each operational objective are compared with each other as well against timelines depicting the impacts of political expectations, climatology, mobilization and deployment, logistical

constraints, intentions of allies (if not a combined force), and anticipated enemy actions. These timelines are not included in doctrine but can be very beneficial to determining windows of opportunity and relating various pieces of information.⁹⁵ Through this comparison and integration the campaign is divided into specific phases.

Phasing involves "sequencing operations to maintain the tempo of the campaign, retain the initiative, and keep the enemy off balance until all objectives are achieved."⁹⁶ This sequencing is accomplished by determining when major operations of the campaign will take place: sequentially or simultaneously. Phases are determined by selecting periods of time in which a large number of forces are involved in similar activities (for example deployment, or defense). A transition from one phase to another indicates a shift in emphasis.⁹⁷ As phases are determined the necessary conditions to begin and end each phase are described. "Campaign phasing considers prehostilities and predeployment, lodgment, decisive combat (during wartime campaigns), stabilization, follow-through, post-hostilities, and redeployment."⁹⁸

The impact of logistics is crucial to the selection of campaign phases. It is "the key to sequencing major operations of the campaign."⁹⁹ As each objective is accomplished a reorganization of forces or resources may be required before another action is initiated. Predicting when these operational pauses will be needed is crucial to preclude reaching a culminating point. A culminating point is reached when the strength of the force (both physical and moral) is less than that required to continue successful operations.¹⁰⁰ "To go beyond that point would not merely be a useless effort which could not add to success, it would in fact be a damaging one."¹⁰¹ Therefore, operational objectives must be accomplished before culmination is reached.

During execution of the campaign plan, friendly forces strive to maintain freedom of action to seize and hold the initiative. This requires the operational agility provided by operational maneuver and the efficiency of the operational decision cycle. The campaign plan's contribution to operational agility is the determination of appropriate branches and sequels. Branches and sequels build flexibility into the campaign plan and provide options for rapidly changing situations decreasing the decision cycle of friendly forces. Operational planners must give some tentative consideration to the branches and sequels potentially required by the developing course of action. Branches and sequels are refined during course of action analysis.

Branches provide the commander options for the phase of operations underway and for the period during the subsequent phase. Branches can be viewed as contingency plans for "changing the disposition, orientation, or direction of movement and also for accepting or declining battle."¹⁰² Each assumption made during mission analysis may require a branch depending upon the effect of that assumption being proven false.¹⁰³

Sequels are different from branches. Where branches provide contingencies within a phase, sequels follow the conclusion of a phase. Sequels are operations planned based upon potential outcomes of the current phase -- success, failure, or stalemate. Sequels answer potential "what if" questions for various outcomes of the current major operation. Consequently, each phase beyond the first can be viewed as a sequel.

The operational planner must select specific forces by task, designate the main effort, and identify forces as operational reserves. Selection of forces is based on the requirements envisioned for those forces across the operational continuum considering future possible employment of those forces in future phases necessary to achieve

strategic objectives.¹⁰⁴ Operational planners must balance possible courses of action with available forces. However, "a campaign plan should not be totally constrained by strategic plan force apportionment."¹⁰⁵ During campaign plan development, identification of additional military forces or necessary interagency forces to successfully accomplish the strategic objectives and reduce strategic risk should be determined and justified.

Selection of specific forces for each required task can be significantly more difficult during planning for combined and interagency operations. During this process, the operational planner must consider the following points when selecting allied or coalition forces for specific tasks:

- What forces are available and what is their force composition and capability? If not known before hand, how will other nation's forces be integrated into the campaign during execution, what tasks will they be assigned?
- When are multinational forces available? When will the transfer of authority occur? When does the campaign (multinational force) commander get authority over coalition/allied nations forces?
- Given that any language problems can be resolved, how will potential incompatibility of doctrinal methods and terms be resolved?
- Is equipment compatible, especially command and control equipment?
- How will logistics be integrated? Consider additional requirements on terrain and lines of support, visibility of logistics status for the campaign commander, use of common supplies and functions, use of national assets in support of others (need for an accounting system).
- Is deployment a national responsibility and, if so, how is it synchronized with theater requirements? Consider the need for a combined movement control center and/or a combined TPFDL.¹⁰⁶

The availability of interagency forces will generally be based upon specific tasks previously identified at the strategic level minimizing the requirement for the operational planner to select interagency forces. However, whenever interagency forces are assigned specific tasks as part of a campaign plan, some of the same points

as noted for combined operations are worthy of consideration by the operational planner.

Following designation of forces, the operational planner considers designating a main effort. The value of designating a main effort is in the freedom of action, responsibility, and common basis for action it provides to subordinate commanders as well as assisting the staff with determining resource allocations. The main effort may be designated to the operation (focus of effort) or the force or command (main effort force) tasked with the highest priority operational objective during each phase. The main effort is then weighted through the allocation of combat, combat support, and combat service support forces; prioritized sustainment; acceptance of risk in other efforts; and the assignment of geography.¹⁰⁷

Finally, the operational planner considers withholding forces for use as an operational reserve. Operational reserves are the commander's means of influencing the situation during a contingency and as such are normally employed as part of a branch. The requirement for operational reserves is considered for each phase of the campaign, considering the nature of operations, anticipated enemy actions, and the degree of uncertainty and risk the commander is willing to accept.¹⁰⁸

Step Six. Design Theater Organization. This step combines two requirements: determine recommended theater organization and command relationships. Theater organization and command relationships are based upon the campaign design as determined by the developed course of action, the complexity and geographical expanse inherent in the campaign, and the degree of control required by the developed course of action and desired by the commander.¹⁰⁹ Both theater organization and command relationships are designed separately for each phase determined in the previous step.

Organizing the theater requires the operational planner to evaluate the types of operations envisioned within the area of operations by phase and subdividing the area into subordinate areas. Possible designations include theater of war (combatant commander level only), theaters of operation (subunified command, must designate minimum of two), areas of operation (normally for single service predominant operations), joint operations area, joint special operations area, joint rear area, or amphibious operations area.¹¹⁰

Coinciding with organizing the theater, the operational planner develops recommendations for composing subordinate forces and designating command relationships. Forces may be organized into service component commands, functional commands, or joint task forces. Those tasks associated with the forces organized within a subordinate command become the responsibility of that command.

Step Seven. Prepare Course of Action Statement and Sketch. The final step of developing an operational course of action is to prepare the course of action statement and sketch. The course of action statement briefly discusses how the major operations of the campaign are envisioned for execution. The course of action sketch graphically portrays a picture of the statement. Together, the statement and the sketch must clearly portray how each operational objective will be attained and cover aspects of who, what, when, where, why, and how. Depending upon the complexity of the campaign and the number of phases involved, it is probably best to prepare a separate statement and sketch for each phase of the campaign. As a minimum, the sketch should include theater organization and subordinate unit boundaries were appropriate, operational objectives, allocated forces, assembly areas, logistics bases, and depict the scheme of maneuver or movement routes.

Step Eight. Review Course of Action. Each course of action, once developed, is reviewed to determine if it is suitable, feasible, acceptable, complete, and distinguishable.¹¹¹ A course of action is suitable if it will actually achieve the desired strategic aim. It must be aimed at the correct objectives, support the theater campaign plan (if appropriate), and comply with the commander's planning guidance. Determining the suitability of a course of action correlates to the "art" of war and is an intuitive process that depends upon the knowledge and experience of the operational planner.

Determining feasibility of a course of action correlates more to the "science" of war as it is a scientific and quantitative measurement of the concept. Feasibility analysis ensures the organization has the required resources available or can be made available when needed; sufficient time is available for execution; adequate space in terms of geography, infrastructure, and depth is available; and the selected forces have the capabilities to accomplish the mission. Determining feasibility may require the operational planner to conduct a limited wargame of the course of action to determine if all requirements can be met.

Acceptability of a course of action determines if the gains are worth the risks. It evaluates the anticipated cost of executing the campaign in terms of losses of personnel, time, materiel, position, and national and international support against the anticipated outcome of the campaign. It is the operational commander's responsibility to determine the level of risk he is willing to accept. That level of risk is normally provided as an element of the commander's planning guidance. If the commander has not provided the acceptable risk level, then the planner must ensure the risk associated with each course of action is made clear to the commander prior to his decision. Acceptability analysis is also "art," relying on an intuitive process based on

experience, expertise and a firm understanding of the strategic and operational situation.

A course of action is complete if it adequately answers each of the following questions for each planned phase:

- Who (what forces) will execute operations?**
- What type of actions are contemplated?**
- When will the actions begin?**
- Where will the operations take place?**
- Why will the operations take place (the operational objective)?**
- How will the operation be accomplished? (The course of action must clearly explain how subordinate units are to execute the course of action without usurping the initiative and prerogative of subordinate commanders.)**

Finally, each course of action is examined to ensure it is distinguishable from other prepared courses of action yet still meets the commander's intent and guidance. Courses of action must be substantively different to present viable courses of action to the commander. At the operational level campaign plan courses of action can differ in a number of ways. Given determined and approved centers of gravity, they can be attacked directly or indirectly. If indirectly, numerous objectives have the potential for influencing the center of gravity. Consequently, selected operational objectives to achieve the military end state may be different. Since each objective can be achieved in numerous ways, the sequence of tasks to accomplish each operational objective may differ. If all else is constant, the selection of forces to accomplish specific tasks and the timing of those actions may be different. This could involve different phasing of the campaign. Finally, both the theater organization and command relationships have numerous possibilities.

VI. ASSESSMENT AND CONCLUSIONS

Current campaign planning doctrine is missing a tool long available to the tactical planner -- a course of action development process. Although facilitating the development of an operational level course of action, the tactical course of action development process is "inadequate for the breadth and scope"¹¹² of a campaign plan. Operational commanders and planners deserve the same tools they came to expect when operating at the tactical level. More than intuition is required as a guide in the application of the "simple" concepts associated with the intricacies of developing a campaign plan course of action. A complete operational decision-making process encompassing a course of action development process similar to that available to the tactical planner is not only required but should be demanded by operational planners and commanders. Major Stallings proposed operational decision-making process meets part of the requirement, but does not include an operational course of action development process. Such a process must provide a rigorous organization of thought, save valuable planning time, be consistent with joint doctrine, be applicable to each level of campaign planning, and integrate operational concepts.

Integrating campaign planning theory and doctrine into the framework of the tactical course of action development process, an operational course of action development process can be created which fits into Major Stallings' proposed operational decision-making process. The created process is an attempt to provide a similar tool for the operational level of war while recognizing the difficulty in methodically structuring what is essentially a creative art. The proposed process assists the operational planner to think through the development of a campaign plan by first focusing on the end state and the objectives and then, by working backward from this endstate, conceptualizing possibilities for the whole campaign plan. The

process then continuously guides the planner thru considering sections of the whole, systematically integrating these sections back within the whole, and then returning to consider another section until a detailed and synchronized course of action is developed. This rigorous organization of thought meets the first requirement of an operational course of action development process.

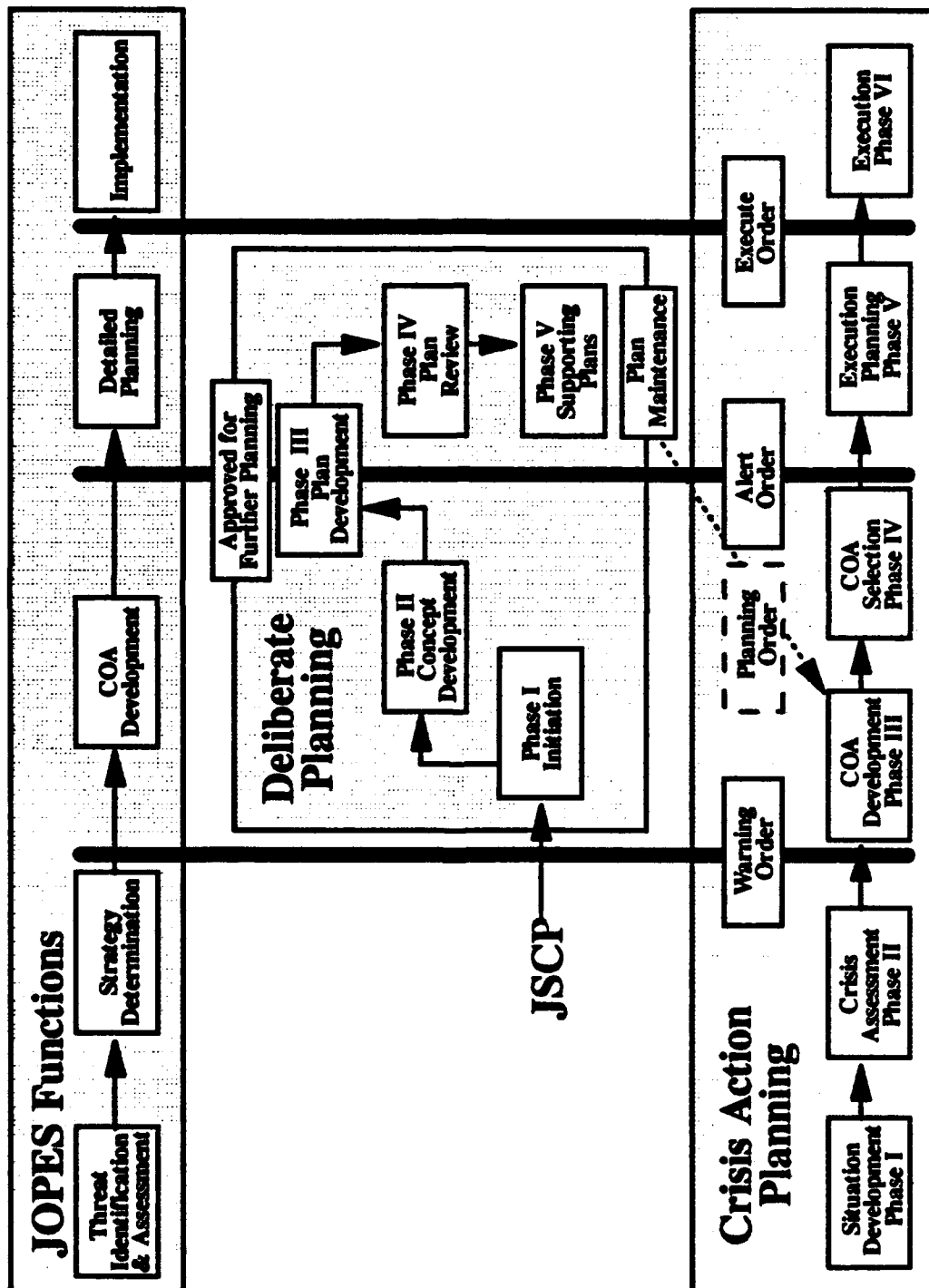
Without a course of action development process at the operational level, experienced tactical planners will continue to be frustrated by attempting to apply the familiar tactical level course of action development process. Without a process oriented to the requirements of a campaign plan and the integration of operational concepts, inexperienced planners (and even perhaps experienced planners) may have difficulty sorting the information necessary to develop a viable course of action. This frustration and subsequent difficulty increases the time necessary to develop possible courses of action. Repeated use and modification of this process or any systematic process that integrates operational concepts saves valuable planning time, thus meeting the second requirement of an operational course of action development process.

The proposed process was created through a modification of the doctrinal tactical level course of action development process by integrating campaign planning concepts found in current joint doctrine. Consideration of doctrinal operational design concepts were incorporated in appropriate steps of the process. Consequently, the proposed process is consistent with joint doctrine and integrates operational design concepts meeting the third and fourth requirement respectively of an operational course of action development process. Finally, the proposed course of action development process is separated from the JOPES processes and the doctrinal campaign planning cycle making it applicable to each level of potential campaign

planning. This meets the final requirement of an operational course of action development process.

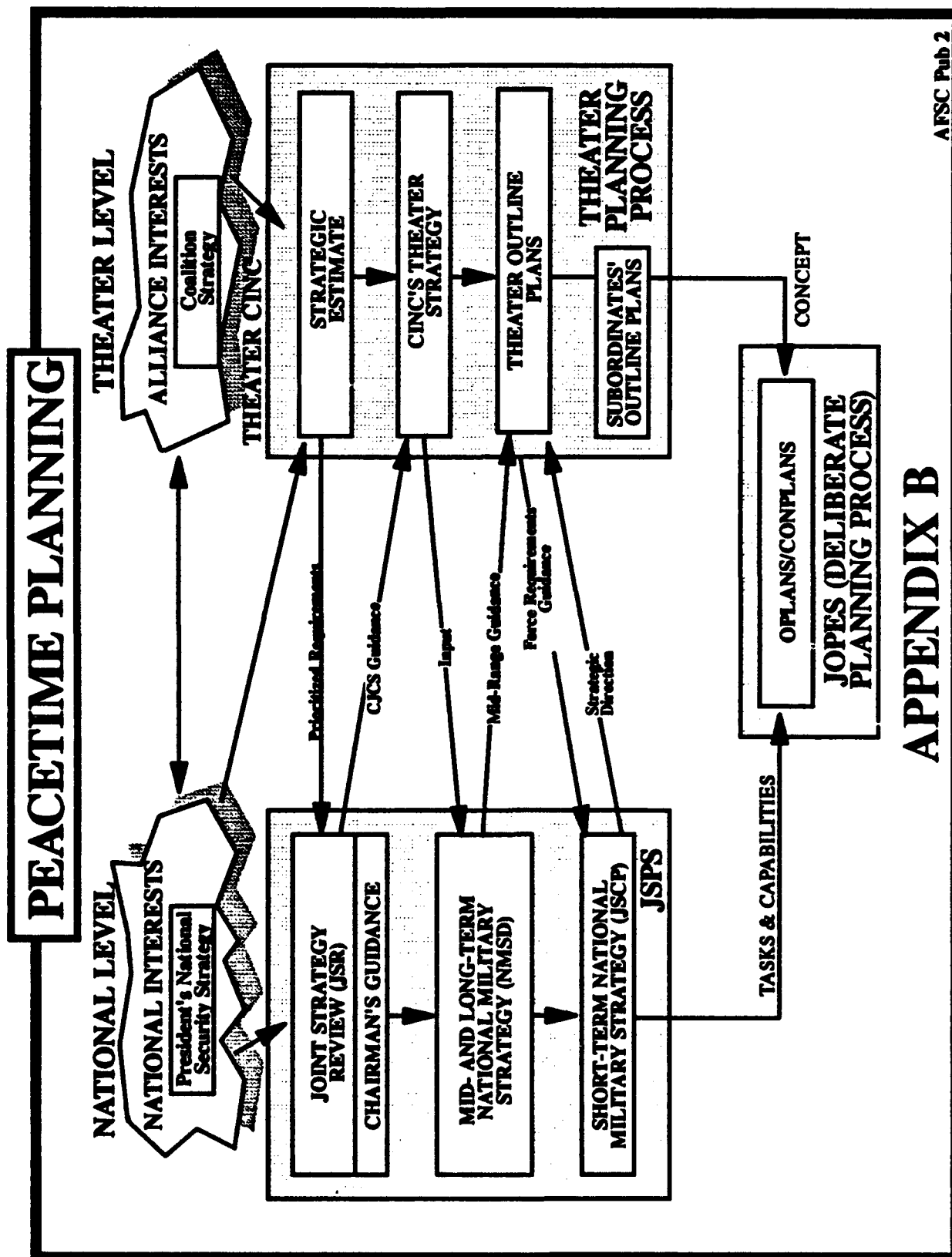
"Operational decision-makers are poorly served by the doctrinal joint decision-making process."¹¹³ If operational expertise is to help offset the reduction in capabilities caused by reduced budgets and subsequent force drawdowns, then both joint and service operational level doctrine must provide the necessary tools and match the level of effort expended at the tactical level. An operational decision-making process and the component course of action development process is needed today to assist operational commanders and planners in the development of campaign plans and the joint employment of military forces as the United States enters the twenty-first century.

JOPEs FUNCTIONS AND PLANNING PROCESSES

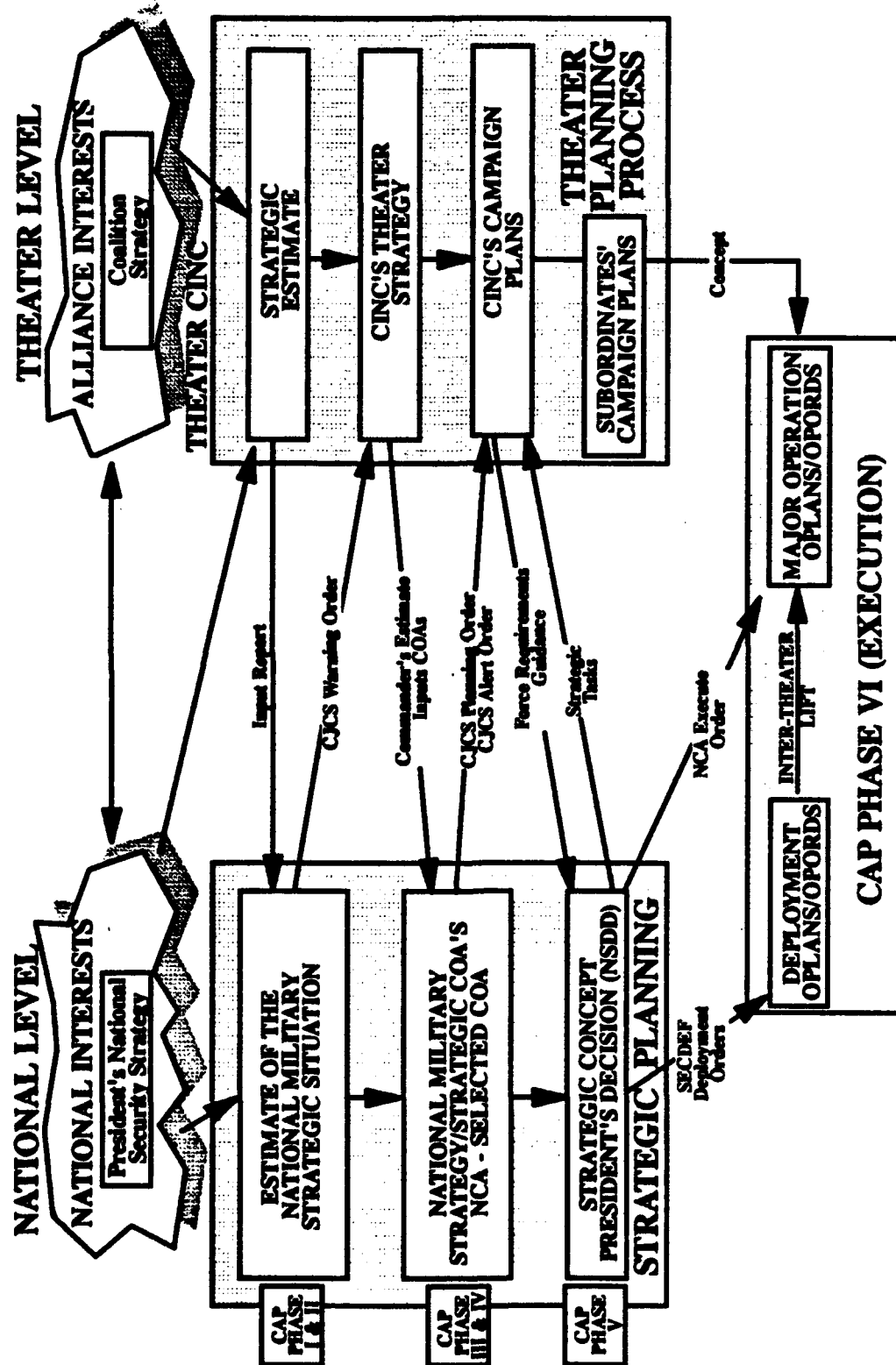


APPENDIX A

AFSC Pub 1



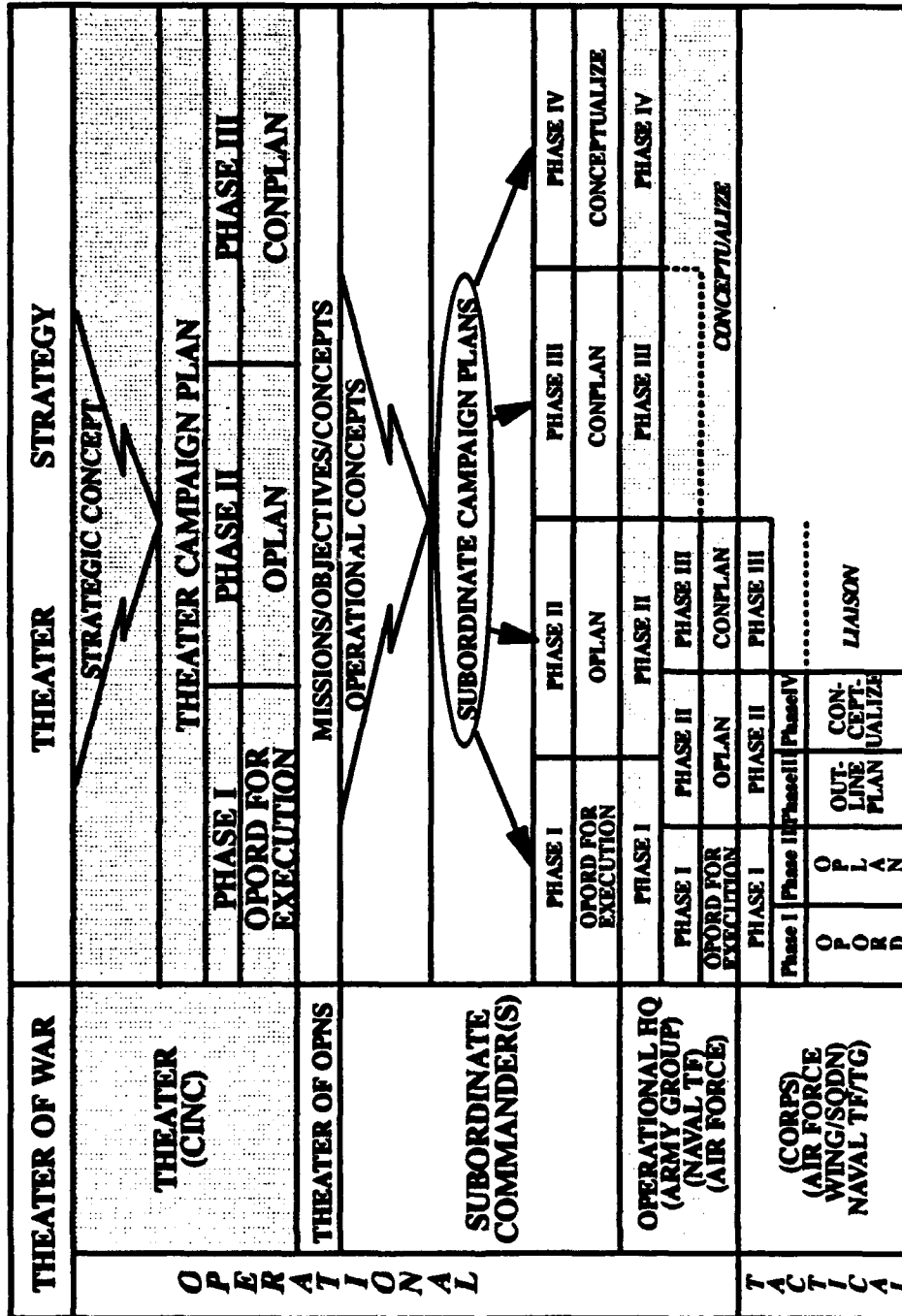
CRISIS/CONFLICT/WAR PLANNING



APPENDIX C

AFSC Pub 2

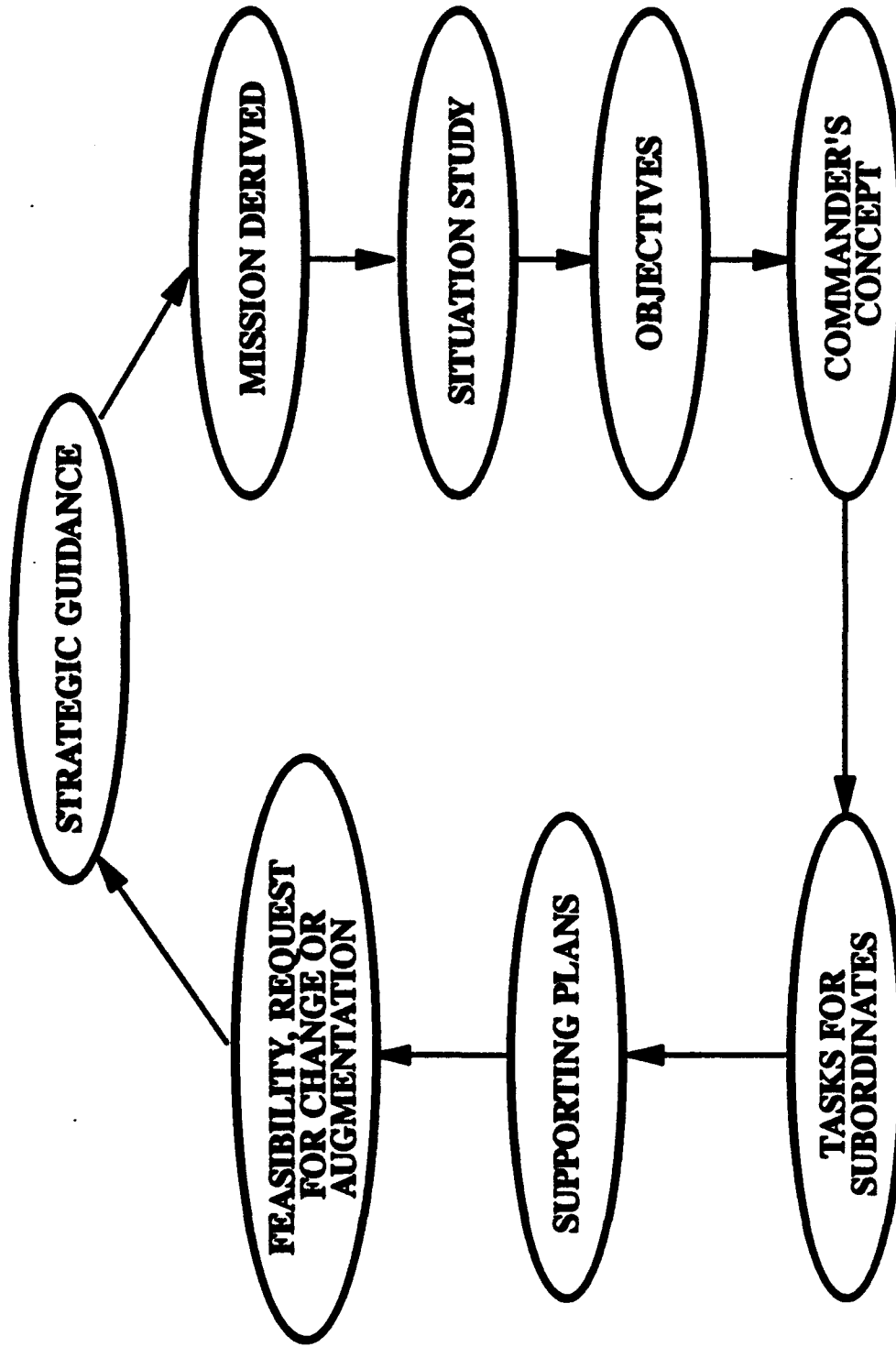
CAMPAIGN AND OPERATIONS PLANNING



APPENDIX D

AFSC Pub 2

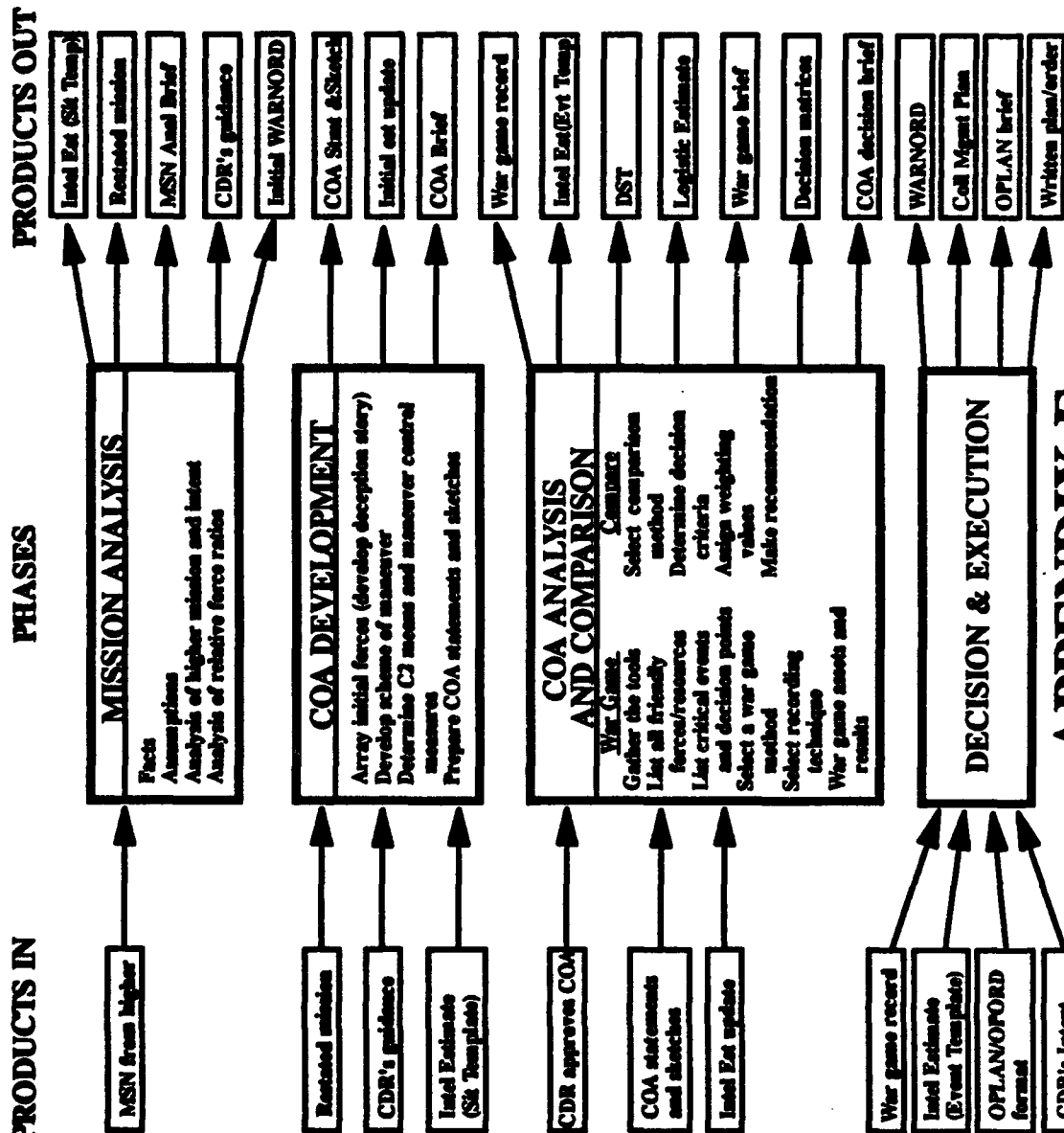
CAMPAIGN PLANNING CYCLE



APPENDIX E

JT PUB 5-00.1

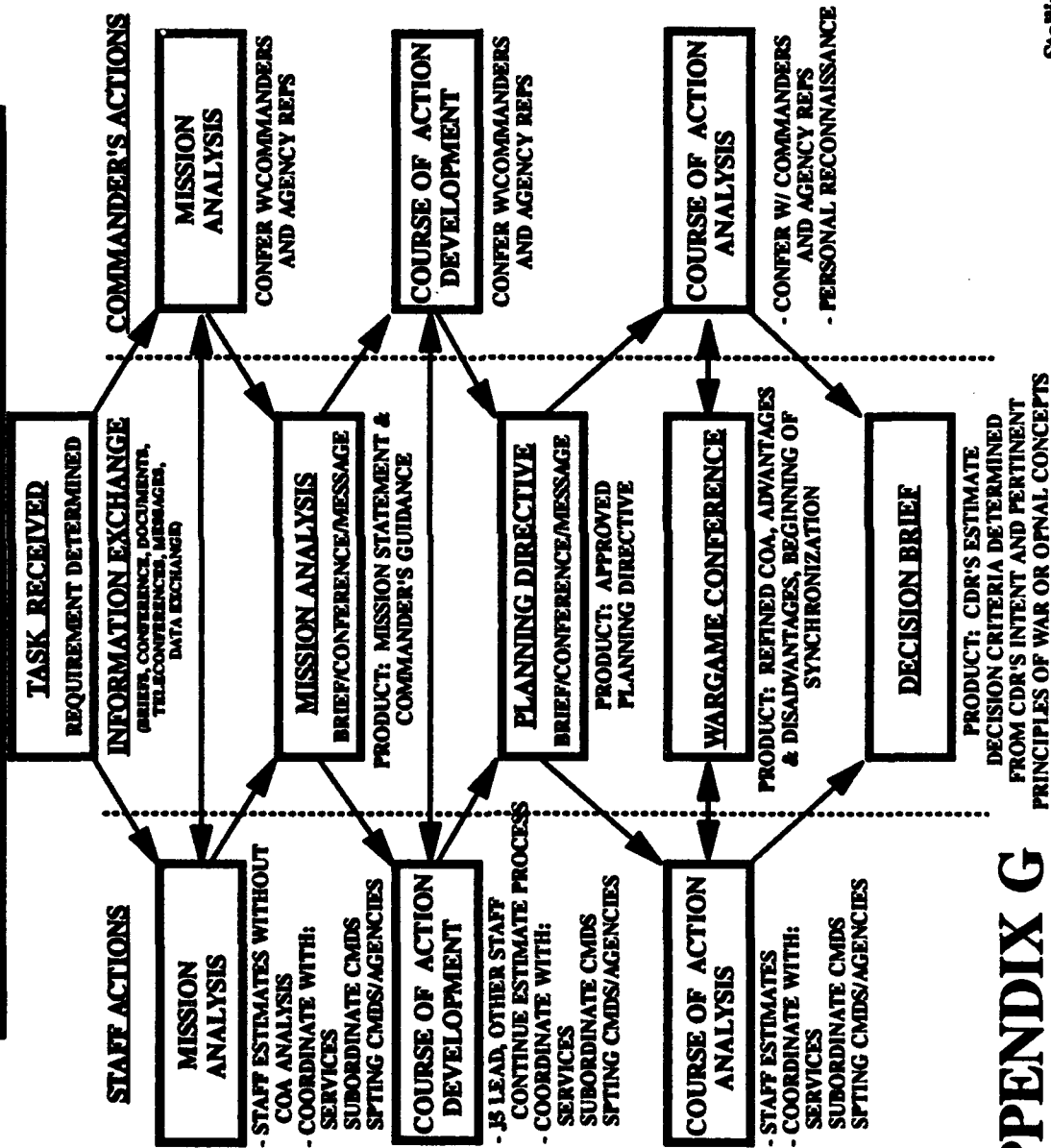
TACTICAL DECISIONMAKING PROCESS



APPENDIX F

ST 100-9

STALLINGS' OPERATIONAL DECISIONMAKING PROCESS



Stallings' Monograph

APPENDIX G

ENDNOTES

- ¹ Mendel, Colonel (Ret) William W. and Colonel Lamar Tooke, "Operational Logic: Selecting the Center of Gravity," Military Review, June 1993, p. 3.
- ² Schneider, James J., "Theoretical Paper No. 4, Vulcan's Anvil: The American Civil War and the Emergence of Operational Art," (Fort Leavenworth, KS, School of Advanced Military Studies, 16 June 1991), p. 60.
- ³ Armed Forces Staff College Publication (AFSC Pub) 2, Service Warfighting Philosophy and Synchronization of Joint Forces, (National Defense University, Armed Forces Staff College, Norfolk, VA, August 1992), p. II-3-13.
- ⁴ Summers, Harry, On Strategy, (New York, NY: Dell Publishing, June 1984), p. 74.
- ⁵ Mendel, Colonel William W. and Lieutenant Colonel Floyd T. Banks, Campaign Planning. Final Report, (Carlisle Barracks, PA, Strategic Studies Institute, U.S. Army War College, 4 January 1988), p. xi.
- ⁶ Compendium of Joint Doctrine Publication Abstracts, (Washington, DC: Joint Staff, October 1993), p. V-1.
- ⁷ Stallings, Major Patrick A. What to Do. What to Do? Determining a Course of Action at the Operational Level of War, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, School of Advanced Military Studies, 22 May 1991), Abstract.
- ⁸ Field Manual (FM) 101-5 (Final Draft), Command and Control for Commanders and Staff, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, July 1993), Appendix E. Previously, the course of action development process was not Army doctrine as it was published in CGSC Student Text 100-9; however, the final approval and publication of the revised FM 101-5 will incorporate a modified version of the process found in ST 100-9 making it officially Army doctrine.
- ⁹ Holder, Colonel L.D., "Educating and Training for Theater Warfare," Military Review, September 1990, p. 88.

¹⁰ Clausewitz, Carl von, On War, Ed. and Trans. by Michael Howard and Peter Paret, (Princeton, NJ: Princeton University Press, 1984), p. 141.

¹¹ Rampy, Major Michael R., Campaign Plan Formulation and the Deliberate Planning Process: Linking the Strategic and Operational Levels of War, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 11 April 1988), p. 3.

¹² Advanced Military Studies Program Course 4 Syllabus, "The Historical Practice of Operational Art," (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, Academic Year 93/94), p. 1.

¹³ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), (Washington, DC: The Joint Staff, August 1993), p. GL-15.

¹⁴ Ibid., p. GL-6.

¹⁵ Field Manual (FM) 100-7, The Army in Theater Operations, (Fort Monroe, VA: Headquarters, Training and Doctrine Command, 31 July 1990), p. 2-2.

¹⁶ Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, (Washington, DC: The Joint Staff, 1 December 1989), p. 60.

¹⁷ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. I-10.

¹⁸ Ibid., p. II-3.

¹⁹ JCS Pub 3-0, Doctrine for Unified and Joint Operations, (Washington, DC: The Joint Staff, January 1990) p. III-7. Also found in Mendel and Banks, Campaign Planning, p. x.

²⁰ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. II-2.

²¹ AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-3-0/1. FM 100-7, The Army in Theater Operations, p. 2-11.

²² Ibid., p. II-3-21.

²³ Mendel, William W. and Floyd T. Banks, "Campaign Planning: Getting It Straight," Parameters, September 1988, p. 52.

²⁴ FM 100-7, The Army in Theater Operations, p. 2-12.

²⁵ I became aware of this concept during reading prior to the research for this monograph. I have been unable to find a reference for it. It is not a doctrinally recognized concept. I however believe it is an important concept which should be known by future campaign planners.

²⁶ Joint Pub 5-00.1, JTTP for Campaign Planning (Initial Draft), p. I-6.

²⁷ Ibid., p. I-6/7.

²⁸ Woodward, Bob, The Commanders, (New York, NY: Simon and Schuster, 1991), p. 304.

²⁹ Field Manual 100-5, Operations, (Washington, DC: Headquarters Department of the Army, June 1993), Chapter 13. This chapter discusses the potential for army operations within the new doctrinal term, operations other than war.

³⁰ Mendel and Banks, "Campaign Planning: Getting It Straight," p. 49.

³¹ Armed Forces Staff College Publication (AFSC Pub) 1, The Joint Staff Officer's Guide, (National Defense University, Armed Forces Staff College, Norfolk, VA, 1993), p. 5-30.

³² Joint Pub 1, Joint Warfare of the US Armed Forces, (Washington, DC: The Joint Staff, 11 November 1991), p. 46.

³³ AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-3-28.

³⁴ Ibid., p. II -3-19.

³⁵ Joint Pub 5-0, Doctrine for Planning Joint Operations, (Washington, DC: The Joint Staff, 26 July 1991), p. II-16.

³⁶ Joint Pub 5-00.1, Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. III-23.

³⁷ Major Stallings uses the deliberate planning process of JOPES as representative of the operational decision-making process. Both Joint Pub 5-0 and AFSC Pub 1 list the following steps as part of the concept development phase of the deliberate planning process: (1) Mission Analysis; (2) Planning Guidance; (3) Staff Estimates; (4) Commander's Estimate; (5) CINC's Strategic Concept; (6) CJCS Concept Review. As noted by Major Stallings the same sequence is generally followed in crisis action planning but is significantly speeded up due to limitations of time. Joint Pub 5-0, p. III-5 provides a description of the concept development phase of the JOPES deliberate planning process.

³⁸ Stallings, Major Patrick A. What to Do, What to Do? Determining a Course of Action at the Operational Level of War, p. 25.

³⁹ Ibid., p. 27.

⁴⁰ Holder, "Educating and Training for Theater Warfare," p. 86. This article discusses the inexperience of senior and mid-grade officers at the operational level of war. "The senior leaders of all services, the men who must train the forces and change the interservice structure, are tested strategists and tacticians, but they are as inexperienced and untrained as anyone else on service at the operational level of war. The middle grade officers who must perform operational staff duties and eventually grow into positions of theater leadership have also studied and practiced tactical operations throughout their service and, unless they have done it on their own, they have not been taught or trained for theater operations."

⁴¹ After Action Review Briefing of Campaign Planning Exercise for Military Operations within Bosnia-Herzegovina conducted in February 1994 at the School of Advanced Military Studies. Briefing prepared and conducted by Major Grant Steffan and Major Jonathon Hunter.

⁴² Webster's New Collegiate Dictionary, (Springfield, MA: Merriam Webster, 1979), p. 41.

⁴³ Joint Pub 5-0, Doctrine for Planning Joint Operations, p. III-6.

⁴⁴ Ibid., p. I-17.

⁴⁵ Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, p. 235.

⁴⁶ AFSC Pub 1, The Joint Staff Officer's Guide, p. 6-24.

⁴⁷ Ibid., p. 6-25.

⁴⁸ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. III-26.

⁴⁹ Joint Pub 5-03.1, Joint Operation Planning and Execution System. Volume 1. Planning Policies and Procedures, (Washington, DC: The Joint Staff, 1991), p. III-12. AFSC Pub 1, The Joint Staff Officer's Guide, p. 6-26/27. Student Text 100-9, The Tactical Decisionmaking Process, (Fort Leavenworth, KS: U.S. Army Command and General Staff College), p. 2-8/9.

⁵⁰ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. C-1.

⁵¹ Ibid., p. II-3.

⁵² Joint Pub 1-02 defines an estimate as "an analysis of a foreign situation that identifies its major elements, an appraisal of capabilities, an analysis of an operation." The estimate of the situation is defined in the same publication as "a process of reasoning by which a commander considers all circumstances affecting the military situation and arrives at a decision as to the course of action to be taken in order to accomplish his mission." FM 101-5 (Final Draft) p. 5-2 describes the purpose of the estimate as "to collect and analyze relevant information for developing, within the time limits and available information, the most effective solution to a problem. It is as thorough as time and circumstance permit and is revised continuously. Staff estimates analyze the influence of factors within the staff officers particular field of interest on mission accomplishment. It results in conclusions and recommendations which identify feasible courses of action (COAs)."

⁵³ AFSC Pub 1, The Joint Staff Officer's Guide, p. 6-29.

⁵⁴ FM 101-5 (Final Draft), Command and Control for Commanders and Staff, p. 4-2.

⁵⁵ Ibid., p. 4-2.

³⁶ Ibid., p. 4-73 for example depicts the tactical level, deliberate decision-making process with staff estimates only included as a component of the staff's portion of mission analysis. The diagram does not reflect the fact that staff estimates continue through course of action development and analysis and into execution and are focused on making recommendations to the commander as to which course of action can be best supported.

³⁷ Joint Pub 5-0, Doctrine for Planning Joint Operations, p. I-17.

³⁸ Arnold, S.L. and David T. Stahl, "A Power Projection Army in Operations Other Than War," Parameters, Winter 1993-1994, p. 12/13. Mission creep is a relatively new term within the military, a brief discussion of its evolution and impact on operations in both Florida and Somalia is provided in this article.

³⁹ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. II-3.

⁴⁰ Ibid., p. III-7.

⁴¹ D'Amura, Ronald M., "Campaigns: The Essence of Operational Warfare," Parameters, Summer 1987, p. 43. "A one-page document . . . outlined the Allies' strategic war aim and specified general mission guidance for the Supreme Commander: 'Enter the continent of Europe, and . . . undertake operations aimed at the heart of Germany and the destruction of her armed forces.' . . . In order to achieve ultimate victory, he [General Eisenhower] focused all his efforts on a single guiding principle -- the destruction of the enemy's forces."

⁴² Arnold, Major General S.L., "Somalia: An Operation Other Than War," Military Review, December 1993, p. 34.

⁴³ Fleet Marine Field Manual (FMFM) 1-1, Campaigning, (Washington, DC: Headquarters U.S. Marine Corps, 25 January 1990), page 10.

⁴⁴ After Action Review discussions during campaign planning exercise for military operations within Bosnia-Herzegovina conducted in February 1994 at the School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS. AAR prepared and conducted by Major Grant Steffan and Major Jonathon Hunter.

⁴⁵ Joulwan, General George A., "Operations Other Than War: A CINC's Perspective," Military Review, February 1994, p. 8. "Most often, other US

agencies will have the lead in operations other than war and will be supported with US military resources." FM 100-5, Operations, p. 13-4. "In such operations [operations other than war], other government agencies will often have the lead. Commanders may answer to a civilian chief, such as an ambassador, or may themselves employ the resources of a civilian agency."

⁶⁶ FM 100-5, Operations, p. 6-1.

⁶⁷ Reed, James W. "Should Deterrence Fail: War Termination in Campaign Planning," Parameters, Summer 1993, p. 42.

⁶⁸ Metz, Steven, "Counterinsurgent Campaign Planning," Parameters, September 1989, p. 65.

⁶⁹ Reed, "Should Deterrence Fail: War Termination in Campaign Planning," p. 49-50.

⁷⁰ Stallings, Major Patrick A. What to Do, What to Do? Determining a Course of Action at the Operational Level of War, p. 3.

⁷¹ Estilow, Major Rex A., Campaign Planning: The Search for Method, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, School of Advanced Military Studies, 6 May 1991), p. 9.

⁷² Clausewitz, On War, p. 183.

⁷³ Ibid., p. 137-140.

⁷⁴ Ibid., p. 90.

⁷⁵ Ibid., p. 486.

⁷⁶ Jomini, Antoine Henri, The Art of War, Edited by Brigadier General J.D. Hittle, Roots of Strategy. Book Two (Harrisburg, PA: Stackpole Books, 1987), p. 460.

⁷⁷ Jomini, The Art of War, p. 461.

⁷⁸ FM 101-5 (Final Draft), Command and Control for Commanders and Staff, p. E-5 thru E-19.

- ⁷⁹ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. III-9 and II-10.
- ⁸⁰ Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, p. 259.
- ⁸¹ Warden, Colonel John A., The Air Campaign, (Washington, DC: Pergamon-Brassey's, 1989), p. 112 - 113. He cites the first three, I added the fourth.
- ⁸² AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-2-6.
- ⁸³ Saxman, Lieutenant Colonel John B., The Concept of Center of Gravity: Does It Have Utility in Joint Doctrine and Campaign Planning, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, School of Advanced Military Studies, 28 May 1992), p. 4-24. This monograph compares the concepts of center of gravity associated with Clausewitz, physics, joint doctrine, and the doctrine of the Army, Air Force, Navy, and Marines.
- ⁸⁴ Filiberti, Major Edward J., Developing a Theory for Dynamic Campaign Planning, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, School of Advanced Military Studies, 26 April 1988), p. 22-23.
- ⁸⁵ Jomini, The Art of War, p. 467.
- ⁸⁶ Filiberti, Developing a Theory for Dynamic Campaign Planning, p. 23-24.
- ⁸⁷ Jomini, The Art of War, p. 461.
- ⁸⁸ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. III-34.
- ⁸⁹ FM 90-2, Battlefield Deception, (Washington, DC: Headquarters Department of the Army, June 1993), p. 2-5. Although titled "Battlefield Deception," this manual discusses both tactical and operational level deception planning.
- ⁹⁰ Filiberti, Developing a Theory for Dynamic Campaign Planning, p. 25.

⁹¹ FM 90-2, Battlefield Deception, p. 2-1/2 and 4-8.

⁹² FM 101-5 (Final Draft), Command and Control for Commanders and Staff, p. E-8.

⁹³ Krepinevich, Andrew F., The Army and Vietnam, (Baltimore: The Johns Hopkins University Press, 1988), p. 4-7.

⁹⁴ See ST 100-9, The Tactical Decisionmaking Process, pages 2-4 thru 2-6; see also Wass de Czege, Colonel Huba, "Understanding and Developing Combat Power," (School of Advanced Military Studies, U.S. Army Command and General Staff College, locally published paper dated 10 February 1984); and FM 101-5 (Final Draft), Command and Control for Commanders and Staff, Appendix E-5 thru E-7. The methodology outlined in ST 100-9 considers the physical comparison of the opposing forces by assigning values to both U.S. and Soviet units based upon their comparative equipment and organizations. Aggregate scores are computed for each side based upon the forces available and the selected scheme of maneuver. The goal is to achieve favorable force ratios at the decisive place and time. This methodology is strictly based upon the physical aspects of both forces and fails to include consideration of the moral aspects associated with leadership, quality of the force, training, surprise, etc. The Wass de Czege methodology includes both moral and physical aspects of force comparisons. This model divides combat power into the elements of firepower, maneuver, protection, and leadership and subjectively evaluates the physical and moral components of the sub-elements of each. The model does not provide a method for quantification or qualitative comparison. Finally, the model presented in the new draft FM 101-5 attempts to combine the value of both the above process by including a strictly quantifiable force ration for initial estimates of relative combat power and then refining this estimate by consideration of the intangible factors which affect combat power. The focus of this process is to identify friendly strengths useful against enemy weaknesses and enemy strengths against friendly weaknesses in order to deduce vulnerabilities for each force. This process does attempt to include the moral factors of warfare. Filiberti, Developing a Theory for Dynamic Campaign Planning, Appendix C includes a good summary of each of the first two procedures and also includes the Quantified Judgment Model (QJM) developed by Colonel (Ret) Trevor N. Dupuy.

⁹⁵ The value of timelines were determined during the after action review of the China campaign planning exercise conducted within Seminar One, the School of Advanced Military Studies, U.S. Army Command And General Staff College, Annual Year 1993/1994.

⁹⁶ Joint Pub 3-0, Doctrine for Unified and Joint Operations, page III-7.

⁹⁷ FM 100-5, Operations, p. 6-9.

⁹⁸ Joint Pub 5-00.1, JTTP for Campaign Planning (Revised Initial Draft), p. II-8.

⁹⁹ FM 100-5, Operations, p. 6-9.

¹⁰⁰ FM 100-5, Operations, p. 6-8. The concept of "culmination has both offensive and defensive application. In the offense the culminating point is the point in time and location when the attacker's combat power no longer exceeds that of the defender. A defender reaches culmination when he no longer has the capability to go on the counteroffensive or defend successfully."

¹⁰¹ Clausewitz, On War, p. 570.

¹⁰² FM 100-7, The Army in Theater Operations, p. 2-19.

¹⁰³ Based upon class discussion led by MAJ Mike Schneider in Seminar One, School of Advanced Military Studies, U.S. Army Command and General Staff College during Spring Term, Annual Year 1993-1994.

¹⁰⁴ AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-4-6.

¹⁰⁵ Ibid., p. II-3-22.

¹⁰⁶ Based upon presentation by General Maddox, CINC U.S. Army Europe to School of Advanced Military Studies, U.S. Army Command and General Staff College, 1 March 1994.

¹⁰⁷ Palmer, Major Peter J., Operational Main Effort and Campaign Planning, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, School of Advanced Military Studies, 7 May 1991), p. 7-14. This monograph examines the main effort concept as an element of campaign planning. The research concludes that the main effort concept is supported by theory, history, and doctrine. The study did not address the application of the main effort concept to operations other than war and interagency operations.

¹⁰⁸ AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-3-24.

¹⁰⁹ Joint Pub 5-00.1, JTTP for Campaign Planning, p. III-37.

¹¹⁰ AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, p. II-3-16/17.

¹¹¹ FM 101-5 (Final Draft), Command and Control for Commanders and Staff, E-1 thru E-3. This discussion is largely based upon the review process of tactical courses of action described in this manual.

¹¹² Stallings, Major Patrick A. What to Do, What to Do? Determining a Course of Action at the Operational Level of War, p. 2.

¹¹³ Stallings, Major Patrick A. What to Do, What to Do? Determining a Course of Action at the Operational Level of War, p. 43.

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