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JOINT ADVANCED WARFIGHTING SCHOOL



ASSESSMENT: A MILITARY METHODOLOGY IN NEED OF AN OVERHAUL

by

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ASSESSMENT: A MILITARY METHODOLOGY IN NEED OF AN OVERHAUL

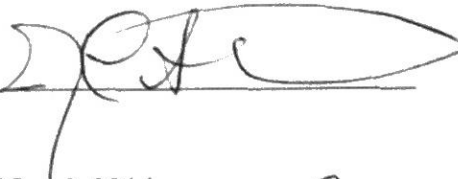
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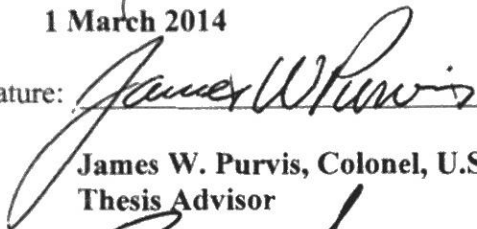
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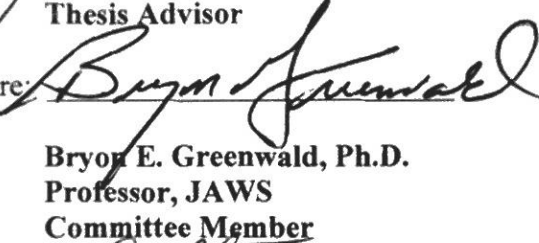
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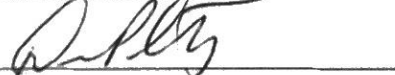
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ABSTRACT

Current assessment doctrine in U.S. Joint Publications needs significant reform by drawing on civilian practices to standardize terminology and procedures to improve its successful use in future operations. Comparison to the civilian practice of assessment reveals that the U.S. military incorrectly defines the evaluation process. The civilian practice uses evaluation to review and improve the operational approach and elements of operational design, update the assessment plan, and validate planning assumptions. Also, current doctrine does not provide adequate description of assessment methodology and lacks common procedures, training, subject matter experts and alignment with a lead Joint Staff directorate. The lack of detail about assessment sharing between organizational levels, assessment output product description, and traditional warfare requirements further exacerbates this failure. The military should correctly redefine the monitoring and evaluating processes in order to shift the focus of evaluation from assessing plan execution to evaluating the plan assumptions and objectives for continued synchronization with strategic goals and changing environment. Moreover, improvement of the U.S. military practice of assessment requires clearly defining doctrine, organization, and procedures while establishing common manning and training. By implementing these changes, the U.S. military can significantly improve its ability to assess current military campaigns and operations.

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CHAPTER 1: INTRODUCTION

Why has the United States been so successful in recent wars and encountered so much difficulty in securing its political aims after the shooting stops?

- Frederick Kagan, "War and Aftermath"

When he took command of ISAF, General Stanley McChrystal published an initial assessment document stating the following about assessment:

ISAF must develop effective assessment architectures...to measure the effects of strategy, assess progress toward key objectives, and make necessary adjustments. ISAF must identify and refine appropriate indicators to assess progress, clarifying the difference between operational measures of effectiveness critical for practitioners on the ground and strategic measures more appropriate to national capitals.¹

This statement implies the fact that ISAF conducted eight years of war without having an adequate assessment process in place to evaluate the campaign against national objectives and ensure proper alignment with national goals.² The potentially catastrophic failure of the assessment system to ensure the continuous match between shifting strategic desires and operational goals is due to a gap in the current US assessment methodology. Joint Publication 3-0 *Joint Operations* presciently states, "changes to the military objectives may occur because political and military leaders gain a better understanding of the situation, or they may occur because the situation itself changes. The Joint Force Commander (JFC) should anticipate these shifts in political goals necessitating changes in military

¹ Stanley McChrystal, "COMISAF Initial Assessment (Unclassified)," *The Washington Post*, September 21, 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/09/21/AR2009092100110.html> (accessed February 27, 2014).

² Jonathan Schroden, "Why Operations Assessment Fails: It's Not just the Metrics," *Naval War College Review* 64, no. 4 (Autumn 2011), 90.

objectives.”³ While the JFC looks for these changes during interactions with the President and Secretary of Defense, the JFC also has a staff that is responsible for monitoring the progress of the war and looking for changes as well.

Unfortunately, current U.S. assessment methodology does not include a system for monitoring the relevance of the elements of operational design and evaluating their alignment with political goals.

The thesis of this paper is that current assessment doctrine in U.S. Joint Publications needs significant reform and should draw on civilian theory and practices to standardize terminology and procedures to improve its successful use in future joint operations. JFCs are responsible for waging military campaigns in order to achieve operational objectives that support strategic objectives. JFCs need to assess the progression of their campaign so they can appropriately adjust to changes in the operational environment and respond to enemy actions. Assessment is the current doctrinal methodology that attempts to provide that vital feedback to the JFC. However, current assessment methodology is not working.

Unfortunately, current assessment doctrine is generally convoluted and inadequate to such an extent that the assessments provided to JFCs can be erroneous, misleading, or inconclusive. The bigger failure is that assessment doctrine does not instruct commanders and assessment teams on how to evaluate potential shifts in the elements of operational design such as strategic end-states or objectives. Instead, it focuses almost all of its attention on monitoring the execution of the current plan,

³ U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), A-1.

informing the commander “If we are doing the right things?”⁴ While this is an important measure of campaign progress, beyond paying lip-service to the fact that the JFC should be aware that the operational approach may require revision during an operation, there is no methodology in joint doctrine that assessment teams can follow to evaluate if the “right things” that were initially identified are still valid.

In order to understand why current assessment is failing and how to improve it, a review of the civilian practice of assessment will show that the military fails to define correctly and properly separate the assessment concepts of monitoring and evaluation. Proper separation creates an evaluation element that is responsible for focusing on plan refinement, updating the assessment plan itself, and assessing the assumptions associated with the plan. Subsequently, a review of current assessment definitions, doctrine, and practices will show that current doctrine does not provide adequate definition of assessment terms, practices, or methodology including a lack of emphasis on subject matter experts, standardized products, and unique traditional warfare considerations.⁵ Finally, recommendations for changes to assessment doctrine include creating distinct monitoring and evaluation assessment teams aligned with separate directorates, as well as producing more robust practices and procedures. Making these changes to assessment methodology will establish an assessment system that is able to view the campaign holistically up to the strategic level and provide the JFC with recommendations on campaign changes. This shift will allow the U.S. military to achieve the highly elusive

⁴ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, Joint Publication 5-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), D-3.

⁵ Current joint doctrine definitions separate warfare into two types: traditional and irregular. Traditional warfare comprises large-scale conventional campaigns and operations. Irregular warfare is all other operations such as counter-insurgency and counter-terrorism operations. For further information, see JP 3-0, page I-14.

long-term success in achieving strategic objectives and end-states, despite the fact that they may shift throughout the campaign.

An extensive literature study indicates that current assessment procedures generally fail to meet the requirements of the JFC.⁶ From this start point, it is possible to focus instead on the root flaws in the current system and potential remedies available without needing to establish the inadequacy of the current system. Also, both the U.S. and NATO are currently producing a large amount of literature and research in the area of assessment. The two agencies are working on similar and complementary improvement programs that inform each other as they progress. This paper will evaluate the current state of U.S. doctrine, but it will consider both U.S. and NATO written procedures when considering the inadequacy of current procedures and the establishment of potential remedies.

⁶ Numerous assessment experts have written extensively in professional literature about the failed state of current assessment practices as used in Iraq and Afghanistan. At least five of the articles in the bibliography describe the failure of assessment. Reference the publications by Cordesman, Downes-Martin, MacIntyre, Schroden and Sotire for further details.

CHAPTER 2: CURRENT ASSESSMENT DOCTRINE

What gets measured gets managed, and what gets managed gets done.

– Dean Spitzer, *Transforming Performance Measurement*

Assessment Defined

Joint Publication 3-0 explains that Joint Force Commanders conduct joint operations by accomplishing four separate procedures: planning, preparing, executing and assessing.¹ JP 5-0 describes assessment as “the continuous monitoring and evaluation of the current situation and progress of a joint operation toward mission accomplishment.”² The purpose of assessment is to inform commanders if their plan is working or if it needs to be refined. In order to achieve this requirement, assessments generally attempt to compare the current progress of the campaign to the advancement predictions made during planning. According to NATO procedures, the assessment process has four steps: assessment plan design, data collection plan development, data collection and treatment, and analysis, interpretation, and recommendations.³ By following these four steps, an assessment team (AT) is able to provide a commander with an assessment of campaign progress. Assessments then should provide the bridge between the military strategy that is the focus of the campaign and the truth of the current context of the war by fostering recommendations for strategy and campaign plan improvement.⁴

¹ U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), I-1.

² U.S. Joint Chiefs of Staff, *Joint Operation Planning*, Joint Publication 5-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), III-44.

³ NATO Operations Assessment Sub-Working Group, *NATO Operations Assessment Handbook*, (Norfolk, VA: NATO Supreme Allied Commander Transformation, 2012), 2-4.

⁴ Ethan B. Kapstein, “Military Metrics: How Do We Know When We’re Winning (Or Losing) a War?” *Smallwarsjournal.com*, July 6, 2011, <http://smallwarsjournal.com/blog/journal/docs-temp/806-kapstein.pdf> (accessed August 12, 2013), 2.

A Short History of Assessment Development

The creation and development of assessment in the military closely related to the rise of the concepts of maneuverist approach and effects-based operations (EBO). In World War II, the development of aircraft and other distance technologies allowed commanders to attempt to defeat the enemy without directly destroying the enemy military.⁵ Various operations, such as the Combined Bomber Offensive attack on the ball-bearing plants in Germany, attempted to achieve this. The problem with this approach is that it was difficult to measure the produced effects because they are not as obvious as lines on a map moving to reflect a front line gain or ground lost. In the 1950s, the renowned management consultant Peter Drucker produced his seminal work on the philosophy of Resource-Based Management (RBM) which was gradually, albeit haphazardly, implemented by the military in various forms.⁶ RBM's core concept is to shift the focus of planning, managing, and decision-making from inputs and processes to the desired outcomes and results.⁷ This approach requires a company to lay out objectives and postulate logical linkages to connect the required means with the desired ends. Thus, an important part of this theory is the ability to measure the outcomes generated to ensure that the plan is succeeding. Since 1991, assessment gained importance in the military campaign system.

Current Assessment Doctrine

JP 3-0 and JP 5-0 are the current U.S. military doctrine publications that define the methodology for assessment. The assessment description contained in JP 3-0 is

⁵ David S. Dees, *Effects-Based Operations at the Operational Level of War: Exploring the Living System Alternative* (Newport, RI: Naval War College, 2008), 2.

⁶ NATO Operations Assessment Sub-Working Group, 6-68.

⁷ Ibid. 6-69.

mostly duplication of the JP 5-0 assessment information. JP 5-0 instructs, “Assessments should answer two questions: Is the JFC doing things right? Is the JFC doing the right things?”⁸ To properly answer these questions, assessment teams (ATs) create, collect and analyze Measures of Performance (MOP) and Measures of Effectiveness (MOE).⁹ MOPs are used to assess friendly accomplishment of assigned tasks and help answer the question “are we doing things right?”¹⁰ MOEs enable the assessment of changes in system behavior, capability, or environment toward achieving end states or objectives and answer the question “are we doing the right things?”¹¹ One of the real values in this assessment methodology comes from comparing the MOPs and MOEs to see if the actions that the Joint Force is executing are leading to the desired effects. By comparing these two metrics across the range of desired effects and tasks, the commander will know if the campaign is proceeding as predicted and desired, or if alterations are required to improve mission accomplishment.

JP 5-0 continues with a description of the assessment process in annex D which is dedicated solely to the assessment methodology.¹² This annex explains that the purpose of assessment is deliberately to compare forecasted outcomes to actual results in order to determine the effectiveness of the military operation or campaign.¹³ The assessment process is then explained in three parts consisting of monitoring the current situation by collecting relevant information, evaluating the data by using criteria to judge progress

⁸ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, III-44.

⁹ Ibid.

¹⁰ Ibid., III-45.

¹¹ Ibid.

¹² Ibid., D-1.

¹³ Ibid.

toward established goals and then recommending actions or changes to the JFC.¹⁴ From there, the annex devolves into a discussion of combat assessment composed of battle damage assessment, munitions effectiveness assessment and targeting considerations, all of which focus on the tactical and MOP level.¹⁵ Combat assessment has very specific uses in traditional, full-scale, kinetic military operations, but it has less applicability in irregular warfare or non-kinetic effects. The total discussion of assessment in JP 5-0, the primary doctrine on assessment is a mere 13 pages. There is also assessment information in seven other JP 3-series documents that provides limited information on assessing specific types of operations.¹⁶ Still, this is a paltry amount of information on assessment when compared to the hundreds of pages in joint publications dedicated to the other joint operations procedures of planning, preparation and execution. The joint community needs to provide more doctrinal guidance for assessment in order to improve its evaluation of military operations.

¹⁴ Ibid., D-5.

¹⁵ Ibid., D-7.

¹⁶ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, (Suffolk, VA: Joint Staff, J-7, Joint and Coalition Warfighting, September 9, 2011), VI-2.

CHAPTER 3: FAILURE TO SEPARATE MONITORING AND EVALUATION

A common mistake that many leaders make is to allow themselves to become too engrossed in the details, too fascinated by the tactical aspects of the enterprise...The toughest job for the leader, then, is to trust in the strategy, trust in the subordinate leaders, and trust in the sensors to do their jobs to report the right information; in doing so, they should be able to stay out of the thicket of tactical execution.

- ADM James G. Stavridis, *Partnership for the Americas*

Current Doctrine Incorrectly Defines Monitoring and Evaluation

Current doctrine does not correctly describe the assessment concepts of monitoring and evaluation in accordance with the theoretical concepts of Resource-Based Management (RBM) or Theory-Driven Evaluation that were the basis for the current assessment practices and doctrine. This improper definition is a primary cause of the failure of current assessment practices. The basic concept of RBM is that the most important focus of a business is not on maximizing the quality or quantity of the product produced, but rather lies in the selection of the correct and best objectives for achieving their aims and then assessing them to see if their attainment is leading to the ultimate goal.¹ For example, most companies want to make money and there are many ways they can set about accomplishing this goal. They can build more products, build better products, build different models of the product, or expand the number of factories producing the product. Each of these objectives could hypothetically increase the revenue of the company by selecting one or an amalgamation of several as its strategy to attain its goal. Once selected, the company management then assesses their operations by monitoring the achievement of the objective; are they producing more, better, or diverse products. But more importantly, evaluating of the objective also ensures that it is

¹ NATO Operations Assessment Sub-Working Group, *NATO Operations Assessment Handbook*, (Norfolk, VA: NATO Supreme Allied Commander Transformation, 2012), 2-7., 6-68.

producing the desired increase in revenue. From RBM theory, the military needs to learn that without evaluating the selected operational design elements, such as end-state or objective, to ensure they will in fact produce the desired strategic outcome, military operations will have a diminished chance of being successful in the strategic context.

JP 5-0 identifies assessment as a three step process consisting of monitoring, evaluation, and recommendation.² The definition of monitoring is the collection of data and metrics to analyze the current situation. Evaluation is determining progress toward end-states, objectives and tasks.³ Recommendation is the use of monitoring and evaluation to adjust the plan execution. Unfortunately, definitions of monitoring, evaluation, and recommendation focus all the assessment effort on evaluating the execution of the approved plan.

The root cause of this misdirected focus on plan execution is assessment's reliance on Measures of Performance (MOPs) and Measures of Effect (MOEs) as the only tools provided for the assessment process. Both tools focus on measuring the proper execution of the plan and determining if the plan is accomplishing the selected goals. JP 5-0 states that MOPs measure "is the JFC doing things right?" and MOEs measure "is the JFC doing the right things?"⁴ Both of these questions assume that the JFC has correctly determined key elements of operational design such as end-state, objectives, and centers of gravity. Further, the current methods of measuring the plan do not track or identify any changes in those key factors or the context in which the staff identified them. This is due to the fact that MOPs and MOEs are not appropriate for monitoring the relevance of

² U.S. Joint Chiefs of Staff, *Joint Operation Planning*, Joint Publication 5-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), D-2.

³ Ibid.

⁴ Ibid., III-44.

selected elements of operational design like centers of gravity or end-states. By relying on MOPs and MOEs, the current doctrinal definitions of monitoring and evaluation focus assessment exclusively on determining if the plan is achieving the originally determined operational approach.

JP 5-0⁵ and the U.S. Assessment Handbook⁶ caution the military practitioner to be aware that the initial conditions and assumptions used to build a campaign are subject to change. Specifically, JP 5-0 details that it is the responsibility of the J-5 future planners to evaluate if the assumptions and desired end-states remain correct and desirable. If it is determined they are lacking, the planners should reframe the problem and consider a branch plan or new Course of Action.⁷ As a campaign progresses, it is not just likely, but almost assured that everything about the operating environment and possibly even the strategic guidance will change including the specifics of the objectives or the center of gravity. The strategic end-state is likely to shift as the plan also meets political reality that will cause a change in both the military end-state and desired termination criteria. Unfortunately, while doctrine identifies the need to monitor assumptions and end-states, and for the future planners to reframe the problem, it does not provide “how-to” guidance for monitoring these areas to identify changes and make the appropriate adjustments in the plan. The fact that doctrine mentions the reframing concept separately from the assessment process and has little discussion on what would constitute reframing trigger events highlights this lack of guidance.

The beginning of potential remedies to the assessment problem lies in the NATO

⁵ Ibid., III-23.

⁶ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, (Suffolk, VA: Joint Staff, J-7, Joint and Coalition Warfighting, September 9, 2011), I-6.

⁷ Ibid., II-18.

Operations Assessment Handbook. This handbook identifies that assessment is responsible for two independent processes: operational assessment focused on the short to mid-term accomplishment of effects and decisive points, and campaign assessment focused on evaluating if the objectives and effects are accomplishing the military mission.⁸ Current doctrine lacks procedures and a specific group responsible for selecting the reframing indicators, monitoring the strategic environment, and evaluating the operational approach to determine if it is still valid or requires reframing.

The Need to Separate Evaluation from Monitoring

Clausewitz famously states that “war is merely the continuation of policy by other means”⁹ denoting all wars are inextricably linked to the achievement of political aims. The impact of this reality is that it is very possible to meet all original military objectives without achieving the political goals of the nation as they evolve over time. Most people immediately consider the U.S. operations in Vietnam or Iraq as examples of not meeting the political objectives, but it has actually plagued militaries throughout history. Pierre Lessard points out that probably the most famous example of this is when Napoleon defeated the Russian Army and captured the national capital in 1812, but was unable to fully defeat his enemy and prevent them from successfully rebuilding and ultimately defeating the French Army.¹⁰ These examples highlight the fact that the most important part of strategy and military operations is periodically assessing objectives and end-states to ensure alignment with policy aims in the changing context of the strategic

⁸ NATO Operations Assessment Sub-Working Group, 2-7.

⁹ Carl Von Clausewitz, *On War*. ed. and trans. Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976), 87.

¹⁰ Pierre Lessard, “Campaign Design for Winning the War...and the Peace,” *Parameters* 35, no. 2 (Summer 2005), 36.

environment. Unfortunately, current assessment practices in doctrine assume that the original plan or policy aims are correct and the goal of assessment is to help ensure the proper execution of the plan. This leads to the major logic shortfall that assumes the original understanding of the operating environment matches current reality and the purpose of assessment is to recommend changes to actions to create the selected effects.¹¹ Assessment needs to be adapted to evaluate the key aspects of the operational approach and design to provide relevant reframing indicators and recommendations to the commander.

In order to gain a better understanding of how to improve assessment practices, the U.S. military can turn to civilian assessment practices and theories. Interestingly, Theory-Driven Evaluation, which is the basic concept underlying modern business assessment practices, provides a mechanism to do just that. As previously discussed, the private sector and government organizations developed and successfully employed assessment methods for decades and culminated in the concept of *Theory-Driven Evaluation*.¹² This theory contains many of the same concepts and definitions that are enshrined in current military assessment doctrine and the U.S. assessment handbook. Unfortunately, the military adopted this method without detailed theoretical or philosophical understanding,¹³ which led to a glaring misapplication of the monitoring and evaluation concepts.

The root problem lies in the fact that the military misidentified the civilian

¹¹ Clinton R. Clark and Timothy J. Cook, "A Practical Approach to Effects-Based Operational Assessment," *Air & Space Power Journal* 22, no. 2 (Summer 2008), 85.

¹² Andrew P. Williams and John C. Morris, "The Development of Theory-Driven Evaluation in the Military: Theory on the Front Line," *American Journal of Evaluation* 30, no. 1 (March 2009), 64.

¹³ *Ibid.*, 63.

definitions of monitoring and evaluation. The military used both monitoring and evaluation to define the same thing, the monitoring of mission execution. This is in contravention to the philosophical basis of theory-driven evaluation that conceptualized two main domains for the performance of evaluation: normative and causative.¹⁴ The normative domain seeks to determine the congruency between the planned program and the actual outcomes achieved. This is the plan-focused assessment that military doctrine currently describes. Alternatively, there is the causative domain, which is the more important component in theory-driven evaluations. The causative domain expands the evaluation to test the plan itself and ensures its validity.¹⁵ It is only through causative evaluation that it is possible to assess a plan as appropriate to the conditions that currently exist or are expected to occur.

International and government agencies, other than the U.S. military, have correctly adopted theory-driven evaluation and are generally seeing successful use of its methods. For example, the United Nations Education, Scientific, and Cultural Organization (UNESCO) has been using the theory, under the title Resource-Based Management (RBM) since 2005. The UNESCO RBM Guiding Principles pamphlet describes how it conducts the concepts of monitoring and evaluation separately.¹⁶ Monitoring is concentrated on assessing progress towards the desired objectives. In other words, it focuses on ensuring the successful execution of the plan. Evaluation, in contrast, moves beyond the assessment of progress and seeks to determine if it is possible to improve the plan in terms of relevance, efficiency, effectiveness, impact, and/or

¹⁴ Ibid., 64.

¹⁵ Ibid., 65.

¹⁶ UNESCO Bureau of Strategic Planning, *Results-Based Programming, Management and Monitoring (RBM) Approach as Applied at UNESCO* (Paris: UNESCO, 2011), 16.

sustainability. The UNESCO pamphlet maintains the most important concept is that different teams conduct monitoring and evaluation at separate levels.¹⁷ The project manager leads monitoring and is directly responsible for executing the plan. Evaluation is completely independent of the project manager and conducted at the top-level of the organization that oversees all UNESCO programs. By solely focusing on evaluating the plan, current military assessment doctrine misses this separation of monitoring by the plan executors from a different group that evaluates the overall plan.

The reason for the military misapplication of the theory is readily apparent to anyone who visits military assessment teams (ATs). The teams are mostly staffed by military officers and civilian analysts drawn from other areas of the organization.¹⁸ This means that almost none of them have formal assessment training or understand equivalent civilian practices for potential incorporation into the military methodology. Williams and Morris note that in their observations of various ATs in the military they have “not yet encountered any that have awareness of the ‘civilian’ evaluation field - a fact that is quite surprising given the level and quantity of development of evaluation technique and theory in the civilian domain.”¹⁹ The military can learn a great deal from the civilian sector about properly applying theory-based evaluation. By tapping into this resource, it can radically improve the accuracy and reliability of its assessment methodology.

Reviewing and Improving the Selected Plan

Military operations take place in complex and challenging environments, full of tentative alliances where each participant has its own objectives. They also consist of a

¹⁷ Ibid., 37.

¹⁸ Williams and Morris, 68.

¹⁹ Ibid.

variety of overlapping and sometimes competing missions accomplished simultaneously. The military often views and analyzes this dynamic operational using the six areas of political, economic, social, military, infrastructure and information, or PMESII.²⁰ The complex nature of the domain in which the military operation is taking place means that it is difficult to ascertain that any specific tasks will lead to specific effects. In fact, in many operations, the military will successfully complete all assigned tasks and still have not created the desired effects or achieve the most current end-states.²¹ Even worse, these complex forces will often work to shift the objectives and end-states desired by both sides as the operation progresses, especially in long-lasting campaigns.

Current doctrine is aware of the changing nature of the environment during plan execution. In several places, JP 5-0 notes that the political environment will likely change during the execution, which often results in a change to the military mission or the desired termination criteria.²² It goes on to say that when these changes are significant or assumptions proven false, the commander and staff need to reframe the operational approach.²³ Unfortunately, doctrine ends with those statements and provides no real guide or instruction on what the commander and staff should do to monitor and adapt to these potential changes.

History shows that selecting and achieving the strategic level goals is the most important part of military action. Williamson Murray, a noted military historian and strategic commentator, asserts, “The military lessons of wars in the twentieth century suggest that it is at the political and strategic levels that wars are won or lost - rarely at

²⁰ NATO Operations Assessment Sub-Working Group, 2-1.

²¹ Ibid., 2-10.

²² U.S. Joint Chiefs of Staff, *Joint Operation Planning*, D-5.

²³ Ibid., II-18 – II-19

the operational and never at the tactical.”²⁴ If this is the case, then the most important task of the military operational commander is to stay in touch with the strategic leadership and ensure that the military executes the campaign in accord with the strategic goals. Bob Woodward points out that the last 60 years of military history is replete with examples of constantly shifting political goals, and thus “military strategic objectives are rarely enduring, and campaign design must be sufficiently agile to adjust to their fluctuation.”²⁵ Even World War II, which most people think entailed fairly consistent policy and focus from the Allies perspective, experienced no fewer than eight major strategic shifts between 1942 and 1945, averaging a change every 5 months.²⁶ The commander should expect that the operational approach selected at the beginning of a campaign will need altering as the military operation progresses.

The reality of politics is that there is an inextricable linkage between them and the results of military conflict. As national leaders face consecutive successes or failures of a campaign, they adapt their own expectations to the outcomes the nation can realistically achieve. The perfect example of this is the Korean conflict of 1950-1953. During a war that had three major phases, the strategic goals of the allies shifted dramatically over the 3 year period. First, it was simply to maintain control of any part of South Korea. Second, after significant military success, the political goal changed to defeating North Korea in detail and uniting the country under democratic control. Finally, after China entered the conflict and rebuffed the Allied advances into North Korea, it transitioned

²⁴ Williamson Murray and Kevin Woods, *Thoughts on Effects-Based Operations, Strategy and the Conduct of War*, (Alexandria, VA: Institute of Defense Analyses, Joint Advanced Warfighting Program, 2004), 5.

²⁵ Lessard, 42.

²⁶ Ibid.

again to re-establishing two separate countries in a status quo antebellum. National leaders must always balance the natural security interests of the country with their own political goals and naturally adapt their desired objectives based on the current success or failure of a military campaign.

The assessment team must be responsible for creating a separate, operational approach-focused evaluation to provide an independent and holistic assessment of the operation. It would also require doctrine to define the process and methodology for how to accomplish this, but the current military sanctioned tools of MOPs and MOEs cannot accomplish it. This naturally leads back to an analysis of the civilian theory and practice of evaluation to see if there are tools and concepts the military can adapt for its use.

The genesis of assessment theory comes from Theory-Driven Evaluation. The central tenet of this method is that the designed plan will not be perfect, without error or always get it right, especially in its initial inception.²⁷ The goal of a plan's first iteration is to provide a baseline for results assessment that the staff will then use to improve and update the plan. It is vital that the staff completes the evaluation of the entire plan in congruence with achievement of effects and outcomes (both desired and undesired). Williams and Morris warn against using assessment just to review and modify the chosen course of action. Instead, they note, it is important to evaluate all conditions, not just those objectives and end-states achieved, and use them to create entirely new plans based on dynamic circumstances.²⁸ Evaluation theory clearly states that assessment requires focusing not only on assuring that the plan gets accomplished, but constantly reviewing

²⁷ Douglas J. MacIntyre, "Operational Assessment: Replacing Black Magic with Learning by Design," *Marine Corps Gazette* 95, no. 6 (June 2011), 20.

²⁸ Williams and Morris, 75.

the plan to ensure that it is achieving the correct and most current goals.

For the military to adopt the evaluation concept, it will need to create a methodology that focuses on the theory of change espoused by the plan. David Apgar, when writing about assumption-based metrics, a theory comparable to theory-driven evaluation, notes that the starting point of the process is for executives to use their intuition to determine what they consider most influential or important.²⁹ Then, the company uses evaluation to test that theory and see if it is correct or needs adjustment. He goes on to explain that assessment metrics are much like recipe ingredients; alone and unused, they are not of much relevance. But, the cook (or commander) selects certain ingredients and the amount of each to use by developing a recipe that puts them together and hopefully produces a culinary masterpiece. The only way to see if the outcome is correct is to execute the recipe and analyze the resulting product.³⁰ In the same way, the elements of operational design are the main ingredients of the plan. The commander develops a theory on how the combination of these ingredients will lead to acceptable outcomes. It is only by testing these outcomes to see if they meet the current political interests of the nation that it is possible to validate the theories. The most important part of evaluation is to compare the current outcomes with the theories that are the basis for the plan and then assess if the realized outcomes validate those theories.

Reviewing and Improving the Assessment Plan

Recent joint doctrine has done a good job tying the creation of an assessment plan or development of metrics to the actual planning process. The U.S. assessment handbook

²⁹ Apgar, David, "Assumption-Based Metrics: Recipe for Success," *Strategic Finance* 93, no. 5 (November 2011), 28.

³⁰ *Ibid.*, 28 – 29.

affirms that the first step of assessment is to support the creation of the operational plan while developing the assessment plan in tandem.³¹ It stresses that assessment members must be a part of the selection of end-states, objectives, and effects to ensure they are written in a manner that is measurable.³² These statements allow the assessment team involvement in the creation of the operational plan and helps capture key decisions and linkages that are determined during the development of the operational approach. Further, it allows them to develop an assessment plan that closely links and coordinates with the planned actions to ensure the most accurate assessment and understanding of what the plan needs to accomplish.

The problem with this doctrine for the development of the assessment plan is that it focuses almost entirely on the creation of the assessment plan during plan development. The assessment handbook beautifully lays out the six steps for developing a successful assessment plan.³³ Unfortunately, it ends at the planning stage of the operation and mentions no methodology for reviewing or updating the assessment plan during execution. If the staff does not regularly update the assessment as the campaign progresses, it loses touch with the changing operational environment and no longer provides meaningful information. Metrics have a shelf-life and need adjustment as the strategy and execution of the plan adapt to changing situations.³⁴ This means that commander and staff must evaluate and update the assessment plan to ensure it provides the correct information they need to properly assess the operational plan in order to make

³¹ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, VI-1.

³² *Ibid.*

³³ *Ibid.*, IV-3.

³⁴ Robert B. Sotire, *Measuring Performance and Effectiveness in Irregular Warfare: Preventing Dysfunctional Behavior*, (Newport, RI: Naval War College, 2009), <http://handle.dtic.mil/100.2/ADA504933> (accessed August 12, 2013), 13.

the necessary changes.

Monitoring Assumptions

An important part of the Joint Operations Planning Process during the Mission Analysis step is the initial identification of assumptions. This is a crucial procedure because, in complex and dynamic operational environments, it is rare to develop a plan without making basic assumptions to help narrow the scope of the plan and simplify the options. History is replete with examples of plans that failed because their underlying assumptions proved to be false. The most recent U.S. example of this reality is the failure of Operation IRAQI FREEDOM to have any significant Phase IV planning to handle controlling Iraq after accomplishing the desired regime change. In his book *The Generals*, Thomas Ricks highlights that both President Bush's staff and the CENTCOM commander, General Tommy Franks, assumed that post-invasion Iraq would welcome U.S. forces with open arms and embrace the freedom they had been given.³⁵ General Franks fully expected and briefed the White House that the U.S. forces would be completely out of Iraq the same year as the invasion occurred.³⁶ This was a key assumption and laid the groundwork for all Phase IV planning and tasks that the U.S. military accomplished. Unfortunately, it was never well monitored or evaluated during execution and it took several years, during which an insurgency and civil war developed and overtook the country, before national and CENTCOM leaders properly accepted it as a false assumption.

While staffs often spend significant planning effort debating the assumptions

³⁵ Thomas E. Ricks, *The Generals: American Military Command From World War II to Today*, (New York, Penguin Press, 2012), 403.

³⁶ Ibid.

involved in an operation, it is easy for these assumptions to get lost in the joint operations planning process as it shifts to COA development, selection, order writing and execution, to the point where many people executing the plan will have no idea of the assumptions upon which it is based. Joint doctrine is aware of the importance of assumptions and the effect that their confirmation or rejection can have on the outcome of an operation. JP 5-0 stresses that “assumptions must be continually reviewed to ensure validity.”³⁷ But, joint doctrine is currently very plan-focused and continues that “although there may be exceptions, the staff should strive to resolve all assumptions before issuing the OPORD.”³⁸ This expectation is short-sighted and almost impossible to fulfill. Most staffs base assumptions on the way adversaries, neutrals, and friendly or coalition forces will act or respond during the execution of the plan. It is not possible to validate many assumptions before executing the plan and the enemy response becomes clear. The U.S. assessment handbook does make several assertions that the assessment teams need to occasionally validate assumptions and that they should continuously challenge assumptions during evaluation.³⁹ It even mentions that the mechanism used to conduct the assumption validation is MOEs.⁴⁰ While these may be good, general statements, what is lacking is any information on how to accomplish the validation process or even how to develop MOEs for monitoring and evaluating assumptions. Since MOEs focus on evaluating effects and not facts, they are completely the wrong mechanism for validating the assumptions that are the underlying basis of the plan. While the importance of assumptions and the need to monitor them is accepted joint doctrine, there is no

³⁷ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, IV-8.

³⁸ *Ibid.*

³⁹ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, II-6.

⁴⁰ *Ibid.*, IV-5.

established or even practiced mechanism for conducting this important requirement.

To consider possible solutions to this problem, it is best to re-consider the civilian practice of Theory of Change strategies to see how they address this issue. A key component of the Theory of Change is the identification of the assumptions that form the basis for the theory.⁴¹ The staff does not accept the listed assumptions as facts until proven. Instead they closely monitor each of the assumptions throughout execution, and where possible, develop tests to confirm or deny the validity of the assumptions as soon as reasonably possible.⁴² Overall, joint doctrine identifies assumptions as a key part of the joint planning process. What it lacks is a clear assessment method for the assessment team to use in monitoring and evaluating these critical elements as the plan and execution of the operation proceeds.

⁴¹ Treasury Board of Canada Secretariat, *Theory-Based Approaches to Evaluation: Concepts and Practices*, (Ottawa, Canada: Treasury Board of Canada Secretariat, 2012), 5.

⁴² Dana H. Taplin and Helene Clark, *Theory of Change Basics: A Primer on Theory of Change*, (New York: ActKnowledge, 2012), http://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToCBasics.pdf (accessed August 12, 2013), 5.

CHAPTER 4: ASSESSMENT FRAMEWORK IS NOT ADEQUATE

You know what is wrong with a lot more confidence than you know what is right.

- Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable*

Current Assessment Doctrine is Inadequate

The current state of U.S. military doctrine on assessment does not provide practitioners enough information to properly execute assessment methodology. Numerous professional journal and periodical articles written by assessment experts over the last decade decrying the current state of U.S. military assessment practices document this fact well. Probably the biggest critic of current assessment doctrine is Jonathan Schroden, former professor at the Naval War College, who bluntly states, “One reason operations assessments fall short is that there are deficiencies, contradictions, and confusion in the doctrine that is supposed to guide their conduct.”¹ He goes on to conclude that current assessment problems run much deeper than just poor metrics and faulty mathematics, saying that what is required is a complete rethink of the theory behind assessment plans and execution.² It is obvious that the current state of assessment doctrine is the root cause behind the poor execution of assessment by military staffs.

Based on the rash of literature available on this subject and recent publications, it seems that the military is aware of the deficiency and making some efforts toward rectifying it. The release of the U.S. Assessment Handbook in 2011 and the NATO Assessment Handbook in 2012 finally provided some guidance on various methodologies assessment teams can use to develop and execute assessment plans. The U.S. followed

¹ Jonathan Schroden, "Why Operations Assessment Fails: It's Not just the Metrics," *Naval War College Review* 64, no. 4 (Autumn 2011), 92.

² *Ibid.*, 96-99.

up their assessment document with the July 2013 release of an Insights and Best Practices Focus Paper on Assessment.³ This paper is a useful review of current assessment practices used by various Combatant Commanders in operational theaters with a highlight of best practices seen in each location. Unfortunately, neither the U.S. nor NATO seems to be engaged in taking the next step of putting these best practices or methodologies into the extensive formal doctrine statements required to standardize practices across commands. Walter Ledford, a doctrine writer in the Joint Staff J-7, explained in an interview that the U.S. Joint Staff is conducting an assessment survey of Combatant Command staffs to try to determine the best way forward for U.S. military assessment development and will be publishing a short Joint Doctrine note on assessment sometime in 2014.⁴ For now, the joint community is not preparing for or willing to codify extensive changes to assessment practices in doctrine.

Lack of Defined Assessment Organizational Structure

The military has conducted assessment for long enough to amass a large body of journal articles, commentaries, and joint best practices on the subject. Nearly all of them come to the same conclusion: assessment is a field easily misused and abused if not conducted by professionals educated in proper statistical methods and mathematical fallacy avoidance. Unfortunately, military assessment teams (AT) rarely contain experts who have the required professional level of training. This is contradictory to the basic concepts of the resource-based management theory. Under this theory, it is vital for the evaluators to have the technical and methodological expertise required by the program

³ U.S. Joint Staff, J-7, Deployable Training Division, *Insights and Best Practices Focus Paper: Assessment*, (Washington DC: Joint Staff, J-7, Deployable Training Division, July 2013), 1.

⁴ Walter Ledford, Joint Staff J-7, interview by author, January 8, 2014.

theory as well as understand the program itself.⁵ Some parts of the military seem to recognize this void. U.S. Army Civil Affairs and Psychological Operations Command guidance dictates the use of reachback capability during assessment metric evaluation in order to access statistical expertise rarely available in theater. NATO operations assessment doctrine strikes a similar note when it states that a multi-discipline team must conduct assessment, constituted by systems analysts, social scientists and operational analysts, each of which has a unique skill set for which there is no substitute.⁶ In order to work correctly, commands must staff assessment teams (AT) with properly skilled individuals.

The military is doing a poor job of developing ATs that have the skill sets required to create relevant and correct assessments. Jonathan Schroden, who has visited assessment teams in multiple combat operations, points out that in his experience, ATs are staffed with unqualified officers or untrained operational researchers.⁷ The root of the problem lies in the fact that military instructions set no expectations or requirements for assessment teams (ATs).⁸ Without a doctrinal basis or requirement, especially in a fiscally constrained environment, joint staffs cannot justify the need for assessment experts in their ATs. Exacerbating the problem is the fact that current ATs are filled and led by military officers who are trying to accomplish the job without any formal training

⁵ Andrew P. Williams and John C. Morris, "The Development of Theory-Driven Evaluation in the Military: Theory on the Front Line," *American Journal of Evaluation* 30, no. 1 (March 2009), 65.

⁶ NATO Operational Experiment, *NATO Operations Assessment Experiment Final Report* (Norfolk, VA: Headquarters, Supreme Allied Commander Transformation, 2013), 17.

⁷ Jonathan Schroden, "Why Operations Assessment Fails: It's Not just the Metrics," *Naval War College Review* 64, no. 4 (Autumn 2011), 95.

⁸ Robert J. Michael, II, *Effective Operational Assessment: A Return to the Basics* (Newport, RI: Naval War College, 2010), 5.

or background in assessment.⁹ These officers often read the meagre doctrine that exists on assessment, but find no real information to help them in their job performance.

The creation of the U.S. Joint assessment handbook published in 2011 has finally given some general advice on the creation and execution of an assessment team (AT).¹⁰ While it is a good start, it lacks many of the elements required to provide ATs with the expertise they need to accomplish the job. First, the nature of the handbook is such that it is not doctrinal guidance like joint publications, but rather “it provides fundamental principles, techniques, and considerations related to assessments that are being employed in the field.”¹¹ This means that the handbook only contains suggestions and best practices that are still under development so they do not provide staffs with a basic methodology or procedure like doctrine. Next, the handbook is very vague on the best practice solutions for the creation of assessment working groups or ATs. The handbook acknowledges that each command currently builds its ATs differently with diverse make-ups of assessment trained personnel, subject matter experts, and group composition.¹² By providing no baseline solution, there is no basis for commands to work toward a common solution or push for funding of expertise positions on their staffs. Finally, the handbook is also inconclusive on the lead directorate placement for the AT; whether it best belongs under the J-2, J-3, or J-5 directorate.¹³ The Joint Staff J-7 recently issued clear guidance in the document *Assessment Best Practices* where they concluded, “At the Operational

⁹ Sebastiaann Rietjens, Joseph Soeters, and Willem Klumper, “Measuring the Immeasurable? The Effects-Based Approach in Comprehensive Peace Operations,” *International Journal of Public Administration* 34, no. 5 (2011), 333.

¹⁰ U.S. Joint Staff, J-7, *Commander’s Handbook for Assessment Planning and Execution*, (Suffolk, VA: Joint Staff, J-7, Joint and Coalition Warfighting, September 9, 2011), I-9.

¹¹ *Ibid.*, i.

¹² *Ibid.*, I-9.

¹³ *Ibid.*

Level, consider establishment of an assessment cell in the J-5 or as an empowered separate directorate.”¹⁴ Until the joint staff J-7 establishes a doctrinal baseline for ATs and professional requirements, joint staffs will continue to struggle to create and fill these positions with personnel that can accomplish assessment correctly.

Absence of Formal Terminology and Training

A complete lack of standard vocabulary or terminology also plagues current assessment methodology. This deficiency first appears in the planning arena where assessment teams use terms such as operational objective, tactical objectives, and tactical tasks, but U.S. military doctrine does not define these terms.¹⁵ Currently, there is also no formal U.S. assessment training. This means military personnel recruited into the ATs must conduct assessments while learning on the job, learning from their predecessors, or by reading the paltry doctrine that exists on the subject.¹⁶ The problem with any of these methods, as discussed in the previous section, is that assessment is a technical field that requires expertise; otherwise the assessor can easily fall into any of a number of mathematical fallacies or logical pitfalls in their evaluations. The fact that the recent war zones of Iraq and Afghanistan create most assessment knowledge further exacerbates the problem. This is a problem because the military tends to assign assessment to their positions for six months to one year, with most of the staff rotating at the same time. As a result, each rotation tends to develop a tailored assessment system, not understanding or building upon the products previously developed and having to relearn hard taught

¹⁴ U.S. Joint Staff, J-7, Deployable Training Division, 10.

¹⁵ Stephen Downes-Martin, "Operations Assessment in Afghanistan is Broken: What is to be done?" *Naval War College Review* 64, no. 4 (Autumn 2011), 117.

¹⁶ Christopher W. Bowman, *Operational Assessment – the Achilles Heel of Effects-Based Operations?* (Newport, RI: Naval War College, 2002), 2.

lessons.¹⁷ Even the U.S. assessment handbook recognizes the desperate need for standardized terms but must state that it is neither authoritative nor prescriptive, and that it hopes a common set of terms and processes will ultimately ensue.¹⁸ Until that time comes, the lack of standardized terms and training is significantly impairing the capability of assessing military operations.

As much as there is a lack of common terminology in military assessment, there is also a severe paucity of formal training and definition for assessment teams (ATs). Jonathan Schroden writes that a critical problem with the current practice of assessment is that there is no training pipeline for practitioners and there is no dedicated cadre of experts being built up to improve the field.¹⁹ These two problems are mutually destructive because the military is currently building up a large volume of assessment experience, knowledge, and lessons. Although there is a formal process to capture this information, the military does not return it to the field by training the next wave of assessment teams.

The U.S. military is not without a monitoring and feedback system, and the Joint Lessons Learned team has collected data on the assessment system and provided feedback to the Joint Staff J-7 for required improvements. This feedback is what led to products like the U.S. assessment handbook and assessment focus paper. Unfortunately, the efforts of the lessons learned team do not go nearly far enough. The military does not staff the team with assessment experts and, while they can collect small improvements and recommended changes, they are not a good organization for creating significant

¹⁷ NATO Operations Assessment Sub-Working Group, *NATO Operations Assessment Handbook*, (Norfolk, VA: NATO Supreme Allied Commander Transformation, 2012), 2-2.

¹⁸ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, I-7.

¹⁹ Schroden, 97.

change or overhauling the current system. A significant level of change is required in the assessment area and only a dedicated group of assessment subject matter experts can do it well. Also, the lessons learned team provides feedback to personnel already conducting assessment and does not provide the baseline training that is necessary to develop a competent staff. Without emphasizing the improvement of assessment doctrine and creating baseline standards and training for assessment practitioners, the U.S. military will not be able to make necessary improvements in assessment methodology.

Assessment Deficiency in Sharing Information between Organizations

One other area where there is a general dearth of information on assessment methodology is the establishment and sharing of assessment products between various military organization levels. JP 5-0 broaches the subject and makes broad assertions about the need to link the organization levels and that the organization level accomplishing the task should also be the one responsible for conducting the assessment of that area.²⁰ The U.S. assessment handbook does not provide much more detail when it asserts that assessment teams need to ensure that all levels share assessment products, remain well connected, and properly link supported/supporting plans.²¹ These are good statements that frame the goal of assessment across multiple military echelons, but both documents are lacking any discussion of how to link the products, connect the various assessment plans or share information.

The reality of accomplishing these seemingly simple principles is what current assessment practitioners are finding difficult. U.S. Marine Lieutenant Colonel Douglas MacIntyre, who returned from operations in Afghanistan in 2010, wrote that ISAF

²⁰ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, D-7.

²¹ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, I-10.

developed an overall assessment strategy, but the regional commanders did not trust or agree with it, so each developed their own assessment methodology and reporting process.²² In the same manner, U.S. Air Force Lieutenant Colonel Kristen Messer wrote that, in her experience, Joint Task Force staffs tend to reserve the operational evaluation for themselves and disregard evaluation information sent up by their subordinate commands.²³ This leads them to neglect the subordinate commander's evaluation because they are asking for only raw monitoring data and making the assessments themselves. Coalition operations complicate the problem even further because each nation wants to develop and conduct its own assessment plan and methodology. This is exactly what is happening in Afghanistan where ISAF, the U.S., the UK, Holland, and Canada each have independent evaluation systems.²⁴ One other problem with current assessment sharing between levels is that subordinate levels rarely received feedback on the superior organization's evaluations and use of subordinate level data.²⁵ This means that they are collecting and analyzing data without knowing if it is fulfilling its purpose or if the superior organization considers their evaluations correct or accurate. Since there is no unity of assessment methodology between levels and outside organizations, the hope of building a comprehensively informed and holistic view of the campaign is almost impossible.

Inconsistency of Assessment Output Products

The final procedural problem with assessment is that it inappropriately relies on

²² Douglas J. MacIntyre, "Operational Assessment: Replacing Black Magic with Learning by Design," *Marine Corps Gazette* 95, no. 6 (June 2011), 19.

²³ Kristen Messer and Shane Dougherty, "A New Operational Assessment Paradigm: Splitting the Stoplights," *Air & Space Power Journal* 20, no. 3 (Fall 2006), 59.

²⁴ Rietjens, Soeters, and Klumper, 333.

²⁵ *Ibid.*, 335.

simplistic quantitative procedures. The current output method of military assessment products is almost completely quantitative in nature and uses the unsophisticated and often misleading form of stoplight charts and quantitative bar or line graphs. The examples given in the U.S. military assessment handbook are entirely stoplight charts and have no associated narratives or textual information provided with the evaluations.²⁶ The same is true for the sample products in the assessment focus paper, which provides two examples that are either stoplight charts or sliding scales with no associated textual information.²⁷ These quantitative types of charts can be very appealing to staffs and commanders because they are simple and provide what appear to be very concrete evaluations. If the staff rates the areas green or moving to the positive side, then the military is winning and operations are going well. The problem with these charts is they dramatically oversimplify the assessments provided and contradict the fundamental tenets of the theory that assessment is based upon. Stoplight charts are great for tracking plan execution and answering “If we are doing things right?” But, they cannot be used to explain causality, influence, or evaluate the correctness of the selected elements of operational design. Evaluations of these elements require a narrative that describes causes, suspected interactions, and intended and unintended consequences.

An alternate method of output display is the integration of a structured narrative²⁸

²⁶ U.S. Joint Staff, J-7, *Commander’s Handbook for Assessment Planning and Execution*, V-9.

²⁷ U.S. Joint Staff, J-7, Deployable Training Division, 11.

²⁸ A Structured Narrative is a compromise format between free text and quantitative charts. Structured Narratives consist of text that follow an explicit format and specified set of fields and text with words that are selected based on their relevance to the subject area as well as spectrum of descriptive ability. The Structured Narrative allows an assessor to provide relevance and context to the quantitative information that is provided while using a format that allows higher organizations to review and combine multiple narratives in a cogent manner. There are even computer programs designed to collect Structured Narrative inputs, combine them and produce consolidated Structured Narrative output, just like can be done with quantitative data. See Appendix A for Structured Narrative examples.

into the stoplight and sliding metric charts that currently exist. The key missing capability of a sliding chart is preservation of the extreme but important data that the staff can easily ignore or become overwhelmed by when aggregating quantitative data.²⁹ For example, if the staff aggregates the current statuses of a country comprised of 100 regions to give an overall assessment, it is easy to add 99 regions that are doing well to a single region that is doing poorly and assess the overall country as green. That result can hide a single poor area that has a population larger than most of the other areas combined or that is the source of the majority of drugs or insurgents in the region. Adding a structured narrative to the stoplight chart helps preserve the needed contextual detail of the assessment.

The use of structured narrative is a contentious topic in the assessment community and there is an on-going debate in assessment literature about the value and integration of structured narrative. Current military opinion sides against it based on the fact that the current military assessment handbooks do not mention it nor show it in the examples. In contrast, there are civilian assessment experts like Stephen Downes-Martin, research professor at the Naval War College, who recommend the assessment of metrics using exclusively narratives.³⁰

Structured narrative methodology does have some obvious drawbacks. The first is the fact that it can lead to information overload. A stoplight chart can provide a large amount of information on a slide that facilitates easy viewing and understanding. That same information in text form could require several slides or the staff can place it on a

²⁹ National Defense Research Institute, *Improving Counterinsurgency Campaign Assessment: The Importance of Transparency in the Fog of War*, (Washington DC: RAND Corporation, 2012), 2.

³⁰ Downes-Martin, 119.

single slide in an illegible small font. ISAF tested the use of narratives on their assessment slides, but the British Colonel who chaired the assessment group rejected the method because he felt that it was putting too much information on a single slide.³¹ Analysts also tend to struggle with free narrative because it is difficult to combine and determining what is important enough to retain and what is unnecessary when aggregating information is very subjective. In Afghanistan, ISAF produced so much unstructured narrative data that it inundated the system and prevented proper assessment of the environment.³² The creation of structured narratives occurred to overcome these two criticisms because they are limited in length by a specified format and contain a structure that allows computer programs to combine them to provide an overall assessment. Still, the use of narrative alone does not fit the needs of the Combatant Commander's decision makers.

The best approach is a balanced combination of quantitative data and structured narratives. This method preserves the advantages of both systems. The advantages of the summary graphics are that they are easily produced and understood, and tend to give a macro-level view of the current campaign progress. In contrast, structured narratives allow for the preservation of the important context of the data as well as a providing qualitative assessment of the data.³³ The proper balancing of these two processes into a single methodology is necessary to provide the assessment community with the best set of tools to inform the commander's decision-making and avoid the pitfalls of misleading

³¹ Rietjens, Soeters, and Klumper, 335.

³² David Hudak, *Improving Assessments for Strategic Decision-Making in Counter Insurgency Operations*, (Carlisle Barracks, PA: US Army War College, 2012), 11.

³³ Dave LaRivee, "Best Practice Guide for Conducting Assessments in Counterinsurgencies," *Smallwarsjournal.com*, August 17, 2011, <http://smallwarsjournal.com/sites/default/files/838-larivee.pdf> (accessed August 12, 2013), 18.

evaluations. It is only through the inclusion of the structured narrative to complement the summary graphics that an assessment team can impart the key context and outlying data that is necessary to provide the commander with the best assessment information.

Unique Requirements of Traditional Warfare Assessment

While assessment is currently a topic of heated debate and discussion in the military and operations research communities, most of the recent dialogue focuses on the use of assessment in counterinsurgency campaigns that tend to be longer-term, slower-paced operations. The military normally conducts these operations over long periods of time with multiple transitions of commanders and staffs, and plenty of time to gather, analyze, evaluate, and act upon assessment data. Rarely discussed in current literature is the methodology for conducting assessment in the fast-paced and quickly shifting operations that tend to characterize traditional conventional warfare. As doctrine revision occurs, it is important to address the unique elements of assessment in this type of warfare and layout techniques, most of which will be different from those used during irregular warfare such as counter-insurgency or stability operations.³⁴

The current perception of conducting assessment during traditional warfare by the assessment community is that it is easier and fairly straightforward.³⁵ The community holds this belief because traditional warfare tends to have more clearly defined objectives; such as taking specific terrain, destroying a certain part of the enemy infrastructure or defeating an element of the enemy military.³⁶ From this viewpoint, traditional warfare assessment is more simplistic because the metrics are easy to define

³⁴ The definition and examples of irregular warfare is taken from JP 5-0, III-43.

³⁵ Jason Campbell, Michael E. O'Hanlon, and Jeremy Shapiro, "How to Measure the War: Judging Success and Failure in Counterinsurgency," *Policy Review*, no. 157 (October 2009), 15.

³⁶ Hudak, 3.

and collect against. Joint doctrine lays out an entire process called Combat Assessment that is well suited to measuring tactical level tasks and effects in a traditional force-on-force conflict.³⁷ From a monitoring standpoint, current doctrine is well-suited to traditional warfare assessment.

There are two areas where doctrine is lacking for traditional warfare assessment: dealing with the high-tempo of operations, and evaluating the effects and outcome of the campaign. The U.S. assessment handbook makes only one mention of high-tempo operations, indicating that the assessment cycle may need to operate more frequently.³⁸ This is a rather gross understatement of the problem. Messer points out that the current manning or equipping tactical-level assessment teams does not enable them to accomplish the large amount of information and combat assessments that need to take place during traditional warfare.³⁹ If the tactical level cannot generate the lower level of inputs into the system, then the joint level will not have the current and complete information it needs to make its higher-level assessments.

The second problem is that the staff must analyze the data and provide recommendations to the commander in a timely manner. The problem with high-paced operations is that they tend to overwhelm the assessment team's time with just collecting and sorting the data that is flooding in. It leaves them with no capacity to develop an overall assessment of the operation progression. In these situations, the tendency is for the assessment staff to move closer to the J-3 directorate because the J-3 is looking for immediate feedback on its operations so it can retarget or retask unsatisfactorily

³⁷ U.S. Joint Chiefs of Staff, *Joint Operation Planning*, D-7.

³⁸ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, V-3.

³⁹ Messer and Dougherty, 58.

accomplished areas.⁴⁰ While this tactical level focus is important, it can lead the assessment team to fall victim to the old adage of losing the forest for the trees. High-tempo operations thus lead to a desynchronization of assessment loops between the joint and subordinate levels, tending to devolve to the tactical or immediate execution level.

⁴⁰ Ibid., 53.

CHAPTER 5: RECOMMENDATIONS

Education is a progressive discovery of our own ignorance.

- Will Durant

The DOD uses the areas of DOTMLPF (Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities) to identify requirements to fill capability gaps. This paper will use these same areas, when applicable, to organize the recommendations for implementing changes required to improve assessment methodology.

Doctrine

Most experts agree that in its current state, military assessment is ineffective and in need of significant reform. There are numerous doctrinal improvements necessary to properly explain and detail the methodological changes required to improve assessment practices. The most crucial change to make is adoption of the civilian practices of separating monitoring and evaluation in assessment practices. In order to adapt theory-driven evaluation correctly to military operations planning and execution, assessment procedures need to separate the monitoring and evaluation functions properly. Doctrine must clearly define that the purpose of monitoring is to assess the execution of the plan while evaluation is to critique the operational design selected in the plan to determine its continued appropriateness and relevance. At the same time, evaluation will subsume the concepts of reframing operational design elements as currently related in Joint Publications. This allows for reframing in a consistent and defined process as part of assessment methodology. Further, the military can use formalized evaluation to review and reframe operational design as part of the In-Progress Review (IPR) of the Adaptive Planning and Execution System. Finally, the joint staff should create a new UJTL task to

mirror OP5.3.1.3. *Conduct Campaign Assessment* that defines the requirements and metrics necessary to conduct evaluation. Institutionalizing the separation of monitoring and evaluation will help solve the ongoing issues the military has with evaluating the context and design of the plan.

The next step of this reform should be to provide clear, detailed, and comprehensive doctrine, terminology, and procedures for conducting assessment. To do this, the joint community needs to collect the best civilian and military assessment practices, methodologies, techniques, and procedures, and publish them as doctrine in a single joint publication to set the baseline for joint assessment operations. This information will likely be too large for inclusion as a part of JP 3-0 and JP 5-0 where it currently resides. Instead, the Joint Staff should separate assessment from these publications and create a stand-alone publication to hold all of this information. Currently, JP 5-0 is the only publication with a single volume in its series while every other numbered series has at least one subordinate publication. The Joint Staff can recognize the importance and uniqueness of assessment by creating a JP 5-01 named *Assessment*.

Another important requirement is to develop and establish a standard vocabulary and process for assessment. Clark and Cook identified this same fact in 2008 and went on to state, “By developing a standard set of tools, we can reduce the workload of [assessment] team’s chiefs by eliminating the need to develop and maintain their own tools.”¹ Without a standard vocabulary and methodology, JFCs cannot share practices and experiences effectively. The joint community must cull all doctrine documents and

¹ Clinton R. Clark, and Timothy J. Cook, "A Practical Approach to Effects-Based Operational Assessment," *Air & Space Power Journal* 22, no. 2 (Summer 2008), 98.

develop a lexicon of terms and definitions that eliminate the current state of redundancy, disagreement, and common but confusing synonyms.² By establishing a common and unified vocabulary, the joint community will have the groundwork needed to move forward with the improvement of assessment practices.

Another key issue requiring resolution is the sharing of assessment information between military organizational levels. The joint community needs to address this issue by giving definitive guidance on how to link assessment products and share information between organizations. The first requirement to accomplish this is to set up a standard assessment plan format and location. Joint doctrine currently does neither of these things. The U.S. assessment handbook states that an assessment plan needs to be detailed in the Operations Plan but only gives a very rough example and then states that it can be included as an appendix to the operations annex or under the reports annex.³ The NATO assessment handbook goes further by establishing a stand-alone annex in the Operations Plan for assessment.⁴ Unfortunately, the NATO handbook also stops short of providing a standard format for the annex or for listing required items.

The U.S. military needs to resolve this issue by developing a stand-alone annex in the Operations Plan that is dedicated to the assessment plan. Then, it needs to develop a format for the annex with a list of requirements for monitoring and evaluating the campaign and context of the campaign. Key elements that must be included are how the subordinate commands should develop their assessment plans and integrate it with the

² Dave LaRivee, "Best Practice Guide for Conducting Assessments in Counterinsurgencies," *Smallwarsjournal.com*, August 17, 2011, <http://smallwarsjournal.com/sites/default/files/838-larivee.pdf> (accessed August 12, 2013), 11.

³ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, (Suffolk, VA: Joint Staff, J-7, Joint and Coalition Warfighting, September 9, 2011), IV-6.

⁴ NATO Operations Assessment Sub-Working Group, *NATO Operations Assessment Handbook*, (Norfolk, VA: NATO Supreme Allied Commander Transformation, 2012), 2-7.

Joint Force headquarters. It should also list the organizational level that will be responsible for monitoring each item and creating the evaluation and recommendation. Finally, doctrine should require this annex to specify the required assessment format, reports, timeline, and other key assessment procedures. Standardizing the assessment plan annex better enables staffs at all levels to link their assessment plans and properly share their information.

The next step is to develop a process for integrating the assessment plans at each level. Currently, each level creates their own assessment plan and tries to integrate them with other levels, but there is no formal mechanism for conducting this process. Much like a Joint Force Commander receives back-briefs from his subordinates, the Joint assessment team should interact with subordinate units as they develop their plans and get a back-brief on its linkage to the higher level. Then, the higher level must avoid the assessment fallacies of averaging the results received from each subordinate or allowing subordinates to mirror the metrics created by the higher command.⁵ These simple mathematical tools can result in the smoothing out of unique or important data or its sub-summation in the greater mound of collected data. The lower level commanders have a unique view of ground truth that senior staffs should not ignore and must properly include and convey in the final product. By properly establishing and integrating the plans between the multiple levels of the campaign, it will be possible to provide the best assessment to each command level and enable them to make timely and accurate decisions.

The final concern that doctrine must address in assessment sharing is how

⁵ UNESCO Bureau of Strategic Planning, *Results-Based Programming, Management and Monitoring (RBM) Approach as Applied at UNESCO* (Paris: UNESCO, 2011), 18.

supporting commanders integrate with the overall assessment plan. The Air and Maritime components struggled with this during counterinsurgency operations in both Iraq and Afghanistan because they are both in almost complete supporting roles with numerous tasks to accomplish, but they are independently generating almost no effects toward reaching campaign objectives.⁶ That has led them to concentrate on MoP measurement in terms of number of aircraft flown or tons of cargo transported. These are important measures, but provide them no feedback on “If they are doing the right things?” The Joint Force assessment staff needs to integrate the supporting commanders with the supported component’s assessment of monitoring and evaluation areas so they can better link their metrics and determine if they should alter or continue the plan.⁷ It is only by integrating these two areas that supporting commanders will be able to properly assess their contribution to the campaign.

Assessment doctrine also needs updating to include the use of Structured Narrative products. The current described practices of only using stoplight charts and quantitative data in assessment outputs leads to misunderstandings and misinterpretations by the assessment audience. Including some textual information that provides context and relevant detail to the quantitative information will significantly improve assessment outputs. The use of Structured Narrative over free text provides a needed limitation and rigor to the textual information created as well as making it possible to electronically review and combine the data to create the best possible product at higher echelons. Adding Structured Narrative to the baseline assessment product will greatly benefit the

⁶ Kirsten Messer and Shane Dougherty, "A New Operational Assessment Paradigm: Splitting the Stoplights," *Air & Space Power Journal* 20, no. 3 (Fall 2006), 66.

⁷ *Ibid.*, 68.

successful conveyance of assessment information.

Joint doctrine currently lacks an established mechanism to track and evaluate assumptions. While creating a new mechanism is possible, military staffs tend to respond better to mechanisms and processes with which they are already familiar. Doctrine does provide tools that are appropriate for identifying and monitoring assumptions: decision points and the Commander's Critical Information Requirements (CCIR). A CCIR is "an information requirement identified by the commander as being critical to facilitating timely decision making."⁸ This definition is fairly broad, but staffs tend to link CCIRs to decision points and the J-3 staff uses them to identify when plan progressions or phase changes can occur. In addition to this use, the planning and assessment staffs need to return CCIRs to their broader use and attach one to every key assumption that is made in the plan to ensure it is properly monitored and acted upon should it be proven false. By using the decision points and CCIR construct to capture the assumptions, assessment teams can ensure that the commander and staff do not drop these important elements as the chaos of the operational environment ensues during execution. This should allow proper identification of any incorrect assumptions in a timely manner and give the commander and staff the cues they need to adapt and overcome problems before they overwhelm the friendly forces.

Organization

Once the revision of doctrine to lay out the theoretical basis for assessment improvement occurs, the next required change needed is in the assessment organizations. According to the J-7 Best Practice Focus Paper on assessment, there is no standardized

⁸ U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington DC: Joint Chiefs of Staff, August 11, 2011), GL-7.

directorate or composition for assessment teams (AT).⁹ Some headquarters locate the AT in the J-5 directorate while others place it under the control of the J-3. Historically, even the J-2 and Chief of Staff have been used to spearhead the AT. The problem with the disparate placement of the AT is that the team tends to take on the characteristics and emphasis of the directorate under which it is located.¹⁰ So, if it is under the J-5, it will tend to focus more on the long-term effects and achievement of the end-state, while if it is under the J-3 it will tend to focus more on current plan execution and the short-term adjustments needed to ensure that the plan remains successful.

The interesting dichotomy of these trends is that they exactly match the difference in concept that theory-driven evaluation holds for monitoring and evaluation. So, the key to solving both problems is deliberately to split the AT into two separate, but interdependent groups inside of the Joint Headquarters. The monitoring group will be responsible for collecting data, analyzing it and making recommendations for changing the current plan that are focused on the executing or modifying the plan to achieve the desired effects, objectives and end-states of the current approved plan. This best fits under the leadership of the J-3 directorate, but will be composed of personnel from other directorates of the headquarters as well. It will develop its own assessment plan using MOPs and MOEs that answer the two big questions currently stated in assessment doctrine: “Is the JTF doing things right?” and “Is the JTF doing the right things?” This team will be easy to create and execute because it largely falls within the current doctrinal guidance and methodology employed by the military in most current operations.

⁹ U.S. Joint Staff, J-7, Deployable Training Division, *Insights and Best Practices Focus Paper: Assessment*, (Washington DC: Joint Staff, J-7, Deployable Training Division, July 2013), 9.

¹⁰ U.S. Joint Staff, J-7, *Commander’s Handbook for Assessment Planning and Execution*, IV-8.

The revolution will come with the creation of a separate AT responsible for taking a more holistic view of the context and design of the campaign or operation. Its job will be to evaluate and challenge the selected elements of operational design, the operational approach and assumptions to ensure they remain accurate. It will be responsible for developing an entirely independent assessment matrix to assess if the strategic and military direction or environments are remaining the same or, if they have shifted, how they have changed. The J-5 AT will also revalidate elements of the operational design selected before the operation began as a means to identify if the problem requires reframing. This independent and wider view will help prevent the commander from getting lost in the “tactical weeds” of the current operation and allow the commander to focus on the real goals of the campaign which are not just accomplishing the plan, but rather, reaching the current and most advantageous military and political strategic end-states.

The establishment of a J-5 evaluation assessment team focused on plan evaluation will also provide a group responsible for tracking planning assumptions and the assessment metrics themselves. The J-5 AT will fulfill Sotire’s recommendation for the development of a metric board that is responsible for reviewing all metrics on a regular basis and updating them as necessary.¹¹ At the very least, an assessment team should avoid over-reliance the on standard metrics that are available in guides such as the Universal Joint Task List.¹² While these guides are useful for establishing a baseline for the creation and tracking of metrics, metrics must be tailored to each unique campaign

¹¹ Robert B. Sotire, *Measuring Performance and Effectiveness in Irregular Warfare: Preventing Dysfunctional Behavior*, (Newport, RI: Naval War College, 2009), <http://handle.dtic.mil/100.2/ADA504933> (accessed August 12, 2013), 17.

¹² LaRivee, 6.

plan to be truly useful and then continuously updated and refined as the plan is executed. Most importantly, the U.S. assessment handbook that describes the six steps of developing an assessment plan¹³ needs updating with a crucial seventh step called “assessment plan review and update.” The purpose of this step is to define the process and responsible parties for reviewing and updating the assessment process as the plan proceeds. Without this last important step, especially for campaigns that continue over weeks, months, or years, the assessment matrix will quickly find it is detached from the plan and no longer providing meaningful data to support commander decision-making.

As previously discussed, the current operations which serve as the basis for most assessment criticism and recommendations are protracted warfare campaigns. These campaigns are of a very different nature than traditional warfare or high intensity conflicts. Assessment faces a different set of challenges during traditional warfare, largely centered on providing timely and relevant assessments that can keep pace with the blistering tempo of modern U.S. joint operations during major combat. The solution to these problems, conveniently, lies in the previous discussion of the appropriate separation of the assessment processes of monitoring and evaluation. The definitions and conduct of combat analysis closely mirror the assessment practices of tracking if the operation is on plan as analyzed by the civilian definition of monitoring. The focus is on tracking the plan and making sure it is accomplished correctly and driving toward the stated decisive points, objectives, and end-states. This is the J-3 or current operations execution focus that naturally occurs during high-tempo operations. With the creation of a separate J-5 evaluation assessment team, it will be able to focus on the larger and longer-term goals

¹³ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, IV-6.

and conduct of the campaign as it progresses, and will not be mired in the daily or hourly detail of the plan execution. The evaluation cell will focus on the larger operating environment issues of the selected elements of operational design that are liable to change, even in high-tempo operations, but are more difficult to see when directly engaged in the rapid pace of current operations.

The U.S. has a poor history of ending traditional warfare operations on terms truly favorable to the U.S. In both Gulf War conflicts, the U.S. either did not achieve the termination criteria or it changed during the operation. At the end of the 1991 Gulf War, the U.S. military left the Iraqi army largely intact and Saddam Hussein was able to maintain his stranglehold on the Iraq people and continue to threaten his neighbors for another decade. By the end of the 2003, Operation IRAQI FREEDOM accomplished regime change, but did not properly assess that the operating environment had changed and that growing insurgency and potential civil war were brewing. Part of the reason these changes went unnoticed in both operations is that execution of the current operation consumed the attention of the commanders. By separating the assessment evaluation team from the pull of the J-3 during high-tempo operations, the command will have a staff dedicated to remaining focused on the operational and strategic level of the operation.

Training

The U.S. and NATO assessment handbooks provide a good initial attempt to capture and codify assessment techniques and procedures. Unfortunately, neither of them is doctrinally binding nor do they propose best techniques, but instead list available options without identifying which are the preferred options. Once U.S. doctrine defines

and endorses the best assessment methods, the joint training and leader development communities should develop standards and training processes to teach it. Numerous writers and publications call for the establishment of formal assessment training. Even the U.S. assessment handbook takes the unusual step of adding an entire chapter on training recommendations and options.¹⁴ Interestingly, it does not go to the length of calling for the development of a formal joint training course, which is exactly what is required. NATO recognized this fact and established an assessment training course. It established the pilot “NATO Operations Assessment Course” which was held in November 2012 at the National Defense Academy in Latvia with a follow-on course conducted in October 2013.¹⁵ The creation of this course fills a much needed assessment training gap and should be mirrored by the U.S. military and attached to the Joint Forces Staff College. Once established, the school house can become the repository for assessment standards, terminology, and processes. Further, it will give the U.S. military a place for experienced assessors to pass on their knowledge and expertise. The creation of a formal assessment course would be incredibly beneficial to the practice of assessment.

Leader Development

The purpose of assessment is to provide information and recommendations to the commander to use in his or her decision-making process. This means that the commander, as the ultimate user, is the real focus of assessment. Unfortunately, most commanders have poor experiences with assessment because it fails to live up to their

¹⁴ U.S. Joint Staff, J-7, *Commander's Handbook for Assessment Planning and Execution*, VI-2.

¹⁵ NATO Operations Assessment Sub-Working Group, 6-58.

expectations¹⁶ and they quickly develop a distrust of it. The only way to overcome this deficiency is to use the military training and education process to develop commanders who properly understand the capabilities and limitations of assessment. Military officers need to understand that assessment systems are never perfect and often riddled with complexity and uncertainty but, if assessments properly understand and account for these limitations, the staff can develop a good recommendation.¹⁷ Commanders who understand that assessment is a tool and not a panacea are more likely to use it properly. Further, if they understand the basic vocabulary and processes of assessment, they will be more likely to use it correctly, and use their intuition and commander's judgment to fill in the gaps with which all assessment plans must deal. The assessment community used this solution during Operation IRAQI FREEDOM in 2010, when it created a two-day workshop where they discussed their assessment tools, processes, and limitations with all key leadership in the coalition.¹⁸ The response was very positive and commanders felt much better prepared to use the assessment information they were provided. The U.S. military should add a robust assessment focus to JPME II training to provide this knowledge to all future commanders. By properly training future joint commanders, they will be best positioned to use and exploit the assessment information they are provided.

Personnel

The final requirement is to lay down baseline placement and manning requirements for the assessment team (AT). Specifically trained personnel must fill AT positions in order to ensure the best possible assessment products. This means that ATs

¹⁶ Jonathan Schroden, "Why Operations Assessment Fails: It's Not just the Metrics," *Naval War College Review* 64, no. 4 (Autumn 2011), 95.

¹⁷ Sotire, 12.

¹⁸ LaRivee, 8.

must have positions for assessment experts who will provide the necessary mathematical and research expertise to prevent the team from making logical fallacies in their products. Next, the AT must include experts from all directorates to provide the diverse and in-depth analysis required for an accurate assessment. In this era of declining budgets and staff manning, it may not be possible to create needed manpower billets for the AT. Instead, the command will create ATs by assigning the additional duty of assessment to personnel from each directorate. Finally, as previously discussed, the military must evenly split the AT into two parts, and align them with the J-3 and J-5 directorates. It is only by defining AT manning, filling those positions with assessment experts, and then properly aligning the teams with an appropriate Joint Force headquarters directorate that assessment will be able to produce correct and meaningful advice for the commander.

CHAPTER 6: CONCLUSION

Usually, everyone gets it wrong at the beginning of a war.

- Thomas E. Ricks, *The Generals*

The U.S. military is likely facing a significant reduction in combat capacity and capability as it enacts the measures of the Budget Control Act over the next decade. Unfortunately, the threat that the U.S. military faces is only growing in this increasingly complex and dangerous world. When the President calls upon the U.S. military to conduct operations, there will be shrinking room for error, wrong strategies, or misused forces. This increases the importance of all four functions of the Joint Force Commander: plan, prepare, execute, and assess. In the current state of U.S. joint doctrine, assessment is ill-defined, poorly developed, and incorrectly applied.

This paper shows that current assessment doctrine in U.S. Joint Publications needs significant reform by drawing on civilian theory practices to standardize terminology and procedures to improve its successful use in future operations. A review of the civilian theory and practice of assessment demonstrated that military assessment incorrectly defines the process of monitoring and execution in such a way that they both focus on measuring progress against the plan rather than also evaluating the adequacy of the plan against the ever-changing context. Context that shifts as quickly as the military operations characterizes war and conflicts and the assessment process needs to use evaluation of the context to ensure that the military plan marries up with current political expectations. As part of this process, evaluation will appraise and constantly improve the assessment plan and provide monitoring of the assumptions used in the plan. Using the civilian practice of assessment as a point of comparison highlights the core deficiencies in the current U.S. military assessment methodology.

A review of the current state of assessment doctrine and methodology emphasized the paucity of information, and lack of standards and procedures. The development of assessment in the U.S. military has been haphazard and did not benefit from the extensive research and success of civilian applications. A survey of U.S. military publications highlighted that current doctrine is inadequate, there are no common standards, little to no training, appropriate subject matter experts don't exist, and there is no identification of a lead directorate for assessment functions. These factors have combined with the challenges of sharing assessments between organizational levels, the lack of product uniformity, and the unique requirements of traditional warfare assessment to explain why the current practice of assessment is not meeting the JFC's requirements.

From the two major identified root deficiencies of the current U.S. military assessment methodology and doctrine, the thesis provides several recommendations using the DOTMLPF format. First, doctrine needs to inculcate the civilian theory and practices of separating monitoring and evaluation along with providing detailed guidance on consistent assessment methodology. Commands can improve the organization of assessment teams by separating them between the J-3 and J-5 cells. Training solidification requires the establishment of a U.S. assessment training course. Leaders are the ultimate recipient of assessment products and need training in assessment practices as part of JPME II. Finally, the Joint Staff needs to establish a baseline for personnel skills and background that comprise an effective assessment team. By adopting these new assessment practices, the U.S. military can dramatically improve its assessment practices.

Doctrine charges the Joint Force Commander with planning, preparing, executing,

and assessing military campaigns or operations. Just like the example of General McChrystal in his evaluation of the poor assessment practices he found upon his arrival in Afghanistan after eight years of war, commanders, staffs, and national leaders have been unhappy with the assessment products created to evaluate the campaigns over the past few decades. The failure of assessment methodology is largely due to the lack of adequate common guidance and negligent misapplication of successful equivalent civilian theory and practices into the military. By making several improvements in assessment methodology and giving it the attention it deserves as one of the primary responsibilities of military leaders, the U.S. military will be able to create an assessment system that provides current, relevant, timely, correct, and appropriate assessment information which will allow the commander to improve upon military operations. Without making these changes, the U.S. military will continue failing to understand and adapt to the ever-changing strategic context, thus wasting national resources or even failing to accomplish its strategic objectives.

APPENDIX 1: STRUCTURED NARRATIVE EXAMPLE

The medical community is leading the development and use of Structured Narrative. The following examples draw from that field and show methods of input and display. Figure 1 shows the simplest example of Structured Narrative input where the user can only select between preset options in each field. This form does not allow the input of free text.

The screenshot displays a medical software interface with three main panels. The top-left panel, titled 'Overviews', shows a 'Patient history' section with a tree view of symptoms including 'Temperature', 'Quantity: Degrees 378 °Celsius', 'Chronology', 'Course: Continuous', 'Past episode(s): absent', 'Setting', 'Onset: Acute', and 'Associated manifestations: Shaking chill absent'. The bottom-left panel, 'Navigator', shows a hierarchical tree of symptoms, with 'Temperature' selected. The right panel, 'Entry form', is titled 'Temperature' and contains several sections: 'Temperature' (checked), 'Description' (empty), 'Degrees' (378 °Celsius), 'Current episode since' (2 days), 'Course' (Continuous), 'Past episode(s)...' (checked), 'Onset' (Acute checked), and 'Associated manifestations' (Shaking chill checked, Vomiting, Diarrhea, Headache). A yellow warning box is overlaid on the 'Past episode(s)...' field, stating 'Warning: Plausible values for Degrees are 36 - 43 °Celsius'.

Figure 1. Example of Structured Narrative entry not allowing text.¹

Figure 2 shows a more complex example of Structured Narrative input where the user can enter a combination of preset options and free text in different fields. By using the separated fields and defining the category of free text entered, it is possible to use computers to aggregate, analyze, and even search all data entered.

¹ BioMed Central, "BMC Medical Informatics & Decision Making," BioMed Central, <http://www.biomedcentral.com/1472-6947/6/29> (accessed February 27, 2014).

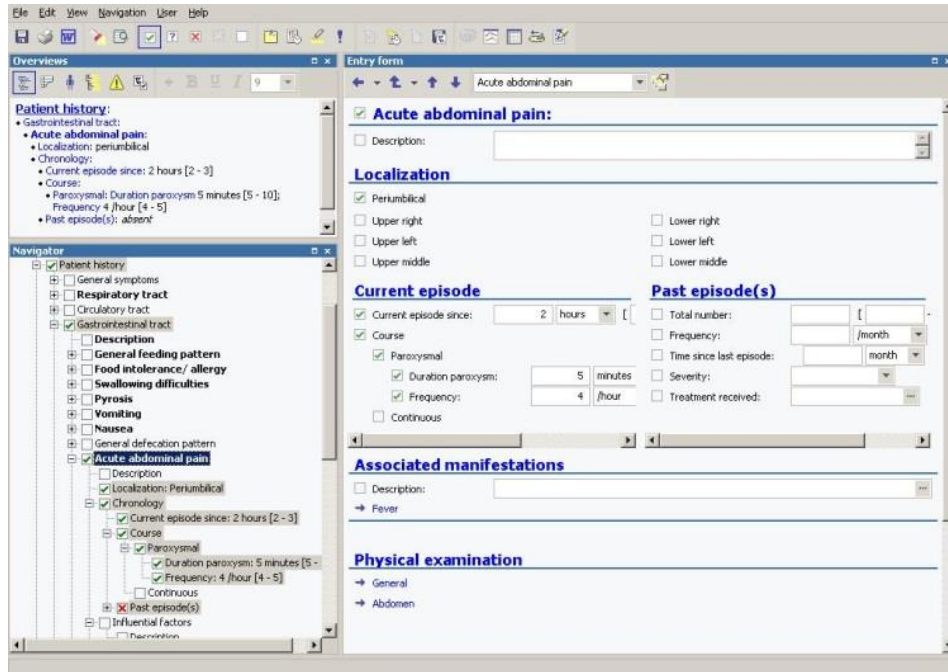


Figure 2. Example of Structured Narratives with text and preset options.²

Finally, once the Structured Narrative has been entered, it can be displayed in four different formats: graphical, definition, structured text and tabular.

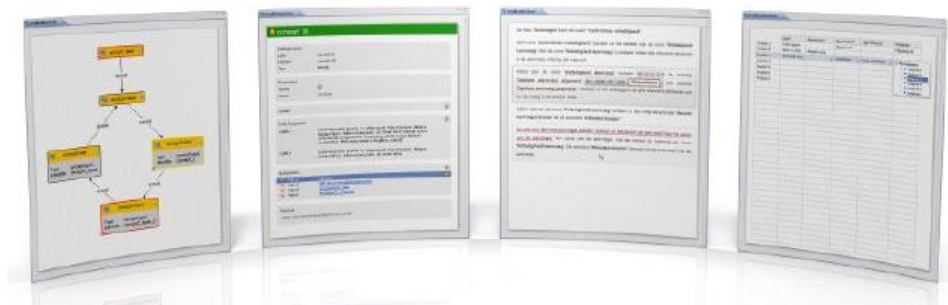


Figure 3. Example of the four display formats of Structured Narrative.³

² Ibid.

³ Semantic Community, “Be Informed 4 – They Really Got It,” Semantic Community, http://semanticcommunity.info/AOL_Government/Be_Informed_4_-_They_really_got_it (accessed February 27, 2014).

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