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**The Heart of Operational Art: Translating
Strategic Objectives into Tactical Missions**

**A Monograph
by
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Infantry**



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This monograph examines the role of the operational level of war to translate strategic objectives into tactical missions. Evidence exists in both the joint and specific service doctrines which suggests that there is a lack of commonality in the language used to express these ends. It appears that to communicate military ends in a joint arena, the operational commander is confronted with the obstacle of a multi-language environment with numerous dialects.

Theory provides a construct consisting of two primary elements - ends and levels of war. Specific ends are associated with a given level of war. These ends have several characteristics. They are dual linked between the levels of war, having a directive and supportive nature. The directive nature provides the end direction or purpose while the supportive nature reflects the degree of effectiveness sought. These ends are associated with four levels of

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American Joint and service specific doctrines present the operational commander with the dilemma of being able to translate strategic military ends into tactical ends. This problem results from a lack of a common lexicon to express military ends and terms which have common usage but different definitions between the services. Similar to theory, the doctrines specifically recognize the strategic, operational and tactical levels of war but do imply the fourth - policy.

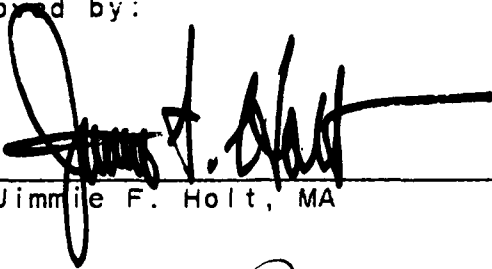
The study concludes that the heart of operational art is the ability to translate strategic objectives into tactical missions. This capability requires an understanding of the nature of military ends, the relationship between ends and the levels of war and the languages and dialects used in the joint and service doctrines.

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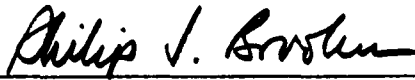
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ABSTRACT

THE HEART OF OPERATIONAL ART: TRANSLATING STRATEGIC OBJECTIVES INTO TACTICAL MISSIONS by MAJ William F. Crain, USA, 50 pages.

This monograph examines the role of the operational level of war to translate strategic objectives into tactical missions. Evidence exists in both the joint and specific service doctrines which suggests that there is a lack of commonality in the language used to express these ends. It appears that to communicate military ends in the joint arena, the operational commander is confronted with the obstacle of a multi-language environment with numerous dialects.

Theory provides a construct consisting of two primary elements - ends and levels of war. Specific ends are associated with a given level of war. These ends have several characteristics. They are dual linked between the levels of war, having a directive and supportive nature. The directive nature provides the end direction or purpose while the supportive nature reflects the degree of effectiveness sought. These ends are associated with four levels of war - policy, strategy, operations and tactics.

American Joint and service specific doctrines present the operational commander with the dilemma of being able to translate strategic military ends into tactical ends. This problem results from a lack of a common lexicon to express military ends and terms which have common usage but different definitions between the services. Similar to theory, the doctrines specifically recognize the strategic, operational and tactical levels of war, but do imply the fourth - policy.

The study concludes that the heart of operational art is the ability to translate strategic objectives into tactical missions. This capability requires an understanding of the nature of military ends, the relationship between ends and the levels of war and the languages and dialects used in the joint and service doctrines.

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Part I - Introduction

The past decade witnessed a renaissance in American military thought. Theories of war are being reexamined, doctrine refined and lessons gleaned from our experiences in Panama, the Persian Gulf, Libya and Grenada. Coupled with the recent balance of power shifts in Europe, the whole American way of war is under intense examination. The result is that the art and science of war has returned as a major subject of study for many, both in and out of uniform.

Among the numerous concepts emerging during this revival is the recognition of three levels of war - strategic, operational and tactical. The operational level is now an intermediate level between strategy and tactics and serves to link strategic ends to tactical ends.

However, the doctrinal language available to the operational commander appears to confound the process of translating strategic military ends into tactical ends. How? The joint and specific service doctrines are not consistent in their description of the types of military operations and the missions their respective forces execute. In essence, it a multi-language environment with numerous dialects. Consequently, the operational commander does not have a common language

between the various services to translate strategic ends into tactical ends.

The purpose of this paper is to determine how, if at all, should joint and service doctrines be improved to enhance the translation of strategic ends into tactical ends. To achieve this purpose, a threefold analysis is used. First, the theoretical propositions are examined to provide a construct for translating strategic ends into tactical ends. Second, a doctrinal analysis is conducted to identify any model for linking strategic and tactical ends. Additionally, a comparison of joint and specific service doctrines will identify the types of operations and missions from each perspective. Particular focus will be made to understanding the context of the doctrine from the service's point of view. Finally, an analysis of these doctrines will be conducted with the intent of developing a common language for expressing operational objectives or missions.

Part II - Theoretical Construct

A theoretical construct for translating strategic military ends into tactical ends can be developed by conducting a four step analysis. Step one provides a broad foundation by identifying the theoretical

propositions regarding military ends and the levels of war. Step two expands on the nature of military ends while the third step examines the framework for the levels of war. The final step is a synthesis of the ends and levels to identify major themes and to provide a theoretical construct for translating strategic military objectives into tactical missions.

The Foundation

To establish a theoretical foundation, 'military end' and 'level of war' must be defined and their relationship identified. Neither of these terms are specifically defined in any theoretical work or doctrinal publication. Consequently, I will initially define these terms as follows:

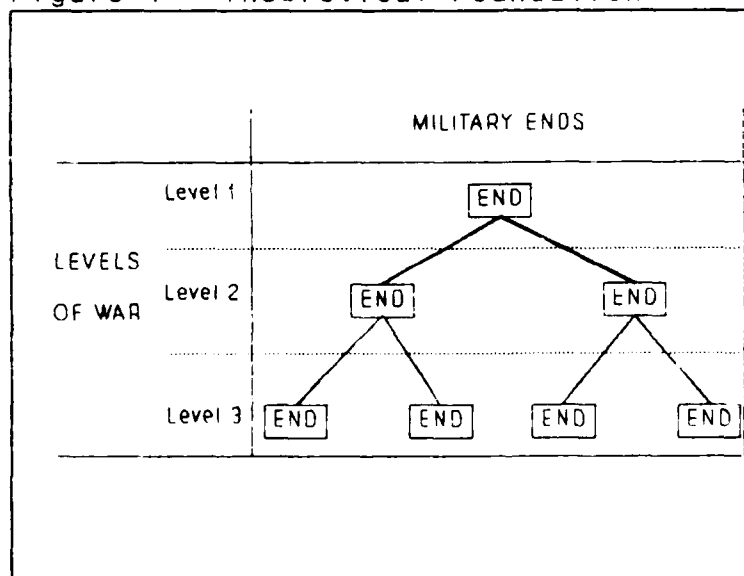
Military End: The result desired from activities conducted by armed forces.

Level of War: A grouping of related activities conducted by armed forces directed towards achievement of a common military end.

Clausewitz refines these definitions by describing war as a "duel on a larger scale."¹ Consequently, the activities conducted by armed forces refer to the duel or duels between warring parties. Each duel has a specific military end at one level of war, while a group of related duels have a common end at higher level.

Theory establishes a two dimensional, hierarchial relationship between military ends and the levels of war. In the first dimension are the military ends; and in the second dimension, the levels of war. The hierarchial arrangement of military ends is an inverted dendritic resembling the branches of an upside down tree, while that of the levels of war is linear.² This relationship is portrayed in figure 1.

Figure 1 - Theoretical Foundation



Accordingly, specific levels are associated with their respective ends; and ends at the lower levels of war are subordinate to and supportive of those ends

associated with the higher levels. With this broad foundation, attention now turns to examining military ends.

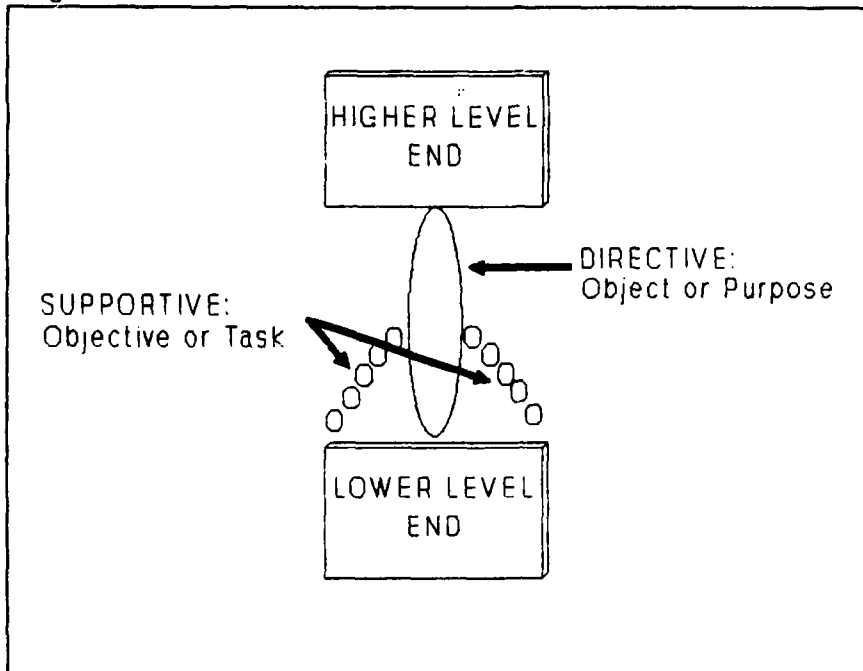
Military Ends

Military ends tend to have three distinct characteristics. First, they have a dual linkage; second, the linkage expresses both the intent and the degree of effectiveness desired; and third, the end focuses on the domains of battle. Each of these traits are examined separately.

The linkage between ends is dual natured - it is both directive and supportive. The link is directive in that a higher end provides direction to a lower level end. It is also supportive because the activities conducted to achieve a lower level end contribute to accomplishment of a higher end. Clausewitz, J.F.C. Fuller, and Julian Corbett are in close agreement on the dual nature of ends. They describe the directive nature of the link as the object or purpose of an end.³ The supportive nature is identified with the objective or task.⁴ Martin Van Creveld refers to this linkage simply as "who did what [supportive] and why [directive]."⁵ In all cases, the directive element of the linkage dominates the supportive element to provide unity of purpose.⁶ This dual linkage provides greater insight into the

relationship between ends and provides the basis for making a clear distinction between the object and the objective as illustrated in figure 2.

Figure 2 - Duel Linked Ends



The directive link, or object, expresses intent. The intent is expressed in a positive, negative and or neutral sense. The positive sense aims to impose by promoting or improving an end. The negative sense seeks to resist external pressure by protecting or preventing the failure of an end. The neutral sense simply tries to maintain an end. Conversely, opposing ends have these same traits. Conflict normally results from a positive end being sought while peace or mutual

coexistence generally prevails when all parties pursue neutral or negative ends. Clausewitz recognizes the positive by stating that "force ... is thus the means in war; to impose our will on the enemy is its object."⁷; and the negative object as causing the enemy to renounce the policy pursued.⁸

Fuller identifies both the positive and negative military object in war as compelling "the enemy to accept the policy in dispute."⁹ While the neutral military object is not specifically identified, Clausewitz alludes to it as the only "consideration [which] can suspend military action."¹⁰ Additionally, Fuller and Liddel Hart imply this neutral object's existence when looking beyond the immediate conflict or war, as a 'better state peace.'¹¹

Presuming that a better state of peace is achieved, the neutral military object seeks to maintain its associated policy. In effect, the object expresses a positive, neutral or negative intent - it seeks to impose, maintain or resist. Figure 3 illustrates this interaction from the friendly perspective.

Figure 3 - Military Objects

		ENEMY OBJECT		
		+	~	-
FRIENDLY OBJECT	+	IMPOSE PROMOTE OR IMPROVE		
	~	RESIST PROTECT	MAINTAIN	
	-	OR PREVENT		

The supportive link, or objective, expresses the degree of effectiveness desired. This effectiveness specifies "some definite point which we wish to get from the enemy or prevent his occupying, or some part of his strength which we wish to destroy."¹² In discussing the offense and defense, Clausewitz describes this effectiveness as "the preservation [of one's own force] and destruction of the enemy forces is the substance but not the ultimate object."¹³ Additionally, both Clausewitz and Fuller use the terms, conquest, defend, seizure, occupy, and mislead to define the degree of effectiveness desired.¹⁴ Generally speaking, it appears that the term used to express the degree of effectiveness desired is a verb that lends itself to quantifiable measurement.

The focus of the object and objective lies in physical, moral or mental domain. In the physical realm, the focus is on the means. Clausewitz and Fuller specifically refer to the enemy's armed forces.¹⁵ The focus in the moral domain is the will to or ends.¹⁶ For the mental domain, the focus is on the ways, or that which links the means to the ends. Clausewitz identifies this with occupying the enemy's country to deny him the ability to raise and employ an army.¹⁷ Fuller refers to the "material elements of aggression and other sources of existence of the hostile army."¹⁸ James Schneider, the military theorist at the US Army School of Advanced Military Studies, succinctly identifies the mental domain as the cybernetics.¹⁹ From this focus, it is possible to tie both the object and objective together as an end sought.

In theory, the end sought is composed of an object and an objective. The object is directive and provides the purpose. The objective is supportive and specifies the degree of effectiveness desired. Both focus on a particular domain. In the case of the object, the domain is expressed in broad or general terms as it relates to the higher level end being sought. For the objective, the domain is more specific and may be directly or indirectly related to, or a subelement of

Figure 4 - State Ends

<u>OBJECT</u>	<u>OBJECTIVE</u>
Security	Physical Survival Territorial Integrity Political Independence
Welfare	Economic Welfare General Well Being
Ideology	Set of Beliefs
Prestige	National Image
Peace	Deter War or Conflict
Power	National Power

When expressed through the government of a state, these national ends become policy.²² Recognizing that war is a act of policy, it follows that military ends are subordinate or equal to and determined by national policy.²³ The political object determines the military objective.²⁴ Applying the expression $END = OBJECT + OBJECTIVE$ to national and military ends, we have the following:

Policy END = State OBJECT + State OBJECTIVE.
Military END = Military OBJECT + Military OBJECTIVE.
Military \leq Policy.

Therefore,

Military END = Policy or Military OBJECT +
Policy or Military OBJECTIVE.

Two points should be noted at this juncture.

First, military ends are generally associated with the military instrument of policy, just as economic and political ends are associated with those instruments. Second, an extension of the linkage implies that the same dual nature exists between the overall military end and lesser military ends. Consequently, attention now turns to subordinate military ends.

Lower level military ends are associated with the subordinate elements of military power. Within the armed forces, these elements are the land, sea and air powers which operate in a joint or independent environment. In joint operations these forces seek accomplishment of military objectives.²⁵ In independent operations, each element seeks to achieve a military objective or an objective associated with that particular element of power or medium (i.e., land, sea or air).²⁶ It must be noted that a specific service can conduct independent operations while operating in more than one medium. Such is the case with naval vessels and naval air, or army ground forces and army aviation, or marine ground forces and marine air. Consequently, these lesser military ends can be expressed as follows:

Military END = Military OBJECT + Military OBJECTIVE.

Joint End = Joint OBJECT + Joint OBJECTIVE.
Independent END = Independent OBJECT +
Independent OBJECTIVE.
Independent or Joint < Policy, but
Independent \leq Joint \leq Military.

Therefore,

Joint END = Military or Joint OBJECT +
Military or Joint OBJECTIVE, and

Independent END = Military, Joint or Independent OBJECT
+ Military, Joint or Independent OBJECTIVE.

Theory carries this construct a step further for
each of the components of military power.

Specifically, Fuller states that "the object of an army
is to destroy an army; of a fleet, to destroy a fleet;
of an air force, to destroy an air force."²⁷

Consequently, the we can extend our expression of ends
to:

Ground END = Ground OBJECT + Ground OBJECTIVE.
Sea END = Sea OBJECT + Sea OBJECTIVE.
Air END = Air OBJECT + Air OBJECTIVE.
Ground, Sea or Air \leq Independent or Joint, and
Ground, Sea or Air = Independent.

Therefore,

Ground END = Joint or Independent Ground OBJECT +
Joint or Independent Ground OBJECTIVE.
Sea END = Joint or Independent Sea OBJECT +
Joint or Independent Sea OBJECTIVE.
Air END = Joint or Independent Air OBJECT +
Joint or Independent Air OBJECTIVE.

Collectively, these theoretical ends can be
illustrated to show their relationship and dual
linkage, qualitative characteristics.

Figure 5 - Theoretical Ends

	OBJECT (+ N -)	OBJECTIVE (High<-->Low)
POLICY	State	State
MILITARY	Policy	Policy
	Military	Military
JOINT	Military	Military
	Joint	Joint
INDEPENDENT	Military	Military
	Joint	Joint
	Independent	Independent
GROUND	Joint	Joint
	Independent Ground	Independent Ground
SEA	Joint	Joint
	Independent Sea	Independent Sea
AIR	Joint	Joint
	Independent Air	Independent Air

+ N -: Reflects Positive, Neutral or Negative Intent
 High<-->Low: Reflects Degree of Effectiveness

With this foundation of theoretical ends established, attention now turns to examining the theoretical levels of war.

Levels of War

Since the writings of Sun Tzu, military theorists have described various levels for the conduct of war.

While agreement is lacking regarding the precise distinction of and between these levels, all theorists subscribe to a some sort of hierarchy. To examine this aspect, the writings of several military theorists were analyzed. These works were first analyzed to determine the authors definition of the various levels. Next, the composite of these findings were correlated to identify commonality in definition between authors. From these commonalities, conclusions were drawn to establish a theoretical construct for the levels of war.

Clausewitz, Jomini, Fuller, Corbett and the Soviets all describe levels of war. Common to all the descriptions are the purpose, activities and the relationship within the hierarchy of each level of war. A synopsis of these sources is provided as appendix A.

Collectively, three major themes emerge from these writings. First, there are several levels of war. Second, the hierarchy of levels is vertically linear; the higher level directs the lower and the lower supports the higher. Third, each level is distinguished from the others by the end it seeks to accomplish.

Of the nine levels of war described by the authors, four distinct levels exist. Descriptively, these levels are national policy, war in total,

operations within the war and combat within operations. Categorically, these levels are policy, strategy, operations and tactics. Policy is associated with the nation or state. Strategy refers to war in total and encompasses grand strategy, major strategy and strategy.²⁸ Operations incorporate minor strategy, operational and grand tactics.²⁹ Focus at this level is on major military activities within the war leading up to the physical engagement in combat. Tactics refers to the level which includes both tactics and minor tactics with actual combat being its distinguishing characteristic.³⁰ Therefore, theoretically, four levels of war exist - policy, strategy, operations and tactics.

All the theoretical writings examined agree that there is a linear, hierarchial relationship between the levels of war. From highest to lowest, this relationship is policy - strategy - operations - then tactics. Each level directs the lower level by providing an object or purpose to achieve. In turn, the lower level supports the higher level by accomplishing objectives or tasks. The relationship between these theoretical levels of war is illustrated in figure 6.

Figure 6 - Theoretical Levels of War

LEVEL	OBJECT	OBJECTIVE
POLICY	National Object (F:69) Political Object (C:81) Statesman's End (J:24)	Political Aims of War (S:218)
STRATEGY	Secures Political Object (F:107 - 108) War Object (C:128)	Policy Determines (S:218) Political Object Determines (JC:327)
OPERATIONS	Military Object (F:107) Destruction of Enemy's Plan (F:108)	Strategy Determines (S:218) Operational Objectives (JC:327)
TACTICS	Destruction of Enemy (C:227) Partial Object is to Destroy Enemy Army, Fleet, Air Forces (F:109 - 110)	Operations Determines (S:140)

(:) - Source and page number from Appendix A synopsis.

Theoretical Synthesis of Ends and Levels of War

A theoretical synthesis is achieved by integrating the ends and the levels of war. This is done by first establishing the directive link, or object, between the different levels. Next, those supportive linkages, or objectives, are tied to their corresponding objects. The result is a theoretical construct for translating strategic ends into tactical ends.

The object provides direction for each level of war. At the policy level the object is that of the state. Specifically, the policy object relates to the security, welfare, ideology, prestige, peace and power of the nation. The strategic level focuses on achieving a particular policy object or objects for the benefit of the nation. At the operational level effort is directed towards a military object which benefits the armed forces as a whole. The tactical level has a joint or independent object which benefits only a portion of the armed forces. Thus, the object at each level directs that of the lower level.

Objectives are supportive of the object for each level of war. Tactical objectives are joint or independent ground, sea or air objectives which contribute to achieving the tactical object. The military object at the operational level is supported by military, joint or independent objectives. Political or military objectives support the strategic object. At the policy level, state objectives support the policy object. Collectively, these objectives and their associated objects provide a theoretical construct for translating strategic ends into tactical ends. This construct is illustrated in figure 7.

Figure 7 - Theoretical Construct

LEVEL	OBJECT	OBJECTIVE
POLICY	State Object	State Objectives
STRATEGY	Policy Object	Policy or Military Objectives
OPERATIONS	Military Object	Military, Joint or Independent Objectives
TACTICS	Joint or Independent Object	Joint or Independent Ground, Sea or Air Objectives

The theoretical construct serves as the foundation for a doctrinal model which translates strategic ends into tactical ends. Within this framework, we now turn to the doctrinal construct.

Part III - Doctrinal Construct

A doctrinal construct for translating strategic ends into tactical ends can be developed using a methodology similar to the one employed for the theoretical construct. First, the doctrinal foundations are established regarding military ends and the levels of war. Next, military ends are analyzed in

detail followed by an examination of the levels of war. Finally, a synthesis of the ends and levels is made to produce a doctrinal construct for translating strategic ends into tactical ends.

The Foundation

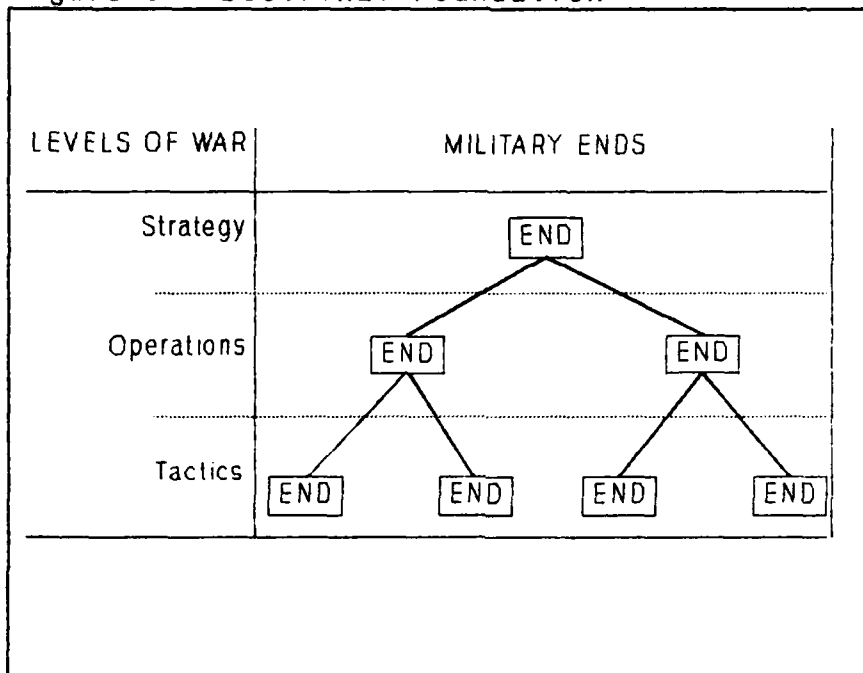
Current United States military doctrine provides a very broad foundation regarding military ends, the levels of war and their relationship. Several terms are used to describe military ends (missions, tasks, objectives, intent, goals, or aims) and three levels of war are specifically identified (strategic, operational and tactical). These ends and levels will be discussed in greater detail in the following sections. At this point; however, only the relationship between military ends and the levels of war can be doctrinally established.

The Joint Chiefs of Staff Publication (JCS Pub) 3-0 (Final Draft) Doctrine for Joint Operations, generally describes the relationship between military ends and the levels of war. In describing the levels of war, the document states:

Whether limited or general, wars are prosecuted at three levels: strategic, operational, and tactical. Understanding the activities that occur at each level will assist in organizing and training for war, assigning responsibilities for warfighting, allocating resources, and enhancing unity of effort.³¹

From this description a broad doctrinal foundation relating military ends to the levels of war is established and illustrated in figure 8.

Figure 8 - Doctrinal Foundation



With this doctrinal foundation, we now focus on its military ends.

Military Ends

Joint doctrine describes military ends as missions and objectives. JCS Pub 1 provides two definitions for mission. The first defines it as:

The task, together with the purpose, which clearly indicates the action to be taken and the reason therefor. In common usage,

especially when applied to lower military units, a duty assigned to an individual or unit; a task.³²

The second definition is:

A clear, concise statement of the task of the command and its purpose.³³

Objective is defined as "the physical object of the action taken ... which is essential to the commander's plan."³⁴ Additionally, JCS Pub 3-0 equates military objective to military end.³⁵ While these terms are not synonymous, a military end in joint doctrine is described as a mission or an objective.

Several levels of military ends are described in the joint doctrine. JCS Pub 1, DOD Dictionary of Military and Associated Terms, defines two of these ends, national objectives and strategic mission. At the highest level are national objectives which are the "fundamental aims, goals, or purposes of a nation ... ends - toward which a policy is directed."³⁶ The purpose of a strategic mission is to destroy or disintegrate the enemy's war-making capacity and his will to make war.³⁷ JCS Pub 3-0 also identifies several levels of objectives. Determining security objectives and establishing national military objectives are associated with the national or alliance level.³⁸ Accomplishing strategic objectives and establishing operational objectives are associated with

campaigns and major operations.³⁹ The ends sought by battles and engagements are the accomplishment of military objectives assigned to tactical units and the achieving of combat objectives.⁴⁰ An attempt to illustrate the relationship between these joint doctrinal ends is provided in figure 9.

Figure 9 - Joint Doctrinal Ends

LEVEL	OBJECTIVE
NATION	National Objectives
NATION OR ALLIANCE	Determines Security Objectives Establishes National Military Objectives
CAMPAIGNS & MAJOR OPERATIONS	Achieves Strategic Objectives/Missions Establishes Operational Objectives
BATTLES & ENGAGEMENTS	Accomplishes Military Objectives Achieves Combat Objectives

With this joint doctrinal framework for military ends, attention now turns to the specific service doctrines.

Military ends are described in each of the service doctrines. As in the joint doctrine, the terms mission and objective are used to define the military end. These terms are examined to compare the similarities and differences between the services and the joint doctrine.

The term mission lacks common definition between the services. First, US Army doctrine has two definitions; one which is task oriented:

The primary task assigned to an individual, unit, or force. It usually contains the elements of who, what, when where, and the reason therefor, but seldom specifies how.⁴¹

and another which is both task and purpose oriented:

2. A clear, concise statement of the task (or tasks) to be accomplished by the command and the purpose to be achieved.⁴²

Second, US Naval doctrine fails to define mission and uses the term only when referring to the mission of the Navy as a whole.⁴³ Third, while not specifically defining the term, US Air Force doctrine refers to mission as describing the objective attained by employing forces.⁴⁴ Finally, the US Marine Corps defines mission as "the task to be accomplished and the reason, or intent."⁴⁵ From these definitions, it appears that the second Army definition and the Marine Corps definition agree with the joint doctrine's definition of mission. Additionally, the Air Force definition has some similarity to the other doctrines while the Navy's usage of the term lacks relevance to the other services.

The term objective also lacks common usage by all services. The Joint and Army doctrines are in agreement defining the term as "the physical object of

the action taken."⁴⁶ Naval doctrine fails to define objective and refers to the term only in the context of national or overall service actions.⁴⁷ The Air Force defines objective as "what a military action intends to accomplish and normally describes the nature and scope of an operation."⁴⁸ Somewhat similar to the Air Force, Marine Corps doctrine describes the term as those conditions which will achieve the envisioned end state.⁴⁹ A comparison of these definitions reveals that the Joint and Army doctrines agree. Additionally, the Air Force and Marines have a similar context, but different from the Joint and Army usage. As with the term mission, the Naval context of objective is distinctly different from the other services.

Several points about doctrinal ends should be noted at this juncture. First, there is a lack of clarity in defining military ends. The doctrines recognizes the terms objective and mission but fails to distinguish or identify the relationship between them. Secondly, several additional yet undefined terms are used interchangeably to describe the ends; specifically, object, goals, aims, purposes and tasks. Whether these discrepancies are significant not may be purely academic; however, we must recall that theory makes a point of discussing the nature of military ends distinguishing between and describing their

relationships in great detail. With this broad doctrinal framework of military ends, we now turn to the doctrinal levels of war.

Levels of War

Both the Joint and specific service doctrines acknowledge the existence of three levels of war. However, there are differences. Not all the written and approved doctrines officially recognize these specific levels.

The strategic, operational and tactical levels of war are officially recognized by the Joint, Army, Air Force and Marine Corps doctrines. Additionally, these doctrines agree on the objective of each level. National or alliance policy objectives are secured at the strategic level. Military objectives which support the policy objectives are achieved at the operational level. Combat objectives are accomplished at the tactical level to support the military objectives.

Naval doctrine officially recognizes two levels of war, but implies a third. Both the strategic and tactical levels are addressed in Navy's doctrine. Strategy seeks to achieve national objectives.⁵⁰ Addressing the tactical level, Navy doctrine describes the combat objectives as naval warfare tasks which "must address the accomplishment of the Navy's

functions."⁵¹ These "naval functions" are actions which achieve the military objectives.⁵² As such, there is an implication that an intermediate level between strategy and tactics exists in the Navy's doctrine.

Of particular interest is the fact that all the doctrines acknowledge that the apex of war is not the strategic level. Each of the doctrines recognize that national policy occupies this supreme position and provides direction to strategy for the prosecution of war.⁵³ While not specifically stated, the implication is clear - policy is the highest level of war ranking above strategy.

Doctrinal Synthesis of Ends and Levels of War

A synthesis of the joint and service doctrines provides a doctrinal construct for translating strategic ends into tactical ends. This construct integrates the military ends and levels of war identified in the Joint and specific service doctrines. Because the definition of terms, 'mission' and 'objective' vary between the services, the reader is cautioned to maintain the perspective and context within which each service uses these words to describe military ends. Additionally, where a particular service does not officially recognize a level of war,

an attempt has been made to relate those corresponding ends to the appropriate level. Finally, policy has been included as a level since it is implicit in all the doctrines examined. The result of this synthesis is provided on the following page and serves as a basis for analysis to develop practical operational model for translating strategic ends into tactical ends.

Figure 10 - Doctrinal Military Ends and Levels of War

LEVEL	JOINT	ARMY	NAVY	AIR FORCE	MARINES
<u>POLICY</u>	Establish Policy Objectives (1-2)	Develop National Policy Objectives (2-3)	Identify National Policy Objectives (1-2-1)	Develop National Security Policy (1-2)	Policy Aims (19)
<u>STRATEGY</u>					
<u>Achieves:</u>	National Policy Objectives (1-2)	Policy Objectives (13)	National Objectives (1-2-2)	National Security Objectives (1-2)	National Policy Objectives (22)
<u>Through:</u>	Strategic Objectives (1-5)	Strategic Military Objectives (13)	Naval Military Mission (1-3-1)	Strategic Military Objectives (1-3)	Strategic Objectives (22-23)
<u>OPERATIONS</u>					
<u>Achieve:</u>	Strategic Objectives (1-5)	Strategic Goals (13)	Military Mission (1-3-1)	Strategic Military Objectives (3-2)	Strategic Objectives (23)
<u>Through:</u>	Operational Objectives (1-5)	Operational Objectives (13)	Naval Functions (1-3-1)	Air Force Missions (3-3)	Tactical Results (23)
<u>TACTICS</u>					
<u>Achieves:</u>	Military Objectives (1-6)	Operational Objectives (13)	Naval Functions (1-4-2)	Mission Objectives (3-3)	Tactical results (23)
<u>Through:</u>	Combat Objectives (1-6)	Combat (14)	Naval Warfare Tasks (1-4-2)	Tasks and Specialized Task (vi, 3-4)	Combat (23)

(): Page reference from appropriate joint or service manual (JCS Pub 3-0, FM 100-1, NWP 1, AFM 1-1 and FMFM 1.

Part IV - The Operational Translator

The purpose of an operational translator is to communicate strategic military ends into tactical ends. This tool must be theoretically sound, doctrinally correct and have practical utility to its user. The theoretical construct developed earlier established the both the nature of military ends, the levels of war and the relationship between the two. From this theoretical foundation, a doctrinal construct was developed to focus on the Joint and specific services doctrines for the broad translation of strategic ends into tactical ends. The remaining step now is to lend practical utility to an operational translator. To achieve this end, the specific joint and service objectives are analyzed to associate them with the appropriate level of war. The criteria for analysis here is to identify differences between the services. Finally, an analysis of these objectives is made using the criteria of commonality. Together, the differences and commonalities will provide a useful tool for translating strategic ends into tactical ends.

In the Joint arena, strategy achieves national policy objectives through strategic military objectives. At the operational level, the strategic military objectives are achieved through operational

objectives. The Armed Forces Staff College Publication 1 (AFSC Pub 1), The Joint Staff Officer's Guide, identifies and defines these operational objectives as military mission options. Specifically, they are presence, show of force, demonstration, special operations, quarantine, blockade and force entry. The manual specifically states that these terms are to "suggest the spectrum of military force available when developing a mission statement for an operation plan and its deterrent options."⁵⁴ These joint operational objectives provide direction for the military objectives of the component services.

The Army identifies its basic military strategic objective as the "defeat of the enemy's forces on land and the seizure, occupation and defense of land areas."⁵⁵ The operational objectives which support this are defined within offensive, defensive, retrograde, security and reconnaissance, deception, and special operations.⁵⁶ Within the framework of these operational objectives, specific combat objectives or tactical missions are specified. For offensive operations this includes a deliberate attack, exploitation, hasty attack, movement to contact, and raid.⁵⁷ Defensive operations include defend a battle position, defend in sector and defend a strongpoint.⁵⁸ The delay, retirement and withdrawal are encompassed

within retrograde operations.⁵⁹ Security and reconnaissance operations include area security, cover, guard, screen, and area, route and zone reconnaissance.⁶⁰ Deception operations include demonstrations, displays, feints and ruses.⁶¹ Special operations encompass unconventional warfare, counter-terrorism, collective security, psychological operations and civil affairs measures.⁶² These strategic, operational and tactical objectives direct the employment of ground forces in war.

The strategic military objective of the sea forces is identified as the conduct of combat operations at sea in support of national interests to assure maritime superiority.⁶³ The operational objectives which support this strategy are the naval functions of sea control and power projection.⁶⁴ The tactical objectives which achieve these operational objectives are describes as fundamental and supportive naval warfare tasks. The fundamental tasks incorporate the actions of anti-air, anti-submarine, anti-surface ship, strike, amphibious (specifically the Marine Corps' objective), and mine warfare.⁶⁵ Supportive tasks include special warfare, ocean surveillance, intelligence, electronic warfare, logistics, and command, control and communication (C³).⁶⁶ Collectively, these objectives guide the employment of

naval and marine forces at the strategic, operational and tactical levels of war.

The strategic military objective of the Air Force is to win the aerospace battle - to gain and/or maintain control of the aerospace environment and to take decisive actions immediately and directly against the enemy's warfighting capacity.⁶⁷ Several operational objectives support this strategic objective. Specifically, they are aerospace offense, aerospace defense, counterair, air interdiction, close air support, special operations, airlift, aerospace surveillance and reconnaissance, and aerospace maritime operations.⁶⁸ Tactical objectives which support these operational objectives are offensive counter air, suppression of enemy air defenses, defensive counter air, battlefield air interdiction, aerial refueling, electronic combat, intelligence, aerospace rescue and recovery, psychological operations, weather service and warning, command, control and communications.⁶⁹ These objectives provide direction for the employment of air forces at the strategic, operational, and tactical levels of war.

Two major commonalities appear to be present in the definitions or descriptions of these objectives. The first is a measure of effectiveness or task. The second is a reason or purpose for achieving the

objective. These commonalities appear across the services and follow the theoretical nature of military ends of identifying the a degree of effectiveness desired and an reason or intent for achieving the objective.

Common to all the service doctrines is a degree of effectiveness sought in the achievement of an objective. The Army and Marine Corps refer to this measure of effectiveness as the task part of the mission. The Navy and Air Force do not specifically identify this measure, but use the same terms as the Army to describe the task. These terms are in fact verbs. Specifically, they are attrite, block, breach, clear, collect, contact, contain, delay, destroy, detect, disrupt, divert, deploy, employ, fix, guard, identify, neutralize, occupy, rescue, retain, screen, secure, seize, and suppress. These terms are used by all the services to describe the degree of effectiveness sought with respect to a particular objective, regardless of the level of war.

The second commonality between the services is the purpose or intent associated with an objective. In the theoretical sense, these terms express a positive, neutral or negative intent toward to object. These terms include:

Cause (the force or enemy)
Deny (the enemy)

Gain (time, terrain or an object)
Portray (to the enemy)
Prevent (the enemy)
Protect (the force or object)
Provide (resources, space or time)
Restore (the force or space)
Support (the force)

When associated with an objective, the intent or purpose provides direction for the military forces.

From this analysis an operational translator can be developed for translating strategic military ends into tactical ends. While not professing to be all encompassing, this tool can facilitate the operational level commander in linking tactical objectives to strategic objectives. Both the differences and the commonalities between the Joint and service doctrines are incorporated to facilitate this communication. The composite results of this analysis are provided in figure 11 as "An Operational Translator".

Figure 11 - An Operational Translator

Strategic Military Objectives.

Army: Defeat enemy forces on land and seize, occupy or defend land areas.

Navy: Assure maritime superiority.

Air Force: Gain/maintain control of aerospace environment and take action against enemy's warfighting capacity.

SERVICE	OPERATIONAL OBJECTIVE	TACTICAL OBJECTIVE	TASK	PURPOSE
ARMY	Offense Defense Retrograde Security & Reconnaissance Deception Special Operations	Deliberate or Hasty Attack, Exploitation, Movement to Contact, Raid; Defend a Battle Position or Sector or Strong-point; Delay, Retirement, Withdrawal; Area security, Cover, Guard, Screen, Area or Route or Zone Reconnaissance; Demonstration, Display, Feint, Ruse; Unconventional Warfare, Counterterrorism, Collective Security, Psychological Operations, Civil Affairs Measures	Attrite Block Breach Clear Collect Contact Contain Delay Destroy Detect Disrupt Divert Deploy Employ Fix Guard Identify Neutralize Occupy Rescue Retain Screen Secure Seize Suppress	Cause (the force or enemy) Deny (the enemy) Gain (time, terrain or object) Portray (to the enemy) Prevent (the enemy) Protect (the force or object) Provide (resources, space or time) Restore (the force or space) Support (the force)
NAVY	Sea Control Power Projection	Anti-air, Anti-submarine, Anti-surface ship, Strike and Mine Warfare; Special Warfare, Ocean Surveillance, Intelligence, Electronic Warfare, Logistics, C ³		
AIR FORCE	Offense Defense CA, AI, CAS, Special Opns Airlift Surveillance & Reconnaissance Maritime Opns	Offensive Counter Air, SEAD, Defensive Counter Air; BAI; Aerial Refueling, Electronic Combat, Intelligence, Aerospace Rescue and Recovery, Psychological Operations, Weather Service, Warning and C ³		

Part V - Conclusion

Translating strategic military ends into tactical ends is the business of the operational artist. Both political and military theory recognize this important linkage and military doctrine strives to establish this connection.

Theory provides several insights to the nature of operational ends. First, there is a hierarchy of ends which are associated with specific levels of war. These ends are linked from one level to the next and have a directive and supportive nature. Second, the directive nature of the end provides an intent or purpose for the objective. Finally, the supportive aspect of the end defines a degree of effectiveness desired from accomplishment of the objective.

Doctrine generally parallels the theoretical construct for linking ends between the levels of war. All the doctrines associate specific ends to a particular level of war. While not specifically stated, the joint and service doctrines do recognize the existence of four levels of war - policy, strategy, operations and tactics. While there are differences between the services as to the definition of objective and mission, all agree with theory that there is a directive and supportive nature to the objectives at

each level.

Both the Joint and service doctrines can be improved to facilitate translating strategic ends into tactical ends. Better understanding could be improved by stressing the commonality between the services in the joint doctrine while the service doctrines should focus on the differences. Commonality does appear to exist in the general treatment of military ends and the levels of war. Joint doctrine should expand on the nature of military ends - the supportive and directive; the expression of a positive, neutral, or negative intent as related to an object or purpose; the defining the degree of effectiveness desired for the objective or task; and focusing the end on a physical, mental or moral domain. Policy should also be officially recognized as the highest and fourth level of war.

Service doctrines could enhance better understanding by realigning to an improved joint doctrine. Definitions of terms should be the same as those described in the Joint manuals. The service specific manuals would then focus on expanding their discussions of the service peculiar ends as they relate to the larger, joint, whole.

Whether or not these improvements will in fact improve the operational commander's ability to translate strategic ends into tactical ends cannot be

demonstrated. However, it may help to avoid situations where an Army officer working in the J5 staff of a predominately naval unified command was recently asked to describe sea control, but expressed ignorance to the meaning of this primary naval function.

The recent renaissance in American military thought has recognized the operational level of war. It uses campaigns and major operations to direct battles and engagements in support of the objectives of war. As Clausewitz recognized that "every engagement, large or small, has its own particular purpose which is subordinate to the general one,"⁷⁸ the very heart of operational art is translating strategic objectives into tactical missions.

Appendix A - Possible Theoretical Levels of War

Policy.

Clausewitz:

- Achieve political object (81).

Jomini:

- To obtain the statesman's end (24).

Fuller:

- The object of a nation (69).

Soviets:

- Determines political aims of war (218).
- Determines strategic objectives and methods of warfare (218).

Grand Strategy.

Fuller:

- Secures political object (107-108).

Major Strategy.

Corbett:

- Deals with the resources of a nation for war (327).
- Province of the plan of war to achieve ulterior object (326).
- Selects primary objects and force, and determines functions of forces (326-327).

Strategy.

Clausewitz:

- Achieve the object of war (128).
- Coordinating engagements to achieve object of war (128).

Jomini:

- Directing masses upon the theater of war (22-23).
- Making war on the map (79).
- One object is to secure advantages for the army (200).

Soviets:

- Stems from state policy (7).
- Determines operational objectives/missions and methods of operation (218).

Minor Strategy.

Corbett:

- Province of plan of operations to achieve primary objects (327).
- Determines objectives of operations and direction of force for the operation (327).

Operational.

Soviets:

- Achieves strategic objectives (140).

- Assigns tactical missions (140).
- Determines tactical missions and methods of combat (218).

Grand Tactics.

Fuller:

- Object is destruction of enemy's plan (108).
- Spirit of plan is political object, heart is military object (107).

Jomini:

- Combining and conducting battles (201).

Tactics.

Clausewitz:

- Planning and executing engagements (128).
- Use of armed forces in engagements (128).
- Object is destruction of enemy (227).

Jomini:

- Maneuvers of an army on the field of battle (79).
- Combatting on the ground (79).

Soviets:

- Preparing and conducting combat operations by subunits (9).

Minor Tactics.

Fuller:

- Partial object is destruction of enemy; army destroys army, fleet destroys fleet air force destroys air force (109-110).

Notes. (#) - Indicates referenced page from respective sources identified below:

Clausewitz: Carl von Clausewitz, On War.

Jomini: Baron Antoine Heneri Jomini, The Art of War.

Fuller: JFC Fuller, The Foundation of the Science of War.

Soviets: Harriet and William Scott editors, The Soviet Art of War.

Corbett: Julian S. Corbett, Some Principles of Maritime Strategy.

ENDNOTES

1. Carl von Clausewitz, On War. Edited and translated by Michael Howard and Peter Paret, (Princeton, New Jersey: Princeton University Press, 1984), p. 75.
2. Both Clausewitz and J.F.C. Fuller establish a hierarchical relationship between ends and levels of war. The ends at the lower levels of war are subordinate to and supportive of those ends associated to the higher levels. Clausewitz does so in On War, p. 128 for the strategic level and p. 227 for the tactical level. J.F.C. Fuller states that "A plan of campaign demands a definite object which should never be lost sight of, and this object, in its turn, demands a series of moves each demanding an objective of its own." J.F.C. Fuller, The Foundations of the Science of War. (London: Hutchinson and Company, LTD, 1926), p. 156.
3. Carl von Clausewitz, On War, pp. 81 and 87. He extends this directive nature of the linkage between political, strategic and tactical ends on pages 81, 128 and 227, respectively. J.F.C Fuller, The Foundations of the Science of War, pp. 107, 221 - 223, 327 and 334. Julian S. Corbett, Some Principles of Maritime Strategy. (Annapolis, Maryland: The Naval Institute Press, 1911), p. 334.
4. Carl von Clausewitz, On War, pp. 81 and 579. J.F.C Fuller, The Foundations of the Science of War, pp. 221 - 223, 327. Julian S. Corbett, Some Principles of Maritime Strategy. (Annapolis, Maryland: The Naval Institute Press, 1911), p. 334.
5. Martin Van Creveld, Command in War. (Cambridge, Massachusetts and London, England: Harvard University Press, 1985), p. 12.
6. William F. Crain, "The Mission: The Dilemma of Specified Task and Implied Commander's Intent." (Fort Leavenworth, Kansas: School of Advanced Military Studies Monograph, 3 January 1990), pp. 4 - 6.
7. Carl von Clausewitz, On War. p. 75.
8. Ibid., p. 94.
9. J.F.C. Fuller, The Foundation of the Science of War. p. 107.
10. Carl von Clausewitz, On War. p. 82.
11. Ibid., p. 221. B.H. Liddel Hart, Strategy. (New York, New York: St. Martin's Press, Incorporated, 1987), p. 338.

12. Corbett, Some Principles of Maritime Strategy. p. 334.
13. Clausewitz, On War. p. 484.
14. Clausewitz, On War. pp. 236 - 237 and 502. Fuller, The Foundation of the Science of War. p. 107.
15. Carl von Clausewitz, On War. p. 90 and J.F.C. Fuller, The Foundation of the Science of War. p. 107.
16. Ibid.
17. Carl von Clausewitz, On War. p. 90.
18. J.F.C. Fuller, The Foundation of the Science of War. p. 107.
19. James J. Schneider, Theoretical Paper No. 3 - The Theory of Operational Art. (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1 March 1988), p. 6.
20. J.F.C. Fuller, The Foundations of the Science of War. p. 70.
21. John Spanier, Games Nations Play. (New York: Praeger Publishers, Inc., 1972), pp. 57 - 64.
22. J.F.C. Fuller, The Foundations of the Science of War. p. 69.
23. Carl von Clausewitz, On War. p. 87, and J.F.C. Fuller, The Foundations of the Science of War. p. 227.
24. Carl von Clausewitz, On War. p. 81.
25. Harriet F. and William F. Scott, editors, The Soviet Art of War. (Boulder, Colorado: Westview Press, 1983), p. 8.
26. Fuller, The Foundation of the Science of War. pp. 111 - 112.
27. Fuller, The Foundations of the Science of War. p. 109.
28. See appendix A.
29. Ibid.
30. Ibid.
31. Joint Chief of Staff Publication 3-0, Doctrine for Joint Operations (Final Draft). (Washington D.C., April 1989), p. 1-5.

32. Joint Chief of Staff Publication 1, Dictionary of Military and Associated Terms. (Washington D.C.: U.S. Government Printing Office, 1 June 1987), p. 236.
33. Joint Chief of Staff Publication 1, Dictionary of Military and Associated Terms. (Washington D.C.: U.S. Government Printing Office, 1 June 1987), p. 236.
34. Ibid., p. 259.
35. JCS Pub 3-0, p. 1-2.
36. JCS Pub 1, p. 244.
37. Ibid., p. 349.
38. JCS Pub 3-0, p. ix.
39. Ibid. p. viii - ix.
40. Ibid., p. ix.
41. U.S. Army Field Manual 101-5-1, Operational Terms and Symbols. (Washington D.C.: Headquarters, Department of the Army, 21 October 1985), p. 1-47.
42. U.S. Army Field Manual 101-5, Staff Organization and Operations. (Washington D.C.: U.S. Government Printing Office, 25 May 1984), p. 5-8.
43. U.S. Naval Warfare Publication 3 (NWP 3), Naval Terminology (Revision E). (Washington D.C.: Office of the Chief of Naval Operations, Department of the Navy, July 1988) does not define the term mission. U.S. Naval Warfare Publication 1 (NWP 1), Strategic Concepts of the U.S. Navy (Revision A). (Washington D.C.: Office of the Chief of Naval Operations, Department of the Navy, May 1978), p. 1-1-2 and 1-3-1.
44. U.S. Air Force Manual 1-1 (AFM 1-1), Basic Aerospace Doctrine of the United States Air Force. (16 March 1984), p. 3-2.
45. U.S. Marine Corps Fleet Marine Field Manual 1 (FMFM 1), Warfighting. (Washington D.C.: Department of the Navy, Headquarters, United States Marine Corps, 6 March 1989), p. 71.
46. JCS Pub 1, p. 259 and FM 101-5-1, p. 1-50.
47. NWP 3 does not define objective. NWP 1, pp. 1-2-1 and 1-4-2.
48. AFM 1-1, p. 2-5.

49. U.S. Marine Corps Fleet Marine Field Manual 1-1 (FMFM 1-1), Campaigning. This is a recently published, undated draft document which was obtained from Major John Priddy, USMC, p. 4.
50. NWP 1, p. 1-2-2.
51. Ibid., p. 1-4-2.
52. Ibid., p. 1-3-1.
53. JCS Pub 3-0, p. 1-2. U.S. Army Field Manual 100-1, The Army. (Washington D.C.: Headquarters Department of the Army, 29 August 1986), p. 2-3. NWP 1, p. 1-2-1. AFM 1-1, p. 1-2. FMFM 1, p. 19.
54. Armed Forces Staff College Publication 1 (AFSC Pub 1), The Joint Staff Officer's Guide 1988. (Washington D.C.: U.S. Government Printing Office, 1 July 1988), p. 212.
55. FM 100-1, p. 4.
56. FM 101-5-1. The specific objectives associated with each of these operations are identified in the manual as follows: offense - p. 1-52, defense- p. 1-23, retrograde - p. 1-62, security - p. 1-64, deception - p. 1-22, psychological - p. 1-57 and special operations - p. 1-66.
57. Ibid., p. 1-52.
58. Ibid., p. 1-23.
59. Ibid., p. 1-62.
60. Ibid., p. 1-64 and 1-60.
61. Ibid., p. 1-22.
62. Ibid., p. 1-66.
63. NWP 1, p. 1-3-1.
64. Ibid.
65. Ibid., pp. 1-4-2 and 1-4-3.
66. Ibid., p. 1-4-3.
67. AFM 1-1, p. 1-3.
68. Ibid., pp. 3-2 through 3-6.
69. Ibid., pp. 3-3 through 3-8.

70. Clausewitz, On War. p. 227.

BIBLIOGRAPHY

Books

- Bellamy, Chris. The Future of Land Warfare. New York, New York: St. Martin's Press, Incorporated, 1987.
- Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, New Jersey: Princeton University Press, 1976.
- Corbett, Julian S. Some Principles of Maritime Strategy. Annapolis, Maryland: The Naval Institute Press, 1911.
- Crevelde, Martin Van. Command in War. Cambridge, Massachusetts and London, England: Harvard University Press, 1985.
- Fuller, J.F.C.. The Foundations of the Science of War. London, Great Britain: Hutchinson and Company, LTD, 1926.
- Greenfield, Kent Roberts editor. Command Decisions. Washington D.C.: Office of the Chief of History, U.S. Army, U.S. Government Printing Office, 1960.
- Hart, B. H. Liddell. Strategy. New York, New York: Praeger Publishers, Incorporated, 1954.
- Lider, Julian. On the Nature of War. Westmead, England: Saxon House, 1979.
- Jomini, Baron Antoine Henri. The Art of War. Translated by Major O.F. Winship and Lieutenant E.E. McLean. New York, New York: G.P. Putnam Company, 1854.
- Morris, William editor. The American Heritage Dictionary of the English Language. New York, New York: American Heritage Publishing Company, Inc., 1970.
- O'Neill, Bard E., Heaton, William R. and Alberts, Donald J. editors. Insurgency in the Modern World. Boulder, Colorado: Westview Press, 1980.
- Paret, Peter. Makers of Modern Strategy from Machiavelli to the Nuclear Age. Princeton, New Jersey: Princeton University Press, 1986.

- Scott, Harriet F. and William F. The Soviet Art of War. Boulder, Colorado: Westview Press, 1983.
- Simpkin, Richard E. Race to the Swift: Thoughts on Twenty-First Century Warfare. London: Brassey's Defence Publishers, 1985.
- Spanier, John. Games Nations Play. New York, New York: Praeger Publishers, Incorporated, 1972.
- Sun Tzu. The Art of War. Translated by Samuel B. Griffith. London: Oxford University Press, 1963.
- Warden, Edward A. The Air Campaign: Planning for Combat. Fort Lesley J. McNair, Washington, D.C.: National Defense University Press, 1988.
- Watts, Barry D. The Foundations of US Air Doctrine. Maxwell Air Force Base, Alabama: Air University Press, December, 1984.
- Weigley, Russell F. The American Way of War: A History of United States Military Strategy and Policy. New York, New York: Macmillan Publishing Company, 1973.

Government Publications

- Joint Chiefs of Staff Publication 1, DOD Dictionary of Military and Associated Terms. Washington D.C.: Office of the Joint Chief of Staff, 1 June 1987.
- Joint Chiefs of Staff Publication 0-2, Unifies Action Armed Forces. Washington D.C., 1 December 1986.
- Joint Chiefs of Staff Publication 3-0, Doctrine for Joint Operations (Final Draft). Washington D.C., April 1989.
- Armed Forces Staff College. AFSC Publication 1, The Joint Staff Officer's Guide 1988. Washington D.C.: U.S. Government Printing Office, 1 July 1988.
- U.S. Army Field Manual 25-100, Training the Force. Washington D.C.: Headquarters, Department of the Army, 15 November 1988.

- U.S. Army Field Manual 100-5, Operations. Washington, D.C.: U.S. Government Printing Office, 5 May 1986.
- U.S. Army Field Manual 101-5, Staff Organization and Operations. Washington, D.C.: U.S. Government Printing Office, 25 May, 1984.
- U.S. Army Field Manual 101-5-1, Operational Terms and Symbols. Washington, D.C.: Headquarters, Department of the Army, 25 May, 1984.
- U.S. Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force. 16 March 1984.
- U.S. Naval Warfare Publication 1, Strategic Concepts of the U.S. Navy (Revision A). Washington, D.C.: Office of the Chief of Naval Operations, Department of the Navy, May 1978.
- U.S. Naval Warfare Publication 3, Naval Terminology (Revision E). Washington, D.C.: Office of the Chief of Naval Operations, Department of the Navy, July 1988.
- U.S. Marine Corps Fleet Marine Field Manual 1, Warfighting. Washington D.C.: Department of the Navy, Headquarters, United States Marine Corps, 6 March 1989.
- U.S. Marine Corps Fleet Marine Field Manual 1-1, Campaigning (Draft). Washington D.C.: Department of the Navy, Headquarters, United States Marine Corps, undated.

Unpublished Documents

- Joint Staff Letter. Subject, "New, Revised and Deleted Entries for the New Edition of the DOD Dictionary of Military and Associated Terms (short title: JCS Pb 1-02)." Washington D.C.: US Joint Military Terminology Group, J-7, JMTGM-76-88, dated 30 September 1988.
- Crain, William F. "The Mission: The Dilemma of Specified Task and Implied Commander's Intent." Fort Leavenworth, Kansas: School of Advanced Military Studies Monograph, 3 January 1990.

Schneider, James J. "Theoretical Paper No. 3 - The Theory of Operational Art." Fort Leavenworth, Kansas: School of Advanced Military Studies, 1 March 1988.