EFFECTS BASED OPERATIONS IN IRAQ – A CASE FOR ARMY ACCEPTANCE

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Effects Based Operations in Iraq A Case for Army Acceptance

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The application of effects base operations (EBO) concepts have become the norm in Iraq. In command posts from Multi-National Force - Iraq through battalion level, commanders have taken a systems analysis approach to the problems they face. They are striving to attain desired effects that have attached measures of effectiveness and indicators. Joint Doctrine has recently adopted these concepts while current and emerging U.S. Army doctrine continues to reject the applicability of EBO concepts at the operational and tactical levels. This paper reviews the development of effects based concepts and doctrine, outlines the theoretical foundations of U.S. Army doctrine, establishes the unique challenges of counterinsurgency, assesses units’ application of effects based operations in Iraq, and provides observations and recommendations with regard to the U.S. Army and effects based operations. The purpose of this paper is to (1) determine if units in Iraq are applying EBO concepts in consonance with joint doctrine and (2) consider the direction of U.S. Army doctrine reference EBO.
Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper.  

—Carl von Clausewitz

For 200 hundred years, generations of military officers around the world have found sage counsel in Carl von Clausewitz’s theoretical reflections on warfare. His deliberations on the nature of war are one of the central concepts in *On War* that have stood the test of time. United States’ military officers appreciate the effects that chance caused by friction have had on every battlefield since Lexington and Concord. To Clausewitz, war is a struggle between two opposites that naturally yields unpredictable results. It is due to its unpredictable nature that Clausewitz cautions the statesman and commander to refrain from turning war into “something that is alien to its nature.”

Clausewitz’s tenets have influenced United States Army doctrine since the end of the Vietnam War. The latest version of Field Manual (FM) 3-0 (Operations) – one of the two Army capstone doctrinal manuals - contains multiple quotes from “the great master.” Conceptually, the manual codifies critical components of *On War*. Center of gravity, friction, and operational art are three such examples. The FM treats war as an unquantifiable problem fraught with uncertainty – clearly in consonance with Clausewitz concept of war. Although FM 3-0 outlines the spectrum of conflict – to include insurgency – a majority of the operational concepts apply to general war on the graduated scale due to the Army’s cultural bias toward high intensity conflict.

Clausewitz saw battle as the essence of warfare. General war – a war between two nation-states with uniformed militaries that clash conventionally in a linear fashion to
attain political objectives – was Clausewitz’s mental-model of warfare. It has also been the United States’ mental-model for over two hundred years. The clash of opposing militaries in high-intensity conflict is a breeding ground for uncertainly and unpredictable results – especially from a strategic and political perspective. The rapid tempo of combat operations precludes senior leader oversight of battles and engagements and compels senior leader decision making under extreme pressure with insufficient information. The sheer magnitude of the effort over time and space often produces operational and strategic “exposed flanks” unrecognizable to senior leaders until events coalesce in wartime. Thus, Clausewitz cautions senior leaders to enter war only after deep reflection.

Today, the United States finds itself waging a protracted counterinsurgency (COIN) war in Iraq. Though Clausewitz does acknowledge “people in arms” as a form of warfare\(^5\), this is clearly outside both his personal experience and theoretical musings. There are stark differences between counterinsurgency and general war.\(^6\) This reality drove the U.S. Army and United States Marine Corps to collaborate and publish a counterinsurgency doctrinal manual to address an obvious shortfall in service doctrine. U.S. Army FM 3-24 / Marine Corps Warfighting Publication 3-33.5 (Counterinsurgency Operations) characterizes COIN as a prolonged war of attrition. At its core, COIN is a struggle for legitimacy in the eyes of the affected country’s people. As opposed to high-intensity combat operations, COIN offers senior leaders time to think, gather data and decide on policy and strategy decisions. Additionally, COIN requires military force to operate outside of its cultural norms, organizational capabilities, and established roles and missions. These realities challenge the ability to apply the U.S. Army’s doctrinally
approved objective based approach to planning and operations. Rather, commanders in Iraq have turned to an effect-based approach to address the complexities of counterinsurgency warfare.

Effects based operations (EBO) is a conceptual construct that provides commanders a means to systematically cope with the complexities inherent in the COIN operational environment. Commanders in Iraq, from Multi-National Force-Iraq (MNF-I) to battalion level, acknowledging the inadequacy of objective-based operational construct in counterinsurgency planning and operations, have turned to an effects based operational construct to tie tactical operations across an immeasurably complex country to the stated strategic end state. This fact has caused a rift between Joint and Service doctrinaires. The U.S. Joint Forces Command (USJFCOM) – in acknowledgement of the gap between established joint doctrine and its applicability in the field – has taken steps to integrate effects based operations concepts into capstone joint manuals. The U.S. Army has unequivocally rejected effects based operations from a doctrinal standpoint.

Are units in Iraq applying EBO in consonance with emerging Joint doctrine? If not, should joint doctrine adjust to reflect effective methodologies in Iraq or should units in Iraq consider adopting emerging doctrinal concepts? Should the U.S. Army incorporate effects based operations into its doctrine? These questions form the basis of this research effort. This study will start with an overview of effects based operations and the related doctrinal development to provide context for subsequent sections. Next, an overview of Clausewitz and the nature of war from his perspective will support an ensuing section on the applicability of Clausewitz in counterinsurgency. An analysis of
plans and operations from headquarters in Iraq at multiple levels in comparison to USJFCOM’s Joint Pub 3-0 and Joint Pub 5-0 will follow. The study will culminate with observations and recommendations relative to the above questions on effects based operations.

**Effects Based Operations – From Concept to Doctrine**

> A systems perspective facilitates the planning and operational design of all joint operations. —Joint Pub 3-0

Effects based operations have become the trendy solution to address the problem of operations in a complex environment. There have been hundreds of articles, white papers, briefings and studies on the pros and cons of effects based operations in recent years. The EBO concept is not new, however. EBO’s pedigree can be traced to the Air Corps Tactical School at Maxwell Air Force Base in the 1930’s. The concept applies a systems approach to problem solving. The process first identifies an adversary’s systemic critical nodes. The commander then focuses operations to affect the critical nodes to achieve desired effects. The methodology is controversial to warfare theorists due to its dependence upon mathematical means to quantify and measure effects to prioritize targeting and assess effectiveness.

Central to EBO is acknowledgement that a system of systems analytical approach can define the operational environment. This approach, in turn, allows planners to map interconnected parts of the system – and exposes critical nodes that affect multiple aspects of the system. To air power enthusiasts, EBO is the means to efficiently apply force to attain strategic objectives through operational and strategic targeting. To Joint and U.S. Army commands in Iraq, EBO has become a means to
define the inherently complex operational environment and apply lethal and non-lethal means to logically attain strategic objectives.

United States Joint Forces Command (USJFCOM) has taken deliberate steps to integrate effects based operations concepts into joint doctrine since 2004. The Joint Warfighting Center released *JWFC Pamphlet 7, Effects-Based Operations*, in November 2004. This pamphlet described the EBO concept and addressed potential doctrine, organization, training, material, leadership, personnel and facilities (DOTMLPF) implications. It defined effects based operations as:

> Operations that are planned, executed, assessed, and adapted based on a holistic understanding of the operational environment in order to influence or change system behavior or capabilities using the integrated application of selected instruments of national power to achieve directed political aims.\(^{10}\)

In response to the release of the JWFC “think-piece,” the Joint Staff, J-7 hosted an EBO Mini-Forum in late January 2005. This meeting, attended by combatant commander and Service representatives, reviewed the EBO process. In general, combatant commands supported the conceptual process while the Services remained skeptical for several reasons. First, the Services are naturally cautious with regard to initiatives that may alter roles, missions, programs and budgets. Second, the Services see little value added in changing doctrine. Finally, EBO remains a convoluted concept not easily understood without an extensive educational commitment.\(^{11}\)

The EBO Mini-Forum did result in group consensus that joint doctrine should not treat EBO as a fundamentally new method of war-fighting. Rather, joint doctrine should codify the effects based approach as fundamental to operational art and design. USJFCOM published the *Commander’s Handbook for an Effects-Based Approach to Joint Operations* in February 2006. The *Commander’s Handbook* provided a “how to"
guide for commanders and staffs to plan and conduct effects based operations. This handbook provided joint commanders with a common baseline to fill the void between concepts, field practices and emerging joint doctrine. The handbook did not profess a new means to conduct operations. Rather, it recognized EBO as a means for commanders and staffs to better understand the operational environment in order to complement current joint planning and execution procedures. Joint Pub 3-0 (Joint Operations) and Joint Pub 5-0 (Joint Operation Planning) incorporated recommendations from the Mini-Forum and concepts from the Commander’s Handbook into both manuals published in late 2006. The USJFCOM Commander rescinded the Commander’s Handbook in the late 2007 – establishing the Joint Pub’s as the authoritative documents for effects based operations and concepts.

Chapter IV (Planning, Operational Art and Design, and Assessment) of Joint Pub 3-0 acknowledges the “systems perspective of the operational environment.” Additionally, the manual outlines EBO concepts in detail – to include objectives, effects, measures of effectiveness and performance, lines of operation and the assessment process. The manual defines an effect as “1. The physical or behavioral state of a system that results from an action, a set of actions, or another effect. 2. The result, outcome, or consequence of an action. 3. A change to a condition, behavior, or degree of freedom.” It establishes the relationship between objectives, tasks and effects as follows:

This effects based approach remains within the framework of operational art and design helping commanders and their staffs clarify the relationship between tasks and objectives by describing the conditions that need to be established to achieve the military objectives and attain the end state.
U.S. Army doctrine has not followed the joint lead with regard to effects based operation. In fact, the latest draft of Army Field Manual 3-0 (Operations) states that “Army forces do not use the joint systems analysis of the operational environment, effects based approach to planning, or effects assessment as described in 3-0.”

Additionally, the term “effect” does not appear in the FM 3-0 glossary. Though FM 3-24 (Counterinsurgency) does endorse selected aspects of EBO, the term “effect” is not in the manual’s glossary. In essence, effects based operations concepts espoused in joint doctrine are absent from U.S. Army doctrine.

FM 3-0 embraces Clausewitz’s characterization of war as comprised of uncertainty, chance and friction. The introduction to FM 3-0 states that “chaos, chance, and friction dominate land operations as much today as when Clausewitz wrote about them after the Napoleonic wars.” The opening chapter of the manual dedicates a
section to “Uncertainty, Chance and Friction”\textsuperscript{17} – to include an extensive quote from Clausewitz. To the Army, a risky endeavor such as war is not conducive to systems analysis, prediction or quantification. An examination of Clausewitz’s theory on the nature of war offers insight into the U.S. Army’s doctrinal position on effects based operations.

**Theoretical Foundation: The Unpredictable Nature of War**

Everything in war is very simple, but the simplest thing is difficult.\textsuperscript{18}

—Carl von Clausewitz

The most influential theorist on the subject of war was a career staff officer that witnessed first hand the forces of chance and uncertainty in war. Carl von Clausewitz was born in Prussia in 1780. He entered the Prussian Army at age twelve, saw his first combat against France at age thirteen\textsuperscript{19}, and graduated first in his war college class at just twenty-three.\textsuperscript{20} In 1806, Prussia was again at war with France, but this time against Napoleon. The stunning destruction of the Prussian Army by Napoleon was the formative event of Clausewitz’s life. How could France decisively defeat Prussia - widely regarded at the time as the greatest army in the world? His literary attempt to solve this mystery became *On War*, a collection of thoughts crafted and refined during his twelve year tenure as superintendent of the Prussian War College. Published by his wife soon after his death in 1830, the purpose of *On War* was to educate the minds of strategists by introducing a theory of war. Clausewitz believed theory "cannot equip the mind with formulas," but rather can "give the mind an insight into the great mass of phenomena and of their relationships, then leave it free to rise into the realms of action."\textsuperscript{21}
Clausewitz offers little for the tactician. His thoughts on camps, marching, billets and other tactical level minutia are clearly passé. However, On War is a goldmine for the strategist. His most famous passage “that war is...a continuation of political intercourse, carried on with other means” is the seminal theoretical concept in the book. While the primacy of policy over the military in war is arguably Clausewitz’s defining legacy, his theoretical reflection on the nature of war has survived the evolution of warfare since the days of Napoleon.

Clausewitz’s concept of warfare focused on the clash of nations' uniformed armies in battle to attain the political objective as defined by the sovereign. Napoleonic warfare sought decisive battle – a single clash between opposing armies that resulted in attainment of the political object. War to Clausewitz was combat – nothing more or less. He had no time for generals that sought to achieve victory through a bloodless campaign. War is a violent act of force characterized by “fighting.” Thus, everything in war must be subordinate to combat:

The end for which a soldier is recruited, clothed, armed, and trained, the whole object of his sleeping, eating, drinking, and marching is simply that he should fight at the right place and the right time.

Clausewitz’s conviction that combat is the essence of war shaped his thoughts on the nature of warfare. This extreme human endeavor produced uncertainty characterized by friction, chance and uncertainty. Friction, defined in On War as “countless minor incidents ... combine to lower the general level of performance, so that one always falls short of the intended goal.” Friction exists from soldier to army level – making its elimination from the battlefield impossible. To clarify his concept of friction, Clausewitz expounds on the effect of fog on a battle. “Fog can prevent the enemy from
being seen in time, a gun from firing when it should, a report from reaching the commanding officer.”

Clausewitz closely aligns chance with his theory on the nature of war. “No other human activity is so continuously or universally bound up with chance.” He further elucidates chance by stating that “war most closely resembles a game of cards.”

Chance also characterizes two-thirds of the “remarkable trinity” as nearly uncontrollable. The government’s reason must counter both the passion of the people and the probability and chance intrinsic to the commander and the army. Yet Clausewitz does not see chance in pejorative terms. Rather, chance is a condition that exists in war – something that the commander must realize and manage to succeed on the battlefield.

The combination of chance and friction render intelligence of little value. “Many intelligence reports in war are contradictory; even more are false, and most are uncertain.” Clausewitz believed that limited observation, the enemy’s ability to maintain secrecy, the imponderables of war, and the challenge of intelligence assessment combine to make knowledge of an adversary’s location and intentions unattainable.

Friction, fog, chance, and poor intelligence combine to make the conduct of war an unqualified, uncertain endeavor. To Clausewitz, the commander cannot systematically analyze an adversary to determine critical nodes that can lead to an efficient application of force in pursuit of the political object. He did, however, acknowledge that warfare’s scientists do exist. Clausewitz criticized their lot by stating “the critics … reduce everything to a few mathematical formula of equilibrium and superiority, of time and space, limited by a few angles and lines. If that were really all, it
would hardly provide a scientific problem for a schoolboy.”

Warfare’s natural uncertainty demands a military leader able to both deal with adversity and take advantage of chance’s opportunities.

Clausewitz’s thoughts on uncertainty in war reflect his mental-model of warfare. Battle – or “general war” in today’s parlance – is a high-tempo affair that often requires commander’s decisions based on intuition and experience. This extreme human endeavor is inherently unpredictable. The fortunes of war may even drive an adjustment to the political object. “Governments must reckon with the facts that war has its own dynamics that influence and may even transform the goals with which they began. Political aim is not tyrant. It must adapt itself to its chosen means, a process which can radically change it.”

Insurgency / Counterinsurgency are forms of warfare foreign to Clausewitz – well outside his mental-model. Today, the U.S. Army finds itself conducting counterinsurgency in Iraq. However, the U.S. Army has committed billions of dollars in support of Clausewitz’s conception of warfare characterized as an unpredictable human endeavor between uniformed opponents. An overview of COIN – and how it differs from Clausewitz’s nature of war – will set conditions for an ensuing review of Joint and U.S. Army doctrinal initiatives on this subject.

**Clausewitz and Counterinsurgency**

This manual is designed to fill a doctrinal gap. It has been 20 years since the Army published a field manual devoted exclusively to counterinsurgency operations. For the Marine Corps it has been 25 years.

—Opening Sentences in Forward of FM 3-24 (Counterinsurgency)
Counterinsurgency is not a new form of warfare to the United States Army. The United States has a long history of involvement in both insurgencies and counterinsurgencies. However, the United States Army has historically been anxious to place recently concluded counterinsurgency wars behind it in order to refocus on conventional warfare. The U.S. Army’s counterinsurgency experience in Vietnam quickly atrophied after the conclusion of that war. The Army refocused its energy in the mid-1970’s on retooling itself to counter the conventional Soviet threat in Western Europe. By the mid 1990’s, the U.S. Army Command and General Staff College’s School for Advanced Military Studies relegated COIN to a one-day seminar conducted by a subject matter expert subsequently exposed as a phony. This historical trend led to the “doctrinal gap” described above.

Clausewitz has little to say on insurgency and counterinsurgency. He struggles to make sense of France’s experience in Spain. However, he does acknowledge insurgency as a form of warfare in a five page chapter entitled “The People in Arms.” Clausewitz saw insurgency as a form of warfare conducted in conjunction with conventional forces. “To be realistic, one must therefore think of a general insurrection within the framework of a war conducted by the regular army, and coordinated in one all-encompassing plan.” Clausewitz also questions insurgency’s effectiveness as a form of warfare, and offers that “the resources expended in an insurrection might be better put to use in other kinds of warfare.”

Counterinsurgency is fundamentally paradoxical – and FM 3-24 acknowledges this reality. The manual outlines COIN historical principles and imperatives, but states that “following the principles and imperatives does not guarantee success. This paradox
is present in all forms of warfare but is most obvious in COIN.” The field manual lists nine “paradoxes of counterinsurgency operations.” A majority of these paradoxes run counter to Clausewitz’s nature of war and the primacy of combat:

- Sometimes, the more force is used, the less effective it is.
- The more successful the counterinsurgency is, the less force can be used and the more risk must be accepted.
- Sometimes the best weapons for counterinsurgents do not shoot.
- Tactical success guarantees nothing.
- Many important decisions are not made by generals.

Statements throughout the field manual question the relevance of Clausewitz’s nature of war with regard to counterinsurgency. The full-spectrum operations construct embraced by Army doctrine (both in FM 3-0 and FM 3-24) runs counter to Clausewitz’s belief in combat as the essence of warfare. U.S. Army doctrine states that “Army forces combine offensive, defensive, and stability or civil support operations simultaneously as part of an interdependent joint force to seize, retain, and exploit the initiative to achieve decisive results.” Stability operations dominate the construct in COIN – relegating offensive and defensive operations to a supporting role. The statement in FM 3-24 that “throughout history … the Army and Marine Corps have been called on to perform many tasks beyond pure combat; this has been particularly true during the conduct of COIN operations” further erodes combat’s role with regard to COIN. Clausewitz saw war as barely controllable outside the rudimentary laws of land warfare. However, FM 3-24 states that “participation in COIN operations by U.S. forces must follow United States law, including domestic laws, treaties to which the United States is party, and certain
HN [Host Nation] laws.\textsuperscript{42} The field manual also advocates the importance of intelligence and characterizes war as protracted by nature – both in direct contravention to Clausewitz’s nature of war. Finally, Table 1-1, entitled “Successful and unsuccessful counterinsurgency operational practices”\textsuperscript{43} lists several initiatives that call into question the efficacy of Clausewitz. Under “Unsuccessful Practices,” the table lists:

- Overemphasize killing and capturing the enemy rather than securing and engaging the populace.
- Conduct large-scale operations as the norm.\textsuperscript{44}

While the U.S. Army’s counterinsurgency manual differs with Clausewitz’s understanding of warfare, it does offer support for an effects based approach to conducting counterinsurgency operations. FM 3-24 outlines several components of effects based operations. The manual describes logical lines of operations (LLOO) and considerations for LLOO development. It also describes measures of effectiveness, measures of performance, and indicators as means to assess the effectiveness of COIN operations. Most importantly, the manual emphasizes the criticality of the counterinsurgent’s understanding of the operational environment. This emphasis lends credence to a systems thinking approach to addressing the problem of counterinsurgency.

In summary, Clausewitz focused on the conventional aspects of warfare in \textit{On War}. He had little appreciation for or understanding of insurgency operations – or the application of force in support of a counterinsurgency. U.S. Army counterinsurgency doctrine acknowledges the paradoxical nature of COIN – and endorses aspects of EBO. U.S. Army commanders in Iraq at corps, division, brigade, and battalion level have
embraced EBO concepts despite the lack of doctrinal support in its Service capstone manual. Are the plans and operations of these headquarters in consonance with guidance provided in Joint Pub 3-0 and Joint Pub 5-0? A review of plans and operations at the various levels in Iraq in light of the guidance provided in Joint Pub 3-0 and Joint Pub 5-0 will determine the gap between joint doctrine and applicability in the field.

Application of EBO Concepts in Plans and Operations in Iraq

Commanders in Iraq have significantly altered plans and operations over the last year due to a change in strategy released by the President in January 2007. The refinement of this strategy – widely associated with the “surge” of five additional brigade combat teams into Iraq - reestablished the strategic goal as “a unified democratic federal Iraq that can govern itself, defend itself, and sustain itself, and is an ally on the War on Terror.” The national strategic objectives delineated in “A New Way Forward” are:

1. Defeat al-Qaida and its supporters and ensure that no terrorist safe haven exists in Iraq.
2. Support Iraqi efforts to quell sectarian violence in Baghdad and regain control over the capitol.
3. Ensure the territorial integrity of Iraq and counter/limit destructive Iranian and Syrian activity in Iraq.
4. Help safeguard democracy in Iraq by encouraging strong democratic institutions impartially serving all Iraqis and preventing the return of the forces of tyranny.
5. Foster the conditions for Iraqi national reconciliation but with the Iraqi Government clearly in the lead.

6. Continue to strengthen Iraqi Security Forces and accelerate the transition of security responsibility to the Iraqi Government.

7. Encourage an expanding Iraqi economy including by helping Iraq maintain and expand its export of oil to support Iraqi development.

8. Promote support for Iraq from its neighbors, the region, and the international community.

Multi-National Force – Iraq (MNF-I) produced its plan in the spring of 2007 based on the strategic guidance provided in “A New Way Forward.” Multi-National Corps – Iraq (MNC-I) produce a supporting plan in late spring 2007. Plans by divisions and brigades in Iraq followed suit. The classification level of these plans is “Secret.” However, every echelon – from MNF-I to battalion level - has incorporated effects based operational concepts into their plans and operations that ties actions on the ground to the strategic objectives established by the President of the United States.

A comparison of plans in theater against the effects based operations procedures outlined in Joint Pub’s 3-0 and 5-0 will reveal the degree to which strategic and operational planners are in consonance with joint effect-based doctrine. Specifically, the matrix below depicts the assessment of the various echelons of plans in Iraq against the critical components of planning and executing effects based operations as outlined in the Joint Publications.
Analysis

Outlined below is the analysis of the various plans / operations in Iraq. In general, plans, operations, and assessments in Iraq are in consonance with the techniques and procedures outlined in Joint Pub 3-0 and 5-0. The unclassified analysis below is based on plans and briefings from classified websites.

a. MNF-I: Multi-National Force-Iraq applies an effects based approach to planning, operations and assessments.

   (1) Plans and Operations: The Joint Campaign Action Plan (dated April 2007) complies with Joint Pub 3-0 and 5-0 in most areas. The plan does not overtly apply a systems approach to the problem at hand. However, the description of the “central challenge” states the problem as a set of “competing variables” that indicates a systems approach to problem solving. There is not an obvious linkage between a center of gravity, LLOO’s and decisive points. The plan clearly states twelve objectives and
delineates six logical lines of operation. A detailed commander’s intent outlines objectives and desired effects. Subordinate to each LLOO are desired effects, a supporting concept and tasks. The plan assigns subordinate headquarters / agencies tasks in support of specific effects. There are solid measures of effectiveness in support of effects in the LLOO’s within military / diplomatic areas of competence. However, the MOE are either lacking or ill-defined in areas outside of the military / diplomatic realm. Measures of performance were not observed. Additionally, there were not indicators outlined to support measures of effectiveness at the MNF-I level. The lack of indicators at the MNF-I level is not a significant oversight.

(2) Assessment: There appears to be an excellent means to manage effects at MNF-I. Effects working groups, an effects assessment cell, and a cyclical effects assessment process are all in place. A monthly assessment cycle consists of a Joint Coordination Group, Joint Staff Board and Joint Mission Council. The assessment cycle results in decisions by the MNF-I Commander that provides direction to the LLOO’s. Additionally, there is a Conditions Assessment Synchronization Board to review the validity of the Joint Campaign Plan. This quarterly review produces amendments to the plan. Measures of performance are not observed.

b. MNC-I: The Multi-National Corps – Iraq applies an effects based approach to planning, operations and assessments.

(1) Plans and Operations: The MNC-I plan is in near consonance with every technique espoused in Joint Publications. The only discrepancy is unobserved measures of performance for each task. There is a clear systems approach to defining the operational environment faced by MNC-I. The commander’s intent details desired
effects. There is a stated, unambiguous link between objectives, effects, and tasks organized around “purpose-based lines of operation” in the plan. Additionally, significant work has been done on measures of effectiveness and supporting indicators, to include the weighting of MOE. There are nine objectives, ten effects, forty-five MOE and 150 indicators. The corps’ clearly defines objectives – both in near term and end state forms. Finally, the plan assigns tasks to subordinate units.

(2) Assessment: The MNC-I assessment process applies EBO concepts outlined in Joint Publications. The only discrepancy is a lack of measures of performance for some tasks. The MNC-I Joint Fires and Effects Cell (JFEC) employs an assessments process that uses a hierarchical structure to link collectable, measurable, and relevant indicators to commander’s objectives. The hierarchical structure consists of objectives, effects, MOE, and indicators. The effects assessment matrix – dated May 2007 – delineates MOE weighting and task “ownership.” Results of the assessment process feed commanders critical information requirements.

c. Division level: This analysis is an amalgamation of three division level plans and assessment processes from units currently or recently in Iraq. These divisions (1st Cavalry Division, 4th Infantry Division and 1st Armored Division) are in consonance with effects based operations concepts as outlined in Joint Publications.

(1) Plans and Operations: Division level plans and operations are in near consonance with Joint Publications with the exception of a clear linkage between COG’s, LOO’s and decisive points and a lack of effects incorporated into commander’s intent. One division has organized its plan around five logical lines of operations, thirteen objectives, thirteen effects, 189 MOE, thirty-eight weekly indicators, and 167
monthly indicators. There are multiple source indicators to gain better fidelity – to include qualitative and quantitative measurements. The plan assigns responsibility for tasks to division staff and subordinate units. There is a clear objective to effects linkage in both plans.

(2) **Assessments**: Division level assessment processes are in consonance with Joint Publications. The only discrepancy is the lack of a CCIR linkage in one of the plans. Both division assessment processes are detailed procedures. The 4th Infantry Division process uses MOE and MOP to evaluate progress toward task accomplishment, effects creation, and objective achievement. The MOP and MOE provide the qualitative assessment while the brigade combat team commanders provide the qualitative portion of the assessment. Combined, both assessments determine effects attainment – and task adjustments as necessary.

d. **Brigade level**: This analysis is based on a review of the five maneuver brigade combat teams currently under the operational control of Multi-National Division-Baghdad and a sixth brigade combat team that departed theater in January 2008. Every brigade combat team applies an effects based approach to planning, operations and assessments. However, there is wide variation in the level of detail and understanding of the effects based concepts outlined in the Joint Publications.

(1) **Plans and Operations**: Brigade combat teams in MND-B were either applying or attempting to apply effects based planning and operations concepts. Every brigade combat team established objectives prescribing friendly goals, logical lines of operation, and measures of effectiveness for each task. There were wide discrepancies between the six brigade combat teams in the remaining areas of analysis. One brigade
was in consonance with every evaluated area. Two brigades established effects and lines of operations, but were not in consonance with any other area of analysis. One brigade confused indicators with measures of effectiveness.

(2) Assessments: Every brigade combat team had MOE’s that assessed change in system behavior and had an established effects assessment methodology. As with plans and operations, there was wide range in detail between the brigade combat teams.

Observations / Recommendations

There are fives observations based on the analysis:

Observation 1: *Effects based Operations efficacy*. There is ample evidence at every level of command that units appreciate the complexity of the operational environment. Units are applying a systemic approach to determine critical nodes and links. Additionally, units at every level – to include maneuver battalion - are applying EBO concepts in planning, operations and assessments.

Observation 2: *Higher headquarters in consonance with joint doctrine*. Multi-National Force – Iraq and Multi-National Corps – Iraq are – with minor exceptions – in consonance with effects based operations joint doctrine. The MNC-I plan and assessment process applies joint doctrinal concepts almost without exception. This is possibly due to the adoption by USJFCOM of MNF-I and MNC-I EBO concepts from previous rotations.

Observation 3: *BCT level discrepancies*. BCT headquarters are attempting to conduct effects based operations. The wide range of variation between brigades is due to either commander’s guidance that does not stress an effects based approach or a
lack of understanding of EBO concepts. Some brigades have detailed and weighted MOE, supporting and weighted indicators, and an integrated assessment process that feeds Commander’s Critical Information Requirements. Other brigades have nothing more than poorly defined measures of effectiveness and lines of operation. These same brigades have effects assessment processes – but lack the fidelity of the brigades with a fully established EBO construct.

Observation 4: Areas of consistency. Headquarters at all levels value objective identification, lines of operation, measures of effectiveness and an effects assessment process. As stated above, the level of fidelity on these areas varies widely by unit.

Observation 5: Lack of MOP’s. In general, units either do not understand measures of performance or do not consider MOP an important measurement.

There are four recommendations based on the observations:

Recommendation 1: Republish an effects based operations handbook. The USJFCOM Commander’s Handbook was a useful document that provided commanders and staffs a “how to” guidance. Joint Publication guidance provides the doctrinal underpinnings for EBO. However, a definitive techniques and procedures document is lacking. USJFCOM should canvas units in Iraq to garner best-practices, update the Commander’s Handbook, and republish the product.

Recommendation 2: A U.S. Army EBO Handbook. The U.S. Army should publish its own version of the Commander’s Handbook for Army commanders and staffs at division level and below. A tactics, techniques, and procedures (TTP) publication that advertise “best practices” in theater would result in a better understanding of EBO concepts and standardization of procedures at the brigade level.
**Recommendation 3**: *U.S. Army adoption of EBO.* The U.S. Army should follow the joint lead and integrate EBO into doctrine. U.S. Army commanders in Iraq are applying EBO in combat. Rejecting effects based operations in capstone doctrinal manuals is driving the diverse expertise at the brigade level in Iraq. Additionally, the soon-to-be-released FM 3-0 will shift the Army’s focus on the continuum of combat from general war toward conflicts of lesser intensity.\(^{50}\) Insurgency, counterinsurgency, and other forms of limited war are inherently complex – and lend themselves to a systems based analytical approach. Embracing effects based operations is a logical step.

**Recommendation 4**: *Integrate EBO into BCT pre-deployment training.* Home station and CTC training for brigade combat teams and battalions currently does not focus on cultivating a thorough understanding of effects based operations. Brigade commanders and staffs become acquainted with effects based operations through the pre-deployment site survey and relief in place processes.\(^{51}\) This is an institutional shortfall in Army training. The lack of EBO standardization aggravates the problem from an institutional standpoint. Publishing effective U.S. Army tactics, techniques and procedures in either a handbook or doctrinal manuals will enable integration of EBO training at the U.S. Army Combined Training Centers.

**Conclusion**

Commanders from MNF-I to battalion level in Iraq have turned to an effects based operations construct for several reasons. First, the efficacy of objective based operations eroded once combat operations transitioned to stability operations. Objective based operations are applicable when tangible targets (terrain or enemy forces) are conducive to the application of force. Stability operations offer no such tangible targets.
Second, the U.S. government directed the military to assume multiple tasks outside of established roles and missions. Deriving desired effects in areas outside of established competencies enabled operational and tactical commanders to logically apply force toward the strategic end state. Third, counterinsurgency is intrinsically complex. The effects based methodology’s capacity to systemically quantify and prioritize tasks in order to focus operations on critical nodes appealed to commanders faced with a difficult problem in a nebulous environment. Finally, counterinsurgency operations leverage non-lethal activity to gain support of the center of gravity – the people. The terms “non-lethal” and “military” are contradictory, if not incompatible, to the casual observer. However, there is a causal relationship between non-lethal activity and effects that resonates with military commanders and planners.

Warfare will continue to be an uncertain undertaking in the future. Effects based operations advocates that profess ability to predict outcomes and efficiently conduct combat through identification of critical nodes consign EBO as a pejorative term. The counterinsurgency effort ongoing in Iraq, however, has highlighted effects based operations ability to break down complex problems. The U.S. Army must acknowledge EBO’s value in the current fight, identify “best practices” in theater, and incorporate it into doctrine.

Endnotes


2 Ibid., 88.

the strategic guidance offered by Clausewitz in *On War*. After the Vietnam War and the establishment of U.S. Army Training and Doctrine Command, the U.S. Army embraced Clausewitz’s tenets. Multiple editions of Field Manual 100-5 (Operations) throughout the 1980’s and 1990’s contained quotes and concepts endorsed by Clausewitz.

4 Headquarters, Department of the Army, *Operations* Field Manual 3-0 (Post-DRAG Draft 05). The field manual quotes Clausewitz on page 1-13 (War is thus an act of force to compel our enemy to do our will.), page 1-15 (Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war…This tremendous friction, which cannot, as in mechanics, be reduced to a few points, is everywhere in contact with chance, and brings about effects that cannot be measured, just because they are largely due to chance.), page 6-1 (The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish…the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature. This is the first of all strategic questions and the most comprehensive.), and page 6-15 (The third factor, the distance from the sources that must send continual replacements for this steadily weakening army, will increase proportionately with the advance. In this respect a conquering army is like the light of a lamp; as the oil that feeds it sinks and draws away from the focus, the light diminishes until at last it goes out altogether.). Additionally, the manual defines center of gravity on page 6-8 in reference to Clausewitz.

5 Clausewitz, 479.

6 Field Manual 3-0 *Operations* (Post-DRAG Draft 05), 2-2. Paragraphs 2-5 (Insurgency) and 2-6 (General War) provide ample insights into the differences between counterinsurgency and general war. Insurgency / counterinsurgency is characterized as a “politically motivated conflict involving significant intra or interstate violence but usually short of large-scale operations by opposing conventional forces. Insurgencies often include widespread use of irregular forces and terrorist tactics.” FM 3-0 defines general war as “armed conflict between major powers in which the total resources of the belligerents are employed and the national survival of a major belligerent is in jeopardy. General war usually involves nation-states and coalitions. In general war, large conventional forces fight for military supremacy by conducting major combat operations. These operations aim to defeat the enemy’s armed forces and eliminate the enemy’s military capability.”


8 Williamson Murray, ed. *Transformation Concepts for National Security in the 21st Century* (Carlisle, PA: Strategic Studies Institute, September 2002). This collection of research papers provides three EBO related studies. Additionally, a word search on Google for “effects based operations” produces hundreds of articles, studies and briefings. A similar search on the U.S. Army War College library results in thirty six studies, papers and books.

9 Philip S. Melinger, ed. *The Paths of Heaven: The Evolution of Airpower Theory* (Maxwell Air Force Base, Alabama: Air University Press, 1997), 217. The Air Corps Tactical School at Maxwell Air Force Base was a bastion of air power zealots in the 1920’s and 1930’s. The application of systems analysis first appeared in 1932 by the ACTS as follows: “Modern great powers rely on major industrial and economic systems for production of weapons and supplies for their armed forces, and for manufacture of products and provision of services to sustain life
in a highly industrialized society. Disruption or paralysis of these systems undermines both the 
enemy’s capability and will to fight. Such major systems contain critical points whose 
destruction will break down these systems, and bombs can be delivered with adequate 
accuracy to do this.”

10 Rick Rowlett, “An Effects-Based Approach to Joint Operations – Where Are We Now?” A 
Common Perspective – U.S. Joint Forces Command Warfighting Center Doctrine and Education 
Group’s Newsletter (October 2005), 8.

11 Ibid., 9.

12 Joint Operations, Joint Publication 3-0, IV-4.

13 Joint Operations, Joint Publication 3-0, GL-14.

14 Joint Operations, Joint Publication 3-0, IV-9.

15 Operations Field Manual 3-0 (Post-DRAG Draft 05), E-2.

16 Operations Field Manual 3-0 (Post-DRAG Draft 05), viii.

17 Operations Field Manual 3-0 (Post-DRAG Draft 05), 1-15.

18 Clausewitz, 119.

19 Ibid., 5. Clausewitz was a twelve year old lance corporal in 1793.

20 Ibid., 8.

21 Ibid., 578.

22 Ibid., 87.

23 Ibid., 127.

24 Ibid., 95.

25 Ibid., 119.

26 Ibid., 120.

27 Ibid., 85.

28 Ibid., 86.

29 Ibid., 89.

30 Ibid., 102.

31 Ibid., 117.
32 Ibid., 178.
33 Ibid., 87.
35 B.G. Burkett and Glenna Whitley. *Stolen Valor* (Dallas, Texas: Verity Press, 1998), 430-431. In addition to the account offered by the authors of *Stolen Valor*, the author of this research paper attended a class on counterinsurgency by Larry Cable in the spring of 1996 while attending the School of Advanced Military Studies at Fort Leavenworth, Kansas. Mr Cable’s counterinsurgency bona fides were based largely on his experience as a Recon Marine in the Vietnam War. He was subsequently discovered that had been neither in the Marine Corps nor to Vietnam.
36 Clausewitz, 480.
37 Ibid., 479.
38 *Counterinsurgency*, Field Manual 3-24, 1-20, Section 1-111.
39 Ibid., 1-26 – 1-28.
40 *Operations* Field Manual 3-0 (Post-DRAG Draft 05), 3-1.
41 *Counterinsurgency*, Field Manual 3-24, 1-20, Section 1-19.
42 Ibid., 1-24, Section 1-132.
43 Ibid, 1-29.
44 Ibid.
46 Ibid.
47 This statement based on personal observations by the author while serving in Iraq as the commander of 1st Brigade, 4th Infantry Division between December 2005 and December 2006.
48 This matrix outlines the effects-based planning, operations and assessments concepts as outlined in Joint Pubs 3-0 and 5-0. The EBO criteria on the left side of the matrix were derived from Chapter IV (Planning, Operational Art and Design, and Assessment) of JP 3-0 and Chapter III (The Joint Operational Planning Process) of JP 5-0. An assessment of MNF-I, MNC-I, division and brigade plans and operations in Iraq with regard to their application of EBO concepts led to the “Red, Amber, Green” grade. A “green” assessment means a given unit’s plan was clearly in consonance with joint doctrine. An “amber” assessment means a given
unit’s plan was in partial consonance. If there was no clear evidence of a unit applying a selected EBO concept, the rating was “red.” The division and brigade ratings were based on the combined assessment of plans, operations and assessment techniques at each level. While some units at division and brigade level applied EBO concepts more directly than others, the rating reflected on the matrix depicts that overall assessment at each level.

The author downloaded plans, orders and assessment briefings from unit websites on the classified internet from MNF-I, MNC-I, three divisions (1st Cavalry Division, 4th Infantry Division, 1st Armored Division), and five brigades (1st Brigade, 1st Cavalry Division; 2nd Brigade, 25th Infantry Division; 2nd Brigade, 82nd Airborne Division; 4th Brigade, 10th Mountain Division; and 1st Brigade, 4th Infantry Division). Though the plans and briefing are classified “Secret,” the analysis of the plans and briefings are unclassified. The classified products by unit are below:

- Multi-National Force-Iraq
  - Joint Campaign Plan 07 Overview and Backbrief – 23 June 2007
  - Commander Conference Briefing – 13 October 2007

- Multi-National Corps-Iraq
  - Opord 07-01 – 1 June 2007
  - Opord 07-01 Brief – 1 June 2007

- Divisions
  - 1st Armored Division
    - 1AD FECC Products – 7 December 2007
  - 1st Cavalry Division
    - MND-B Commander Conference Brief – 5 October 2007
    - Operation Fardh Al-Qanoon Effects Assessment Brief – 14 September 2007
    - August Effects Assessment Brief Exsum – 15 September 2007
    - Baghdad Effects and Assessment Model Brief – 5 October 2007
    - Logical Lines of Operation and Objectives – 10 July 2007
    - MND-B Decision Support Template and Effects – 231706 April 2007v3
  - 4th Infantry Division
    - Assessment Methodology Brief – 27 December 2007
    - Assessments V6
    - MND-B Effects Assessment Model (Objectives-Effects-Assessment) – Jan 07

- Brigades
  - 1st Brigade, 1st Cavalry Division
    - Ironhorse Effects Management
    - App1 LOO Assessment Brief
    - App1 LOO Analysis Brief
  - 2nd Brigade, 25th Infantry Division
    - 2-25 FECC VTC Briefing – 30 Oct 07
    - Annex D, Appendix 14 (LOO Tasks)
    - Opord 08-01 (Warrior Tsunami) - 082030 Jan 08
  - 2nd Brigade, 82nd Airborne Division
    - 070623 Sadr City Effects Working Group Slides
    - S3P – 071211 – OIE to MG Hammond – v5 Brief (11 December 2007)
- 4th Brigade, 10th Mountain Division
  - 06Jan08 Patriot Effects Battle Rhythm Brief
  - IP, IPS, PIC and Threat MOE
  - LOO Assessment Brief – 15 March 2007
- 1st Brigade, 4th Infantry Division
  - Commander’s Quarterly Assessments – Aug and Nov 2006

50 This statement based on a briefing entitled “U.S. Army Field Manual 3-0 Operations – A Blueprint for an Uncertain Future,” dated 8 Jan 2008. This briefing – sent to the commander of the U.S. Army War College on 9 January 2008 by the CAC Commander at Fort Leavenworth – is the authoritative briefing from TRADOC to the Army leadership outlining the key concepts in the pending version of FM 3-0. Slide 11 of the briefing entitled “Aimpoint for Army Training and Leaders Development” depicts the Army’s decision to shift its doctrinal focus left on the spectrum of conflict from General War to conflicts of lesser intensity.

51 This observation based on personal experience by the author as a brigade commander that deployed to Iraq during the period December 2005 to December 2006.