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An analysis of 1st Marine Division's operations during the conventional phase of OIF, between 20 March and 15 April 2003, indicates that while the 1st Marine Division conducted detailed planning before launching into Iraq, it was able to sustain a rapid operating tempo once hostilities began through an abbreviated decision making process. The true value of planning prior to "first contact" was that it provided commanders and staffs with common visualization of the battlespace and, when combined with strong command relationships and streamlined operating procedures, it enabled the Division to rapidly adjust and adapt its plan.

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## MASTER OF MILITARY STUDIES

# The Plan and First Contact: Command in the 1st Marine Division, Iraq 2003

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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## **Executive Summary**

Title: The Plan and First Contact: Command in the 1st Marine Division, Iraq 2003

**Author**: Major Cole Petersen, Canadian Army

**Thesis**: An analysis of 1st Marine Division's operations during the conventional phase of OIF, between 20 March and 15 April 2003, indicates that while the 1st Marine Division conducted detailed planning before launching into Iraq, it was able to sustain a rapid operating tempo once hostilities began through an abbreviated decision making process. The true value of planning prior to "first contact" was that it provided commanders and staffs with common visualization of the battlespace and, when combined with strong command relationships and streamlined operating procedures, it enabled the Division to rapidly adjust and adapt its plan.

**Discussion**: From 20 March to 15 April 2003, the 1st Marine Division participated in Operation IRAQI FREEDOM, moving over 800 kilometers from the Kuwait-Iraq border to the city of Tikrit, defeating several Iraqi divisions and helping seize Baghdad, all in the span of twenty-four days. Despite the rapid conduct of conventional operations by the US-led coalition, post-war critiques of the procedures used to plan and execute the battle implied that there was much room for improvement. These critiques focused on a planning method that was overly tied to process and products, took too much time to apply, and resulted in orders that were late and/or difficult to understand. This study examines the 1st Marine Division's operations as part of Operations IRAQI FREEDOM, examining its approach to planning to determine if it suffered from any of the aforementioned problems.

**Conclusion:** The 1st Marine Division's approach to planning and executing operations was characterized by small teams of commanders and staff with shared experience and great trust in each other, enhancing information flows and ensuring shared understanding of the commander's intent. They applied the analytical MCPP in thorough detail prior to the start of the operation, and used the outcome of shared visualization as a framework to adapt after H-Hour.

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#### **Preface**

Students at military staff colleges are taught the military dictum that "the plan is nothing; planning is everything." While catchy, it isn't strictly accurate. What this axiom actually implies is that the process of planning an operation, if done effectively, offers participants far more than just a plan to work from. It offers shared understanding of what to anticipate as events unfold, conditioning the ability to react and adapt quickly to unforeseen events. This essay explores effective planning and the essential factors that contribute to it, demonstrating the real value of military planning through analysis of how the commanders and staffs in the 1st Marine Division struck a successful balance between detailed processes and intuitive judgment. This balance created an operating tempo that the Iraqi armed forces were never able to match.

Primary source documentation for this paper comes from two sources. First, the command chronologies of all US Marine Corps' units and formations, along with oral history interviews, were located in the Archives Division of the US Marine Corps Historical Center to provide a general picture of the campaign. Secondly, author interviews with key commanders and staff within the 1st Marine Division shed light on many of the specific themes of this paper. I am indebted and grateful to Lieutenant General (Retired) John Toolan, Major General Paul Kennedy, Major General John Broadmeadow, Brigadier General Michael Groen, Colonel (Retired) Clarke Lethin, Colonel (Retired) Mark Toal, Colonel (Retired) Jim Parrington, Lieutenant Colonel (Retired) Nick Vuckovich, and Lieutenant Colonel Warren Cook for both their time and insights into how the 1st Marine Division planned and fought its battles. Additionally, I must also thank Dr. Nathan Packard, Dr. Jim Storr, Mr. Tony Prudori and the Marine Corps University's Leadership Communication Skills Center for the time and editorial content which only improved the end product. Any remaining errors are mine alone.

Therefore no plan of operations extends with any certainty beyond the first contact with the main hostile force. Only the layman thinks that he can see in the course of the campaign the consequent execution of an original idea with all details thought out in advance and adhered to until the very end.

#### Helmuth von Moltke<sup>1</sup>

Helmuth von Moltke's pronouncement is a well-known military maxim. In spite of this, it is normal for today's modern staff colleges to teach detailed, deliberate planning processes to prospective commanders and staff officers, with the end state being the production of explicit orders and numerous accompanying annexes. During the lead up to Operation IRAQI FREEDOM (OIF), military planners produced documented efforts of laborious planning and detailed plans to assemble and launch the coalition force to topple the regime of Saddam Hussein. Lieutenant Colonel James Hutton of the British Royal Marines remarked that the American approach to planning appeared excessive and "mind-numbing," while United States Marine Corps (USMC) historian Nicholas Reynolds argues OIF may have been "one of the most extensively rehearsed wars in U.S. history."<sup>2</sup>

During OIF, the 1st Marine Division executed a plan that saw it march over 800 kilometers from the Kuwait-Iraq border to the city of Tikrit, defeating several Iraqi divisions and helping seize Baghdad, in the span of twenty-four days. An analysis of 1st Marine Division's operations during the conventional warfighting phase of OIF, between 20 March and 15 April 2003, indicates that while the 1st Marine Division conducted detailed planning before launching into Iraq, it was able to sustain a rapid operating tempo once hostilities began through an abbreviated decision making process. The true value of planning prior to "first contact" was that it provided commanders and staffs with common visualization of the battlespace and, when combined with strong command relationships and streamlined operating procedures, it enabled the Division to rapidly adjust and adapt its plan once it commenced operations.

To provide a clear understanding of how the 1st Marine Division planned and fought its battle in Iraq, this study will be divided into three parts. First, this study will look at USMC planning doctrine to understand how it instructs military commanders and staffs to plan and execute operations. A survey of critiques of this system will also be covered to illuminate why some of the post-war criticisms of US and coalition military planning arose. Second, a survey of the key events of the 1st Marine Division's operations during the conventional phase of OIF will illustrate how the division adapted to an abbreviated process in the face of a high operating tempo. Finally, a synthesis of the Division's campaign along with theories of decision making will provide a framework for understanding the Division's planning model, while also indicating avenues for future development and study applicable to the military profession.

## THE US MARINE CORPS AND PLANNING FOR OPERATIONS

The source of the 1st Marine Division's planning doctrine, like all other USMC elements in OIF, is from one of its keystone publications, MCDP 5 *Planning*, which provides readers with a theoretical understanding of operational planning. Issued in 1997, it draws on literature on decision making and systems theory and states that planning is "the art and science of envisioning a desired future and laying out effective ways of bringing it about." The manual goes on to explain that planning facilitates learning by "thinking before doing" and that it helps military organizations with proactivity, avoiding time lags between decision and action, and navigating complex and unfamiliar situations.<sup>4</sup>

MCDP 5 warns that proper planning helps to avoid wasting time and energy on irrelevant activities. Poor planning can result from over-institutionalized processes, which stifle creativity and lead to a rigid approach to creating plans. Poor planning can also result from a lack of timeliness. Commanders failing to plan in a timely fashion leave less time for subordinates to

prepare, but also increase the chances that outside events will change circumstances, rendering elements of the plan irrelevant. Even if a planning process runs well and on time, poor planning can also occur if it attempts to predict events too far in the future. Symptoms of this are plans full of complicated details, or attempts to script and prescribe friendly and enemy actions with great precision. The capstone USMC doctrinal publication, MCDP 1 *Warfighting*, says that war is inherently complex and non-linear in nature, with events subject to incalculable inputs by the multitude of participants and outcomes, making it inherently unpredictable through analytical means. Trying to use planning as a *predictive* tool is, due to the nature of war and military operations, an unproductive use of time, energy, and resources.

Planning's true value is in its utility as an *anticipatory* tool. While the difference between the terms "predictive" and "anticipatory" may be subtle, they are worth exploring. Predictive planning establishes expectations, using synchronization and timelines to drive the plan forward. Organizational theorist Russell Ackoff calls this *preactive planning*, where one strives to use forecasting to control the effects of an unpredictable future through the establishment of objectives and the minimization of possible threats.<sup>7</sup>

MCDP 5 instructs its practitioners to use planning for different purposes, viewing the process as an anticipatory tool. Ackoff calls this *interactive planning*, where the user envisions an end state, then continuously seeks to assess the situation and overcome impediments to closing the gap between current and envisioned conditions.<sup>8</sup> In the same vein, MCDP 5 teaches that planning is a tool that trains and enables a commander to anticipate what may occur during the battle – to create a "system of interrelated decisions subject to revision." Plans should be loose-coupled and modular, meaning they should require minimal interaction (and thus minimal synchronization and control) between constituent parts, that they be less dependent on outside

events, and easier to modify in the face of changing circumstances.<sup>10</sup> Finally, planners are instructed to ensure their plans are timely. Fewer things are more important than giving subordinates the time to conduct their own planning efforts, as a great plan is likely to fail if those executing it are unprepared to do so. Timeliness also ensures that plans do not affect the tempo of operations, allowing organizations to react to changing circumstances and seize fleeting opportunities.<sup>11</sup>

USMC doctrine, therefore, teaches its practitioners that uncertainty, complexity, and time-sensitivity dominate operational planning, and that while planning cannot predict what will happen on the battlefield and provide a plan to control events, it will allow for anticipation of possible battlefield events, providing a plan that allows its participants to "act in a purposeful, prepared way." How to do this is prescribed in MCWP 5-1, *Marine Corps Planning Process*, with a planning process called the Marine Corps Planning Process (MCPP). The version used by the Marines in OIF, including the 1st Marine Division, was based on the 2000 edition, which replaced the previous extant planning manual from 1979, Fleet Marine Force Manual 3-1 *Command and Staff Action*.

MCWP 5-1 was issued to support MCDP 5 by providing a common tool to organize thought processes in a coherent and consistent manner. MCWP 5-1 introduces the MCPP, which is a six-stage analytical approach to planning. The MCPP provides procedures to produce a plan and is organized into mission analysis, developing courses of action (COAs), comparing courses of action through wargaming, comparing the results of wargaming to provide a decision, turning the decision into orders, and transitioning from planning to execution.<sup>13</sup>

There are three critical outputs of the MCPP. The first is the product of the initial step, mission analysis. Mission analysis is the process a planner uses to review orders, along with

intelligence and other guidance, to determine his mission within his superior's plan. This is done by examining assigned and implied tasks, drawing deductions from relevant factors, and considering limitations and constraints. The output is a mission statement, stating what the planner aims to do, along with details such as time and location, and why it seeks to accomplish this task.<sup>14</sup>

Following the production of a mission statement, the second critical output of MCPP is the COA. The COA provides the "how" to the mission statement's "what" and "why." MCWP 5-1 instructs the planner to generate multiple courses of action, unless limited by time, and to determine advantages and disadvantages to each COA through a comparative process called wargaming. The wargame pits generated COAs against possible enemy actions, using the judgement of commanders and staff to determine possible outcomes and provide criteria to the commander to evaluate which COA is the best option. <sup>15</sup>

This process of rationally breaking down the problem and comparing possible options is known as an analytical decision making process. Gary Klein, an expert on decision making, explains that the process of generating options, determining comparison criteria, and then comparing the options, is a model of decision making called *concurrent option comparison*.

MCPP is a form of this, as are the decision making models of other Western militaries.<sup>16</sup>

Once the planner determines a suitable COA, MCPP then moves to the third critical output, which is orders to subordinates. The order is "written or oral communication that directs actions and focuses a subordinate's tasks and activities toward accomplishing the mission" and must do so in a "clear, useful form." Orders are generated in a standard format, describing the situation and giving the planner's mission (the what and why) along with the execution (the how), and concluding with essential logistical or command details for the operation.

Analytical processes in the form of concurrent option comparison, such as MCPP, provide military planners with a structured, procedural approach to problem solving. Klein points out that procedures are useful to organizations as they serve as practical training tools, can safeguard against memory slips and interruptions to planning, spread the workload for planning complicated operations, and impose consistency both within and between planning teams. MCWP 5-1 is careful to point out that MCPP procedures are tailorable to the situation and time available and that commanders must optimize aspects of the process to suit their needs. 19

Despite these processes being understood, accepted, and practiced by military planners, there are criticisms that underscore the definitions of poor planning highlighted in MCDP 5: planning processes can be too procedural and product driven, take too long, and lead to orders that do not communicate the plan effectively to subordinates. In an official post-war analysis conducted by the British Army looking at its performance in OIF, "there is evidence of a tendency to plan excessively...(with) no positive output beyond the confines of the headquarters" and that "orders which were required were often produced too late, and there was a lack of passage of information from headquarters to subordinates" which ultimately created suboptimal command of British units in Iraq. <sup>20</sup>

Critiques on procedure focus on the processes that occur within operational planning methods such as MCPP, specifically with regards to the number of tools and products that are produced. Within MCWP 5-1, Annex D gives planners numerous tools that may be produced during the process to track and analyse information. With each COA is a COA graphic and narrative, and after wargaming a COA, an accompanying synchronization matrix. These are compared to event templates detailing expected enemy activities and produce a COA comparison and decision matrix to point out each COA's advantages and disadvantages.<sup>21</sup> Critiques of these

products and tools argue that they take too much time and energy to use, and have little actual input on the decision a commander makes.

From a theoretical perspective, Gary Klein points to research showing that experienced decision makers do not take the time to compare options and, if they do, they tend to select the first COA that they intuitively derived. Over-emphasis on procedure in the decision making process, therefore, costs valuable time.<sup>22</sup> From the practical perspective, Jim Storr, a retired British Army officer who studied command and staff processes and also wrote the official post-OIF report for the British Army, notes in observations of army planners in training that it was common for staffs to become fixated on procedures and generate numerous products and tools during planning, but never actually update or use them.<sup>23</sup> The post-OIF British Army report notes that several staff officers felt the briefs that accompanied much of this procedure and product were disruptive and time consuming.<sup>24</sup>

Heavy time investment leads to the second critique of concurrent option comparison: the timeliness, or lack thereof, of the process itself. In an effort to use a military decision making process such as MCPP thoroughly, observers at the US Army's National Training Center found that units "have difficulty conducting time-critical tactical planning." The British Army post-OIF report notes that this had a crucial impact on operations due to the late arrival of orders. In one instance the 1st (UK) Armoured Division released its fragmentary order (FRAGO) for initial operations the day *after* operations actually started, while in other cases, units were receiving directives related to the capture of Basrah a day after they had already occupied the city. <sup>26</sup>

Even if orders are received in a timely fashion, the third critique of current planning processes focuses on the method of transmission: no plan can be effectively executed if it is not passed on to subordinates in a clear and effective manner. This is not a new problem, as a US

Army study from the 1980s examined seventy separate operation orders issued during training exercises by various formations and found that they were "frought (sic) with excessive guidance" and "redundancy" resulting in a low quality, yet high quantity, of information.<sup>27</sup> Echoing this, the British were critical of their performance in OIF, noting that orders were, in general, "excessively long, confusing and hard to understand" with examples of mission statements running over twenty lines of text, exceedingly long statements of intent, and instances of twelve to thirteen essential tasks for a mission.<sup>28</sup> The US military was not free from this criticism in OIF, with 1st Marine Division staff noting that the I Marine Expeditionary Force (MEF) order for the invasion was excessively long, with the mission statement being somewhere past the twentieth page.<sup>29</sup>

Critiques of concurrent option comparison processes such as MCPP existed before and after OIF. If there are any grounds to the critiques, and problems exist with the planning approaches used by units such as the 1st Marine Division during its operations in Iraq, then how did it still not only accomplish its mission, but also do so in such a rapid and decisive fashion? The British Army study offers one reason, "Few *consequences* of poor command were observed, which was probably a result of the poor quality of the adversaries. A more capable enemy would have punished shortcomings severely." While planning models used by the coalition such as MCPP had issues, the capability of the Iraqi Army was poor enough that these formations got away with a less than optimal process.

While a completely hapless adversary provides one explanation for campaign success despite flaws in a planning model, two other possible explanations also exist. It is possible that the critiques are unfounded. It is also possible answer that the 1st Marine Division was able to adapt the planning system to the circumstances of the battlefield, avoiding the pitfalls described

in the critiques. The following survey of 1st Marine Division's actions in 2003 strongly indicates that the latter is the case.

#### THE 1ST MARINE DIVISION IN OPERATION IRAQI FREEDOM

The 1st Marine Division in OIF deployed to Iraq with 21,764 uniformed personnel and over 8,000 vehicles. The Commanding General (CG), Major General James Mattis, was an experienced Marine of thirty-one years of service, which included command of a Marine infantry battalion in the Gulf War. Prior to assuming command of the 1st Marine Division on 2 August 2002, he commanded Task Force 58, an amphibious task force that had launched operations from the Indian Ocean into Afghanistan as part of Operation ENDURING FREEDOM.<sup>31</sup>

The 1st Marine Division's immediate subordinate maneuver formations in OIF were three Regimental Combat Teams (RCTs), built around USMC infantry regiments and designated RCT-1, RCT-5, and RCT-7. Each RCT had over 5,000 personnel and about 1,000 vehicles. To support these elements, the Division also had the 11th Marine Regiment, an artillery formation with seventy-five howitzers. Also attached to the division were two tank battalions, three light armored reconnaissance battalions, a reconnaissance battalion, two combat engineer battalions, and elements of three armored amphibious vehicle battalions. During OIF, these supporting battalions were usually attached to the RCTs to provide direct support to the Marine infantry.<sup>32</sup>

On taking command in August 2002, Major General Mattis called together his senior commanders and staff to provide his initial intent for how the Division would approach the coming war, speaking to an audience that was already heavily involved in planning for OIF. The 1st Marine Division's planning efforts to date were a small part in a larger effort that had been ongoing for years. US plans for actions against Iraq had long been held by Central Command (CENTCOM), the geographic Combatant Command responsible for military operations in the

Middle East. Dubbed Operating Plan (OPLAN) 1003, this plan for invading Iraq was previously updated in 1996 and updated again in 1998.<sup>33</sup> In early 2002, the Bush Administration tasked CENTCOM Commander General Tommy Franks with dramatically refining the plan. Amid constant updates, a USMC planning conference in March of 2002 added the 1st Marine Division to the planned invasion force.<sup>34</sup>

Although OPLAN 1003 would continue to evolve through 2002, Mattis and his staff had a general concept of what the 1st Marine Division would be tasked to execute. Mattis facilitated a sound planning methodology by building a well-trained and cohesive team, not least due to the fact that he brought some of his key staff over from Task Force 58, ensuring they were involved with the MEF and Division planning efforts prior to assuming command. Familiarity with his key staff and early involvement in planning helped Mattis determine and convey his approach to how the Division would plan and fight its upcoming battle in Iraq.<sup>35</sup>

By mid-summer 2002, the Division was planning operations to seize key oil infrastructure at the Rumaylah oilfields across from the Kuwaiti border. After this, the general concept had the Division crossing the Tigris and Euphrates Rivers, moving north on one – later expanded to two – highways, and dealing with the Iraqi Republican Guard elements around Al Kut. The final piece of the general concept was Baghdad itself, with the Division forecasted to act as a supporting force to the US Army's decisive attack on Baghdad from the west.<sup>36</sup>

During this period, the Division and RCT staffs used the MCPP extensively as the plan continued to evolve. Then-Lieutenant Colonel Paul Kennedy, as the Division's Plans Officer, recalls Mattis insisting that the MCPP be used in the prescribed, structured manner to ensure all personnel involved in the planning could anticipate future requirements as well as enabling the

Division's planning efforts to be synched with concurrent planning being done by other Marine and US elements.<sup>37</sup>

Kennedy led several operational planning teams (OPTs) to consider various aspects of the operation. The Division's official history notes that, although the "eventual scheme of maneuver bore only slight resemblance to any of the original plans...the staff gained an invaluable understanding of the factors that would determine success or failure in the Division's coming fight."<sup>38</sup> The real value of the OPTs was not in preparing *the* specific plan for the invasion, but rather in building *a* plan and understanding how components such as logistics, bridging, supporting fires, and the like would contribute to success when the Division was engaged in combat. This process was termed by Kennedy as the "progressive deepening" of the plan, and its value lay in developing greater understanding of the operating environment to enable adaptability during the campaign.<sup>39</sup>

Critical to this shared understanding was the active participation of commanders in the planning process. Mattis initiated planning efforts by sharing his intent and guidance, ensuring that, as CG, he led the process. He was engaged with every step of the various plans the Division looked at and also involved himself with the planning aspects of specialist functions such as intelligence, logistics, and supporting fires. The Operations Officers of all the RCTs recall that their Commanding Officers (COs) were also deeply engaged in their respective planning processes. In this situation there was time before first contact with the enemy, and active engagement by commanders at all levels in the planning process was a critical factor in ensuring intent was understood, incorporated into subordinate planning, and used to enrich support planning, which resulted in an increase in the shared understanding within the Division.

While much of the pre-war planning dealt with anticipated tasks and possible events,
Division planning for its first objective, the Rumaylah oilfields, was very specific and detailed.
This objective consisted of a vast complex of oil pipelines, four Gas-Oil Separating Plants
(GOSPs), and a large pumping station termed the "Crown Jewel." Both the Bush Administration and Central Command placed high political value on it as it processed a significant portion of Iraq's oil production. It would play a key role in post-Hussein Iraq, and it was imperative that it not be destroyed in the manner of the Kuwaiti oilfields by Hussein in 1992.<sup>41</sup> Due to its proximity to the Kuwaiti border and its political importance, the Rumaylah oilfields would have to be taken first, and taken fast.

Because of this, and because there would be minimal time between "first contact" and arriving at the oilfields, the Division could afford to plan this part of the operation in great detail. John Toolan, who at the time was a colonel leading the operations staff as the Division's G3, recalls that Mattis acknowledged that many quick, dynamic decisions would need to be made during the operation but that the first 96 hours of the invasion could be planned in greater detail, and that by executing it successfully, the Division as a whole could be confident that it crossed the line of departure well-prepared and well-led.<sup>42</sup> As a result, no detail was spared in the planning, with specific objectives assigned and a 48-page execution checklist drawn up, detailing how the Division would destroy the Iraqi Army 51st Mechanized Division, secure the Rumaylah oilfields, and stage itself for movement to the Euphrates River.<sup>43</sup> As the planning for this developed, a common understanding of how the Division would achieve this filtered down to the lowest levels, where detailed training was conducted on mock-ups of specific objectives.<sup>44</sup>

Concurrently, more general planning considered numerous potential situations that could face the Division. One aspect was river crossing: the tentative route of the Division not only

took it across the Euphrates and Tigris Rivers, but through terrain bisected by numerous smaller crossing sites as well. The problem of the opposed water crossing was sufficiently common enough that planners referred to the operation as a "war of the bridges" due to the decisive role that water obstacles played in Division's planning. Kennedy recalls that, as a result, the Division planned to conduct multiple opposed water crossings with the requirement to conduct military bridging operations as the retreating Iraqis demolished existing bridges to slow the Division's advance. Preparation for this type of task also filtered down, with RCT-7 conducting a large-scale maneuver exercise, bridging the Colorado River as it moved from Twentynine Palms, California to Yuma, Arizona. This was an activity Lieutenant Colonel Nick Vuckovich, the RCT Operations Officer, recalled as being extremely useful in helping the RCT and Division understand the process involved in getting a large formation across a water obstacle in the face of enemy resistance.

Planning continued as the Division deployed a portion of its headquarters forward to Kuwait in November of 2002 and the remainder in January and February of 2003. As the Division assembled in Kuwait, its Operation Order (OPORD) began to take shape. Dubbed the OPENING GAMBIT, the OPORD addressed the first ninety-six hours of the invasion focusing on the seizure of the Rumaylah oil fields. According to the plan, RCT-7 was to be the main effort, attacking along the eastern edge of the Division's frontage to destroy the 51st Mechanized Division, seizing the "Crown Jewel", and then blocking any enemy from coming out of the city of Basrah. RCT-5 in the middle would support this attack by capturing the GOSPs. RCT-1, operating on the Division's western flank, would attack towards the west, protecting the other RCTs and aiming to link up with elements of the US Army's 3rd Infantry Division. By this point in the planning, the British Army had committed to the coalition, and planning began for

the handover of this area to the British 1st Armoured Division once the Marines were successful in taking their objectives.

Mattis insisted that the OPORD for OPENING GAMBIT be a relatively short product in terms of length when compared to what was normally issued by a formation headquarters. This was a deliberate and conscious effort to ensure the plan was transmitted in a clear manner and that only the necessary information was included. As a result, anything that was non-essential, or which could be referenced elsewhere, was excluded from the OPORD itself. The final product was a fifteen page document, with an additional thirty or so pages in annexes and attachments. Mattis provided clear intent in the order: "We will swiftly secure key oil nodes allowing the least possible opportunity for their destruction...(and) destroy the 51st Mech Division and its adjacent/supporting units if they fight." With this, his subordinate commanders had a solid understanding of what Mattis considered essential to mission success, providing a sound base from which to adjust plans during the battle when new circumstances arose.

A clear and concise OPORD focusing on the Commander's Intent was one of the essential methods Mattis used to "image" the upcoming fight to the Division. Another method was rehearsals, a tool the Division used extensively prior to the war. Of note was the "Lego Drill", in which all 8,000+ vehicles of the Division were represented by a labeled toy brick. Putting all of these bricks on a large ground model allowed the commanders and staff of the division to mentally image what their large formations would look like once deployed and how best they could address impediments to mobility.

Another rehearsal drill used for the OPENING GAMBIT was the "Jersey Drill", in which subordinate commanders wore colored jerseys representing their units and moved around on a

large-scale mockup of the Rumaylah area. The Jersey Drill allowed all participants to better picture how the upcoming battle would unfold and what their part in it would be. All division and regimental staff officers described these drills as highly effective not for predicting specific times or events, but for envisioning how their own organizations would be positioned as the operation unfolded.<sup>51</sup>

By 17 March 2003, based on directions from I MEF, 1st Marine Division issued a Fragmentary Order (FRAGO) moving the Division into its dispersal areas in preparation for the advance into Iraq. The Division would be assembled by the 19<sup>th</sup>, and I MEF issued the Division an H-Hour (time for commencement of ground operations) of 0600 on 21 March 2003.<sup>52</sup> Months of detailed planning, numerous rehearsals, and the generation of a common understanding of the task ahead had prepared the 1st Marine Division for "first contact."

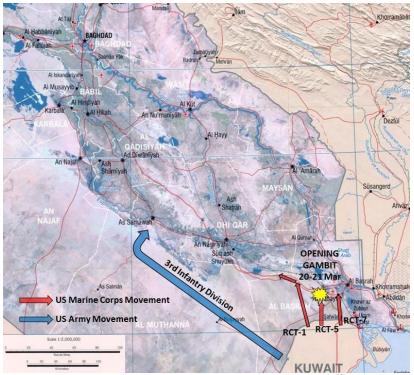
As the 1st Marine Division waited in its dispersal areas for the order to cross the line of departure and begin OPENING GAMBIT, the plan began to change almost immediately. The first impact on the plan came in the form of an intelligence source that arrived at RCT-7's command post. The RCT and Division leadership was faced with information supplied by an Iraqi informant indicating that the 51st Mechanized Division had been significantly reinforced by a Republican Guard tank brigade. Moreover, the brigade was apparently deployed across the RCT's intended line of advance.<sup>53</sup>

Even if the information was questionable and disbelieved by much of the division's leadership, the threat could not be ignored and Colonel Steven Hummer, the RCT commander, was forced to adjust his plan. Vuckovich recalls that Hummer consulted with Mattis, worked with the staff to quickly determine a new line of advance, and then called in his battalion commanders. Standing over a map table, Hummer gave a verbal explanation of the threat and

change of plans, and then issued an updated FRAGO face to face. RCT-7's commanders then dispersed to adjust their plans and prepare for the anticipated H-Hour.<sup>54</sup>

As the Division grappled with the new enemy brigade, pressures from higher forced a second change. I MEF was asked by its higher headquarters, the Coalition Forces Land Component Command (CFLCC), to accelerate its timeline for the seizure of the Rumaylah oilfields due to information suggesting the Iraqis were preparing to destroy them. The I MEF CG spoke with Mattis, who then contacted the CO of RCT-5, Colonel Joe Dunford. After some back and forth discussion, Dunford confirmed to Mattis that RCT-5 could go within five hours. With this confirmation, Division amended the plan for OPENING GAMBIT, giving a new H-Hour of 2030 on 21 March and assigning RCT's 5 and 1 to cross early and begin seizing their respective objectives while RCT-7 continued to make adjustments to deal with the potentially new enemy to its front. As RCT-5 would now be crossing into Iraq first, it was re-designated the main effort for the Division, meaning it became the primary focus of the Division's operation, gaining priority for supporting efforts such as artillery fires and close air support. So

RCT-5 crossed into Iraq at 2030, nine hours earlier than the originally scheduled time, and by night instead of by day, becoming the first coalition unit into Iraq. At 0600 on 21 March, RCT-7 advanced quickly and discovered that the reported enemy tank brigade was non-existent and based on false information. They quickly reverted to their original plan, advanced up and took the "Crown Jewel" while overrunning scattered resistance by the 51st Mechanized Division. By 1256 on 21 March, RCT-5 reported its part of the Rumaylah oil fields secure, with RCT-7 securing its objectives later in the afternoon.<sup>57</sup> By the end of the day, the 1st Marine Division had achieved its initial objectives, preventing the destruction of the vitally important Rumaylah oilfields and destroying the Iraqi Army Division guarding the border.



Map 1. OPENING GAMBIT, 20-24 March 2003<sup>58</sup>

The next two days, 22 and 23 March, saw mopping up of remaining elements of the 51st Mechanized Division and the conduct of the relief in place of 1st Marine Division by the 1st (UK) Armoured Division, a complex exchange of positions while in contact with the enemy. As the Division achieved the objectives set out in the OPORD for OPENING GAMBIT, it moved west toward the city of Nasiriya and the CG considered options to continue the advance. The Division's concept was to get north of the Euphrates River on two axes, move up to the Tigris River, and engage the Baghdad Republican Guard (RG) Division, which was deployed around the city of Al Kut in what was assessed to be the outer ring of defense of the city of Baghdad. To accomplish this, the Division wanted to send one-third of its force (RCT-1) across the Euphrates along Highway 7 at the city of Nasiriyah and then on to Al Kut from the east. The other two-thirds of its force would cross the river west of Nasiriyah, moving north along the unfinished Highway 1 towards the city of Al Kut from the south-west.

Mattis ordered his subordinate formations forward. RCTs 5 and 7, led by the 3rd Light Armored Reconnaissance Battalion (LAR), pushed across the Euphrates on 23 March. By 1907 that day, as dusk approached, 3rd LAR was struck on three sides by a large ambush on Highway 1. The enemy north of the Euphrates was providing more coherent resistance than the Iraqi elements at the border. As 3rd LAR fought within the ambush, the message was sent that they were in danger of being overrun by Iraqi forces. Responding to the situation on the battlefield, Mattis moved up near the fight, and while laying prone on a hill with a map and notepad, proceeded to relay a FRAGO through a staff officer on a radio to the Division to shape supporting efforts to assist the lead battalion in contact.<sup>59</sup> Three and a half hours later, after hard fighting and heavy support from Marine aviation, the Division repelled the ambush and destroyed a battalion-sized enemy unit.<sup>60</sup>

While 3rd LAR was fighting north of the Euphrates and RCT-5 and 7 were moving to follow in behind it, RCT-1 moved to the outskirts of the city of An Nasiriyah, linking up with Task Force Tarawa, another Marine formation in I MEF. The original plan was for TF Tarawa to secure the city and its crossing sites, and for RCT-1 to move through it in an operation called a forward passage of lines. This plan became irrelevant when Task Force Tarawa encountered heavy resistance in the city from irregular fighters, the Fedayeen, and took numerous casualties in an effort to achieve its objective. As Colonel Joe Dowdy's RCT-1 arrived outside of An-Nasiriyah to link up with Task Force Tarawa, confusion reigned.<sup>61</sup>

On the morning of 24 March, as a large sandstorm formed across Southern Iraq, Mattis was faced with choices. He met with his staff to consider if his two-pronged approach to Al Kut was still viable in light of Task Force Tarawa's fight in An Nasiriyah. After deliberation, Mattis determined two routes gave him better flexibility to deal with the enemy at Al Kut. A FRAGO

was issued, giving Mattis' intent to position the Division north of the Tigris River as rapidly as possible using multiple routes, while bypassing enemy main defenses by fixing the Baghdad Republican Guard (RG) Division at Al Kut. He envisioned his end state as the Baghdad and Al Nida RG Divisions "out of the fight" and the Division moving against Baghdad's defenses.<sup>62</sup>

Mattis' RCT commanders were also quickly doing their own battlefield planning and execution. Having crossed the Euphrates River the morning of 24 March, RCT-5 was tasked to move through 3rd LAR and continue the advance. Colonel Dunford, recognizing 3rd LAR's fight the previous evening and the requirement to fight up Highway 1, issued a quick FRAGO to his RCT to conduct a forward passage of lines and clear northward along the highway.

Normally, for an organization as large as an RCT, this would be a deliberate process with detailed orders, but Dunford did not have the luxury of time. At 0730 24 March, he issued the following orders over the radio:

Situation: 3rd LAR encountered heavy contact vicinity NA 2613 night of 23 March. Mission: At 0900Z 24 March, RCT 5 will attack along Highway 1 and clear in zone. Will conduct forward passage of lines with 3rd LAR.

Tasks: 1st LAR – conduct moving screen

3/5 – (main effort), attack along highway 1 and clear in zone

2/11 – establish PA's in support of attack

2nd Tanks – follow and support 3/5

2/5 – Follow and support 2nd Tanks

1/5 – Follow and support 2/5

*Limit of Advance 72 Northing*<sup>63</sup>

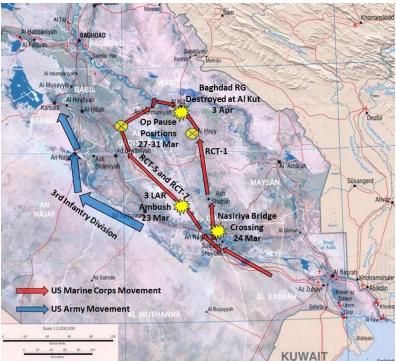
With eighty-one words in nine sentences, Dunford launched a force of more than 5,000 Marines and 1,000 vehicles through a friendly position and onto the offensive. This was possible due to shared understanding between commander and subordinates on what these phrases meant, a product of good training and common understanding of the situation. The Division's advance up Highway 1 continued.

Colonel Dowdy of RCT-1 also had quick decisions to make. Movement across the Euphrates was stopped while Task Force Tarawa continued its unexpected fight in Nasiriyah. In an effort to better understand the situation, Dowdy moved forward to the first bridge across the Euphrates River, meeting with the I MEF CG, Lieutenant General James Conway, the Assistant Division Commander of 1st Marine Division, and the commanders of Task Force Tarawa and RCT-2. As Task Force Tarawa's fight raged on, these senior commanders deliberated on the next move and decided RCT-1 could not wait for the Nasiriyah fight to finish and would push through the city while the battle was ongoing.<sup>64</sup>

With this direction amplified by the Division FRAGO, Dowdy moved back and held a hasty meeting with his staff to determine the best way to conduct a forward passage of lines with a friendly formation in contact, something that was not anticipated. The decision was made to use the RCT's infantry to create a secure "tunnel" along Highway 7 for the remainder of the RCT's column to move through unmolested by the enemy. Dowdy issued the direction to his battalion COs and RCT-1 began moving at 1300 24 March.<sup>65</sup>

The days of 25 and 26 March would see the advance slowed by an intense sandstorm, and then halted on 27 March by a CFLCC imposed operational pause, a perceived necessity to allow for logistics to catch up to advancing Army and Marine combat elements. The halt would remain in effect until 30 March. The Division would utilize this time to deal with enemy remnants scattered along Highways 1 and 7 as well as refueling and repairing after a week of maneuver. Mattis moved to personally see each of his RCT COs, issuing his intent to destroy enemy elements in the vicinity of the Division through offensive and ambush actions while, at the same time, preparing for immediate movement to the Tigris River. The days of the days of

On 30 March, Mattis also took the time to fly to I MEF with his planners to confer with his superior, Lieutenant General Conway, and generate options for defeating the Baghdad RG Division in Al Kut once the CFLCC-imposed pause was lifted. This conference was fruitful: the pause was lifted after only four days and the Division could continue its advance to Al Kut.



Map 2. From An Nasiriya to Al-Kut, 24 March - 4 April 2003<sup>68</sup>

After reviewing options with his planners and generating his concept, the staff prepared a written FRAGO for Mattis as he moved to personally brief Colonel Joe Dunford with RCT-5. The Assistant Division Commander made the trip to RCT-1 to brief Colonel Dowdy on the plan. By the morning of 31 March, 1st Marine Division was moving again, with the Baghdad RG Division firmly in its sights, and it rapidly seized its planned objectives at Hantush (RCT-5) and Al Hayy (RCT-1) on 31 March, pushing north the following day to the banks of the Tigris River. RCT-5 led the way, seizing crossing sites over the Saddam Canal on 1 April followed by the Numaniyah bridge across the Tigris, which it successfully captured by 0655 on 2 April. By

the end of the day, the bridging operation was complete and RCTs 7 and 1 were staged on either side of Al Kut, ready to attack the Baghdad RG Division.<sup>70</sup>

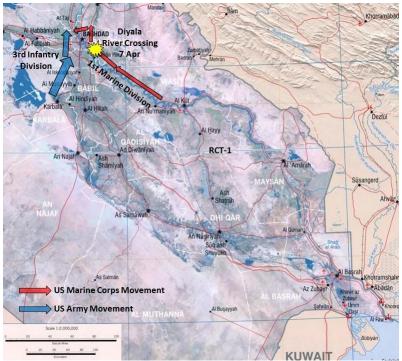
The intelligence staff assessed that the Baghdad RG Division had been thoroughly decimated by coalition bombing over the preceding two weeks. As the sun rose on 3 April, the Division conducted its attack into Al Kut, with both RCT-1 and RCT-7 advancing at 0606.

Despite scattered resistance, the Baghdad RG Division essentially melted in the face of the Marine attack. Months of studying the ground and tactical possibilities in the vicinity of Al Kut had prepared the Division, enabling the Marines to adapt to the "catastrophic success" of the Baghdad RG Division's rapid collapse, quickly sweeping up to the outskirts of the city by midday. What was expected to be a heavy fight turned into a mop-up operation, one the Division adjusted to and executed with great speed.<sup>71</sup>

The destruction of the Iraqi position at Al Kut was a mission the Division had considered, in general terms, for months preceding the war. In the words of the Division's official history, "The Division had accomplished its second strategic victory. The deliberate planning that had identified the routes, seams, and scheme of maneuver for the Division's actions had all paid off...(and) the Division was now poised on the north bank of the historic Tigris River." There was no time for the Division to rest on its laurels and Major General Mattis issued a FRAGO for RCTs 7 and 1 to disengage from Al Kut to catch up to RCT-5, who continued the advance along Highway 6 towards Baghdad. On 4 April, in the Division's heaviest fighting to that point, RCT-5 encountered remnants of the Al Nida RG Division and Fedayeen fighters near the town of Al Aziziyah and, by the end of the day, defeated a battalion-sized force. The Division had considered, in general Laurels and Statistical Properties of the Division had considered, and the Division had considered, and the Division had considered had a paid to be provided the Division had considered, and the Division had accomplished the Division had considered, and the Division had considered, and the Division had considered, and the Division had considered had been described by the Division had been described

As the Division spent 5 April closing up to the Diyala River, the last major water crossing before Baghdad, Division planners were considering how to seize the Iraqi capital.

Mattis provided his intent verbally to the RCT COs, stating that the Division was to isolate eastern Baghdad and then conduct armed reconnaissance of the outskirts of the city to get a sense of enemy resistance while also identifying crossing sites over the Diyala and into the city.<sup>74</sup>



Map 3: From Al-Kut to Baghdad, 4-10 April 2003<sup>75</sup>

Over the night of 5/6 April, RCT-7 started the encirclement of Baghdad by clearing out the Rasheed military complex. As the sun rose on 6 April, the RCTs were fanning out along the Diyala River. When the Division considered the river in pre-war planning, intelligence estimates indicated it was shallow with numerous potential crossing sites. What became apparent, as the Division closed up to the Diyala, was that the engineering of the river had produced steep embankments and the river banks were wet and non-passible to wheeled traffic. Worse still, the two bridges over the river were damaged by Iraqi attempts to destroy them. The plan did not survive first contact as the Division quickly realized that it had no areas to cross the Diyala River. The

Mattis consulted with his staff and his RCT COs, who prepared to conduct assaults across the river as rehearsed and practiced prior to the war, expressing a sense of urgency in getting across the river and into Baghdad. Armed with Mattis' intent of crossing the Diyala at multiple points to secure a bridgehead into Baghdad, the RCTs moved to execute. How they accomplished this was another indication of the Division's ability to plan and execute complex operations with minimal time or procedures.

On RCT-7's front, the lead battalions approached the two damaged bridges within their zones. Guided by their CO's intent, the battalion commanders scouted the bridges and determined the best way to get their forces across. Colonel Hummer, after consulting with his staff, issued some updated guidance over the radio and listened as the COs coordinated their respective movements. The RCT CO ensured the appropriate support was in place and let the COs drive their operations. Bridging started at 0600 on the morning of 7 April and continued for RCT-7 until 1730; by nightfall, the RCT was pushing forces across the Diyala and into the outskirts of Baghdad.<sup>79</sup>

To the north of RCT-7, RCT-1 completed an equally audacious water crossing operation. In an effort to support RCT-7's bridging operation Colonel Toolan, now in command of RCT-1, proposed that the RCT's amphibious tracked vehicles, usually used for moving from a ship to a beach, be used to ford the Diyala River. This plan aimed to meet Mattis' intent to get across the river in the shortest time possible, and gave the Division more options once it did cross. With his operation approved, Toolan moved back to RCT-1 and, as recalled during an interview, planning the crossing and issuing orders directly to his subordinates over the hood of his vehicle.<sup>80</sup>

With his plan in place, Toolan then proceeded to the front to observe operations as the lead battalion entered the river and swam its vehicles across at 1400 on 7 April. A smaller local

bridge was secured to bring the lighter vehicles across, and by the end of the day, RCT-1 was across the Diyala and established in a bridgehead within extensive palm groves on the river bank.<sup>81</sup> The Division was now on the outskirts of Baghdad.

On the morning of 8 April, Mattis moved across the Diyala, meeting up with Colonels Toolan and Dunford. Spreading a map out on the hood of Dunford's vehicle, Mattis carved up the eastern portion of Baghdad into sectors and handed out tasks to his subordinates, with RCT-1 aimed at moving through the urban sprawl of eastern Baghdad while RCT-5 was to move around the outskirts of the city to cordon off any northern exit routes. Mattis then moved the meet with Hummer, conducting a similar face-to-face meeting over a map on the hood of a vehicle to direct RCT-7 to clear out the Rasheed military complex, a large military base within the city.<sup>82</sup>

With the plan in place, the RCTs rapidly broke out from the bridgehead and on 8, 9 and 10 April proceeded to advance through eastern Baghdad, seizing their objectives against sporadic opposition by regime remnants. The final battle for the city of Baghdad occurred in RCT-5's sector at the Azimiyah Palace and mosque complex, where a battalion-sized hold out of RG soldiers and Fedayeen fought against Dunford's Marines. With the collapse of the palace and mosque after hard fighting, the seizure of Baghdad was essentially complete and the Division began to look to a new operation for the RCTs: securing and stabilizing the city now that Hussein's regime had been ousted.

As the fighting on 10 April wound down, the Division received a warning order from I MEF to prepare to move 200 kilometers north to seize the vital oil-producing city of Kirkuk. The Division was able to build an ad hoc task force around its LAR battalions, Task Force Tripoli, and develop a plan to take Kirkuk within 24 hours. With planning complete, the operation's objective was changed to the city of Tikrit and, in a testament to the Division's

ability to rapidly plan and execute, the planners were able to reconfigure the mission and launch the Task Force within 24 hours.<sup>83</sup> Task Force Tripoli would launch on the night of 11/12 April and succeed in taking Tikrit with minimal resistance by 14 April.<sup>84</sup> This mission ended the Division's "march up," moving into Phase IV of the operation: stabilizing post-Saddam Iraq.

1ST MARINE DIVISION AND PLANNING FOR FIRST CONTACT

The Division's action in contributing to the removal of Saddam Hussein's regime was a decisive feat of modern arms, termed by one author as the "Marine Corps's longest march from the sea." It had over a year to consider how it would achieve its part of the campaign, and it used this time to learn and plan in great detail, building up shared understanding of the environment and the necessary elements for success. When the time came to cross the line of departure, Moltke's dictum proved true, and the Division was forced to adjust, adapt and overcome impediments to its rapid advance to the heart of Iraq, but was able to do so due to the foundations established through effective planning.

In analyzing the Division's use of planning and how it executed operations after crossing the line of departure, six key factors are evident. These factors indicate how the Division created a plan that was durable enough to allow them to maintain their momentum and achieve their objectives despite the effects of battlefield friction and change. These six factors are:

- 1. Small Command and Staff Teams;
- 2. The Active Commander;
- 3. A Single, Adaptable COA;
- 4. Disciplining the Process and the Role of Expertise;
- 5. Planning as Visualizing; and
- 6. Short Orders.

The first factor, small command and staff teams, was the result of a conscious effort by Major General Mattis once he took command of the Division and issued guidance to his staff. <sup>86</sup> The reasons for this were twofold. First, Mattis wanted to ensure that the Division's command posts were small enough to keep up with the rapid advance he envisioned. This required smaller numbers of headquarters staff, reducing the need for physical "real estate" in the command posts to provide work space for excess staff as well as reducing the level of logistical support required to keep a headquarters operating. <sup>87</sup>

The second reason was based on Mattis' philosophy regarding his relationship with his staff. Mattis believed that as commander, he was better served by a small number of capable staff officers, with whom he shared a close relationship, than by a large, multi-tiered organization. The smaller staff facilitated dialogue between commander and staff and prevented complicated briefings and a bottleneck to information flows. A smaller staff also allowed for closer working relationships and more easily built an environment of trust and understanding. Of the officers who worked in Mattis' staff, many had come with him from Task Force 58 or served with him on previous assignments, and had a firm understanding of his requirements. Those who weren't familiar with him quickly learned through their routine interaction with the CG. 88 The RCTs, with smaller allotments of Marines, also achieved the objective of a small and nimble headquarters.

Organizational theory supports the idea that small teams help create an environment of trust and ease the flow of information. Jim Storr, in his observations about British staffs on training and operations, notes that larger staffs begin to suffer from a phenomenon observed by software engineer Fred Brook: the more people in a project, the less actual work you can actually divide up to assign them. While increasing a team from one person to two splits the work in half, for a

50% reduction in workload, the workload reduction diminishes when applied to larger groups. Going from two to three only takes the work load from 50% to 33%, for a 17% reduction in workload, while going from six to seven only takes the workload from 16% to 14%, a trivial improvement of 2%.

Brook's observation establishes an inverse relationship between workload reduction and the number of people in a group. As well, more people means much more work in ensuring collaboration and coordination, which greatly adds time needed to conduct planning or other staff work. A second phenomenon of organizations, noted by author C. Northcote Parkinson, contends that work will expand to fill the time available, meaning that larger staffs will create additional work to occupy more hands, further slowing internal processes. By insisting on lean staffs, Mattis ensured that process would not be slowed by the organizational and procedural friction that could plague larger groups.

The second factor was the active role of the commanders at all levels in the Division, creating the conditions for the staff to effectively contribute to planning and executing operations. Prior to first contact, the direct participation of the commanders in formulating the plan and contributing to its refinement ensured that intent was repeatedly broadcast to all ranks and that it drove subordinate and supporting planning efforts. That this occurred was a good thing, with Clarke Lethin, who served as the Deputy G3 and ended the war as the Division's G3, arguing that the direct role of the commander in delivering his intent provides the "glue" that holds a team together. 91

After contact, commanders at all levels continued to play an active role through their forward presence on the battlefield. Frequent and direct communication between commanders facilitated mutual understanding of the situation and the intent for the operation. Mattis and his

leaders led from the front and shared understanding with each other through verbal confirmation, greatly improving synergy and reducing the requirement to provide detailed direction. Not only did this assist them in gaining a first-hand understanding of the unfolding situation, but it also facilitated the numerous face-to-face contacts between commanders, enabling the verbal confirmation of intent, coordination of future actions, and passage of new instructions. Direct communication between commanders and key staff, something Mattis and his subordinates strove to achieve, completely removed the requirement for overt synchronization by maintaining a high degree of common understanding about what the Division was doing.

Active commanders and small staffs were able to take advantage of the focus on single, adaptable COAs and the process of "deepening" them, which is the third factor of the Division's successful approach to planning. The "deepening" of a single COA occurred both before and after the campaign commenced. Divisional staff officers recalled the generation of multiple COAs as relatively uncommon. Instead, Mattis would provide a single COA to the staff, who would conduct "progressive deepening" of the CG's selected plan. The same observation was made at the RCT level, with Operations Officers recalling their COs generating a COA, using available time to discuss improvements, and issuing the plan in a timely manner.

While this is deviation from the formal procedure to conduct concurrent option comparison prescribed by MCWP 5-1, this rapid selection of a COA understood by the commander to be feasible, followed by a "deepening" to further refine it, is an indicator of the role of judgement and experience in the Division's planning and execution. As Klein's research indicates, it is not a case of the commander making an ad hoc plan or "winging it", but rather the application of years of experience to quickly review options and, through intuition provided by expertise and training, rapidly determine which COA was feasible and most likely to succeed

based on the information available, a model Klein termed the Recognition-Primed decision model. <sup>92</sup> The application of Recognition-Primed approaches, when the situation required, was based on the idea that the expertise of those making the plan could take the place of extensive analysis. This is summed up in Mattis' statement that he took 30 years to make a decision in 30 seconds. <sup>93</sup>

"Progressive deepening" of a COA was one method representing the fourth factor of effective planning, which was a disciplined approach to planning and the role of expertise and judgement in driving the process. In a study of planning by US Army formations in the Second World War, John Garrett noted that complex missions such as crossing major rivers were achieved with relatively simple plans that were developed under great time constraints. In his examination of Second World War planning and orders, Garrett found that the focus of efforts was primarily confined to objectives and capabilities. Commanders made minimal, if any, effort to predict outcomes through comparing detailed friendly and enemy courses of action. Time was not spent on activities that would provide no useful output in a rapidly changing environment. A disciplined process driven by commanders permitted the plan to be easily understood, left as much flexibility open to subordinates to adapt to changing circumstances, and did not set false expectations of what was necessary to do to achieve the mission. 94

This effect was achieved in the 1st Marine Division by ensuring there was no ad hoc nature to the planning process. Mattis' directive to the Division was that when there was enough time, planning was deliberate and followed the MCPP model. According to Mattis, even dynamic or hasty planning after crossing the line of departure would still be integrated, with a disciplined approach that was coordinated and thorough. Officers of the Division and RCTs interviewed all said MCPP was implemented when the time allowed. Like the Second World

War commanders Garrett studied, Mattis disciplined the staff process accept uncertainty, focus on objective and intent, and anticipate the culminating point of friendly capabilities. 95

Even after the operation started, and planning time was significantly reduced, none of the members of the Division interviewed believed that planning ever became ad hoc. Even when time was short, planning was still structured to ensure the essential factors were properly considered. This may have been the divisional or regimental commander with a few staff officers over the hood of a vehicle, or through an abbreviated cycle of the MCPP during a lull in the campaign. Michael Groen, who as a Lieutenant Colonel was the Division's deputy for intelligence, recalls the essence of this being less a demand for formalized procedures and products, and more the application of rigor to only the key components of a plan. <sup>96</sup> Clarke Lethin summarized this as the importance of being masters of the planning process, rather than slaves to it, something Mattis enunciated in his guidance to the Division. <sup>97</sup> By insisting that planners adhered to a fundamental process, even in abbreviated forms under limited time constraints, commanders and staffs ensured common understanding of the necessary inputs to planning and what the next steps entailed.

More importantly, the disciplining of process provided the environment for commanders to apply judgement on how to compress analytical procedures to suit the demands of time, such as Mattis' actions in the face of 3rd LAR's ambush, or Hummer's execution of the Diyala crossing with his battalion commanders. This is supported in planning doctrine when planners face tight timelines. In decision-making theory, Klein calls this an "automatic system", which relies on tacit understanding of the situation based on intuition (pattern matching based on expertise) and mental simulation (imaging the future) which, in the hands of an experienced decision maker, provides for sound judgement to make decisions in high-stress situations with

little time. <sup>99</sup> By inserting judgement based upon years of experience, commanders could focus the efforts of planning, even in the most chaotic of conditions, by shortening or accelerating activities or simply using the process as a mental guide for subordinates and staff to follow.

In the 1st Marine Division, the commanders and staff mastered the planning process through disciplined application, which brought deep familiarity and an ability to produce a plan through the appropriate level of process. In the Division's case, the commander and staff drove the process, and were not beholden to it. How to drive this process, and when to compress or accelerate planning, was informed by experience and understanding, with intuition and sound judgement, when applied with rigor, replacing methodical processes to produce a quick, effective decision.

Discipline in the planning process was facilitated through focus on "visualization," the fifth key factor of the Division's approach to planning. All commanders and staff interviewed saw "visualization" or "imaging" of the battle, or the conceptualization of how the Division would fight through various problems it could encounter, as the essential output of planning. Visualization provides time to train the commander, staff, and subordinates in understanding the problem and building a common mental model of the situation, the operational problem, the mission, and the commander's intent and concept of operations.

Prior to the war, visualization was the product of detailed work. Although everyone knew the plan would change once the operation began, it was necessary to use the time available to build shared understanding of the objective and the commander's intent. This understanding was essential to enable dynamic changes or "audibles" to the plan once engaged with the enemy; Groen stated that dynamic plans were based on and fed by understanding achieved through deliberate analysis, for it was essential "to have a plan to deviate from." 100

Another method that contributed to visualization was the use of rehearsals prior to the war. All the officers interviewed recalled the importance of the "Jersey Drills" and the "Lego Drills", amongst other rehearsals that were conducted at all levels of the Division. Most commanders and staff interviewed recalled the primary importance of these drills not so much as an understanding of how future events would unfold, but rather that they provided an increased understanding of the participants' own organizations and capabilities, and the time and space required to complete varied tasks. As an example, the RCT Operations Officers all recalled the "Lego Drills" as the first time they were able to visualize what a 1,000-vehicle formation looked like deployed on a route, and what would be required to move and deploy it.<sup>101</sup>

This concept of visualization is an example of MCDP 5's notion that planning is a learning tool; a principle summed up in the military axiom that "the plan is nothing, planning is everything." By using planning as an *anticipatory* tool, vice a *predicative* tool, the Division did not focus on trying to synchronize its actions for future events that were unlikely to occur in the predicted manner. There was long, detailed planning document which attempted to predict the events of the campaign. The Division's commanders and staffs did not try to predict when it would cross the Tigris River and destroy the Baghdad RG Division, nor did it waste time in trying to synchronize this future activity prior to the war. Rather, they were able to envision the multitude of possibilities essential to completing this type of operation through planning and anticipate how to best be prepared to address them should they occur. <sup>102</sup>

The river crossing operations illustrate this principle. The Division's plan did not hinge upon major river crossings at a specific location and time during the operation, but anticipated the need to cross major waterways, identified where these events could occur, and used training and rehearsals to "image" itself through these activities. Klein terms this phenomenon "pattern

matching", in which the decision maker builds a repertoire of patterns to quickly understand what is happening, facilitating quick decision making.<sup>103</sup>

Without an imperative for synchronization and prediction, the Division was able to produce short and concise orders, the sixth and final factor and one which helped facilitate quick implementation of planning. Brief and concise orders were a requirement Mattis imposed in his direction to the Division's leadership. The Division was not wedded to any specific method of delivering orders to convey the plan, using whichever method was most expedient, whether it be over the radio, face-to-face, or through distribution of written orders. When written orders were produced, they were brief and concise. The relatively short OPORD issued at the beginning of the operation was a result of deliberate efforts to limit information included in the order to the essentials.

After crossing the line of departure, the Division would issue between twenty to thirty shorter FRAGOs to adjust execution to the situation at hand. When written, they were done in an abbreviated format, and were simple and clear enough to be delivered verbally by the Divisional and RCT commanders to their subordinates over the radio or in a face-to-face meeting. At the RCT level and below, officers interviewed did not recall many written products being issued after crossing the line of departure: direction was verbal based on a disciplined use of shorthand orders delivery. The Division's policy of short orders prevented the over-proceduralization of orders development that slowed production and delayed the final step of the planning process. It also demonstrated that successful operations were undertaken over the span of weeks without the requirement for formal, written orders, as the commander's intent, the constant interaction between commanders and staff, and the shared understanding of the situation and objective created a condition in which little formal direction was required. Comfort with the

approach allowed the Division to avoid the pitfall noted in the British post-war study of OIF, where events outpaced the issue of orders.

## **CONCLUSIONS**

The 1st Marine Division's approach to planning and executing operations was characterized by small teams of commanders and staff officers with shared experience and great trust in each other, enhancing information flows and ensuring shared understanding of the commander's intent. They applied the analytical MCPP in thorough detail prior to the start of the operation, and used the outcome of shared visualization as a framework to adapt after H-Hour.

After first contact, when adaptation and new plans were required, the division understood that expertise and judgement could be applied to compress or omit parts of the planning process, trusting in experienced-based intuition to provide the optimal decision in the face of time constraints. Planning was also accelerated by experienced leaders quickly producing single, workable COAs through reliance on Klein's principle of "tacit knowledge," and issuing simple orders in shorthand form, often verbally, to speed the process of turning the plan into action. They applied the tenets of MCDP 5 *Planning*, and used as much or as little of MCWP 5-1 *Marine Corps Planning Process* as time and the situation dictated.

The implications of the Division's successful planning model are three-fold. First, training on the MCPP must highlight how the process can be shortened as planners take advantage of their experience and expertise when time is limited. This includes better training to produce short, clear orders, enunciate clear statements of commander's intent, and focus on the anticipatory approaches to generating a plan. This also includes producing plans in less-than-ideal physical conditions, such as in small field command posts or in moving vehicles.

Second, doctrine should recognize a form of Recognition-Primed decision making that includes concepts of single COAs that are intuitively determined by experienced commanders and then developed progressively deepened by their staffs. This does not discount the value of an analytical model focused on concurrent option comparison, which has great value in exploring a new situation. Rather, an understanding of the inputs and outputs of a Recognition-Primed model of decision making can encourage a balance of detailed analysis and intuition in battlefield decision making, both of which are critical to the maintenance of tempo in a fast changing, complex landscape.

Finally, doctrine must never diminish the role of the commander in producing and executing the plan. While the staff has a role in contributing to and developing the plan, it is always the commander's plan. In the 1st Marine Division, the commanders produced effective plans by constantly putting themselves near the front of their formations so they could build understanding and adjust plans based on battlefield circumstances. Battlefield planning was never a sterile process of gathering information, analyzing it, and weighing options, rather it was a process of discovery and leadership by a small group of commanders and staff, built on mutual trust and shared understanding of the situation and the objective. Training and education must balance the processes of planning against the exigencies of a rapidly-changing battlefield, and develop every commander's sense of where to best place him or herself.

Ultimately, the 1st Marine Division had *a* plan for its part in OIF, but it was not *the* plan. What the Division crossed the line of departure with was an understanding of battlefield success built from detailed determination and assessment of the likely elements for success. This was enabled by six key factors of the Division's approach to planning, which were:

## 1. Small Command and Staff Teams;

- 2. Planning as Visualizing;
- 3. Disciplining the Process and the Role of Expertise;
- 4. A Single, Adaptable COA;
- 5. Short Orders; and
- 6. The Active Role of the Commander.

These factors served to provide the Division's commanders and staff with a shared understanding of what to anticipate as events unfolded, and conditioned their ability to react and adapt quickly to unforeseen events. Understanding these factors should be essential in the instruction of future commanders and staff officers in military training institutions. Ensuring they are engrained in doctrine and training will help future leaders gain perspective on the true value of planning, which is not as a tool for predicting and planning for future events. Planning is the process to help anticipate probable battlefield problems and create shared understanding of solutions, providing the basis for rapid decision making in battle.

<sup>&</sup>lt;sup>1</sup> Helmuth von Moltke, *Moltke on the Art of War: Selected Writings*, ed. Daniel J. Hughes, trans. Daniel J. Hughes and Harry Bell (Novato, CA: Presidio Press, 1995), 92.

<sup>&</sup>lt;sup>2</sup> Nicholas E. Reynolds, *U.S. Marines in Iraq 2003: Basrah, Baghdad, and Beyond* (Washington, DC: United States Marine Corps History Division, 2007), 29, 37.

<sup>&</sup>lt;sup>3</sup> Headquarters United States Marine Corps, *MCDP 5 Planning* (Washington, DC: Headquarters United States Marine Corps, 1997), 3.

<sup>&</sup>lt;sup>4</sup> Ibid, 4, 6-8.

<sup>&</sup>lt;sup>5</sup> Ibid, 6, 23-25.

<sup>&</sup>lt;sup>6</sup> Headquarters United States Marine Corps, *MCDP 1 Warfighting* (Washington, DC: Headquarters United States Marine Corps, 1997), 8-9, 12-13. Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War" in *International Security*, Vol. 17, No. 3: 61-66, 90.

<sup>&</sup>lt;sup>7</sup> Russell Ackoff, *Re-Creating the Corporation: A Design of Organizations for the 21st Century* (Oxford, UK: Oxford University Press, 1999), 52-53.

<sup>&</sup>lt;sup>8</sup> Ibid, 55-60.

<sup>&</sup>lt;sup>9</sup> Headquarters United States Marine Corps, MCDP 5 Planning, 14.

<sup>&</sup>lt;sup>10</sup> Ibid, 50-52, 70-73.

<sup>&</sup>lt;sup>11</sup> Ibid, 76-78.

<sup>&</sup>lt;sup>12</sup> Ibid, 91.

<sup>&</sup>lt;sup>13</sup> Headquarters United States Marine Corps, *MCWP 5-1 Marine Corps Planning Process* (Washington, DC: Headquarters United States Marine Corps, 2000), 1/3.

<sup>&</sup>lt;sup>14</sup> Ibid. 2/1-2/7.

<sup>15</sup> Ibid, 3/1-3/2, 4/1-4/2, 5/1-5/2.

- <sup>16</sup> Gary A. Klein. "Strategies of Decision Making" in *Military Review*, Vol. 69, No 5 (May 1989): 56. The US Army uses the Military Decision Making Process (MDMP). The Canadian Armed Forces uses the Operational Planning Process (OPP) where the Australian Army uses the Military Appreciation Process (MAP). All of these processes follow the same sequence of analyse the task, generate COAs, compare COAs, and then issue the plan. <sup>17</sup> Headquarters United States Marine Corps, *MCWP 5-1 Marine Corps Planning Process*. 6/1.
- <sup>18</sup> Gary Klein, *Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making* (Cambridge, MA: MIT Press, 2011), 28-31.
- <sup>19</sup> Headquarters United States Marine Corps, MCWP 5-1 Marine Corps Planning Process. 1/1.
- <sup>20</sup> J.P. Storr, *The Command of British Forces in Iraq, March to May 2003* (Wiltshire, UK: British Army Directorate General of Development and Doctrine, 2004), 1.
- <sup>21</sup> Headquarters United States Marine Corps, MCWP 5-1 Marine Corps Planning Process. D/1-D/14.
- <sup>22</sup> Gary A. Klein. "Strategies of Decision Making", 57-58. Also see Karol G. Ross et al, "The Recognition-Primed Decision Model" in *Military Review*, Vol. 84, No. 5 (July-August 2004), 6.
- <sup>23</sup> Jim Storr, "A Year Observing Command and Control" in *The British Army Review*, No. 127 (Summer 2001), 4.
- <sup>24</sup> J.P. Storr, *The Command of British Forces in Iraq, March to May 2003*, 10.
- <sup>25</sup> John F. Antal, "It's Not the Speed of the Computer that Counts! The Case for Rapid Battlefield Decision-making" in *Armor: The Professional Bulletin of the Armor Branch*, Vol. 107, No. 3 (May-June 1998): 13. Also see Jim Storr, "Timelines and Timeliness" in *The British Army Review*, No. 146 (Spring 2009): 54.
- <sup>26</sup> J.P. Storr, The Command of British Forces in Iraq, March to May 2003, 11.
- <sup>27</sup> Edward J. Filiberti, *The Army Standard Operations Order: Has It Kept Pace With the Changing Operational Environment.* MSA 685 Integrative Project. (Mount Pleasant, MI: Central Michigan University, 1987), 55.
- <sup>28</sup> J.P. Storr, *The Command of British Forces in Iraq, March to May* 2003, 13.
- <sup>29</sup> Author interview with Major General Paul Kennedy (19/23 January 2017), who as a Lieutenant Colonel was the Division's Plans Officer.
- <sup>30</sup> J.P. Storr, *The Command of British Forces in Iraq, March to May* 2003, 13.
- <sup>31</sup> 1st Marine Division 5750 HistO 7 Sep 03, *Command Chronology for 1 January to 30 June 2003* (Archival Branch, United States Marine Corps Historical Center), 2. Also see Bing West Ray L. Smith, *The March Up: Taking Baghdad with the United States Marines* (New York, NY: Bantam Books, 2003), 18.
- <sup>32</sup> Michael S. Groen and Contributors, *With the 1<sup>st</sup> Marine Division in Iraq, 2003: No Greater Friend, No Worse Enemy* (Quantico, VA: United States Marine Corps History Division, 2006), 11. Also see 1st Marine Division, *Command Chronology*, 1-2.
- <sup>33</sup> Bob Woodward, *Plan of Attack* (New York, NY: Simon and Schuster, 2004), 37.
- <sup>34</sup> Ibid, 75-80. Michael R. Gordon and Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. (New York, NY: Pantheon Books, 2006), 75-84. Nicholas E. Reynolds, *US Marines in Iraq* 2003, 26.
- <sup>35</sup> Author interview with Major General John Broadmeadow (25 January 2017), who was a Lieutenant Colonel who ran the Division's logistical efforts as the G4, and Colonel (Retired) Clarke Lethin (23 January 2017), who was a Lieutenant Colonel who served as the Deputy G3 and then G3 during OIF 1.
- <sup>36</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 13.
- <sup>37</sup> Author interview with Kennedy.
- <sup>38</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 14.
- <sup>39</sup> Author interview with Kennedy.
- <sup>40</sup> Author interview with Brigadier General Michael Groen (24 January 2017), who as a Lieutenant Colonel was the Deputy G2 and focused on intelligence planning. Also, author interviews with Kennedy, Lethin, and Broadmeadow. Perspectives on RCT planning are drawn from author interviews with Lieutenant Colonel (Retired) Nick Vuckovich (25 January 2017), Colonel (Retired) Mark Toal (27 January 2017), and Colonel (Retired) Jim Parrington (30 January 2017), who served as the Operations Officers of RCTs 7, 5, and 1 respectively.
- <sup>41</sup> Nicholas E. Reynolds, *U.S. Marines in Iraq 2003*, 57-58. Michael S. Groen and Contributors, *With the 1st Marine Division in Iraq*, 2003, 44-45, 51.
- <sup>42</sup> Author interview with Lieutenant General (Retired) John Toolan (27 January 2017). Toolan was originally the G3 of the Division and replaced Colonel Joe Dowdy as CO of RCT-1 on 4 April 2003.
- 43 Michael S. Groen and Contributors, With the 1st Marine Division in Iraq, 2003, 55-57.
- <sup>44</sup> Bing West and Ray L. Smith, The March Up: Taking Baghdad with the United States Marines, 14-17.
- <sup>45</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 7.

- <sup>46</sup> Author interview with Kennedy.
- <sup>47</sup> Author interview with Vuckovich.
- <sup>48</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 54-56.
- <sup>49</sup> Author interviews with Kennedy and Lethin.
- <sup>50</sup> Mattis' intent for the OPENING GAMBIT was given by Clarke Lethin, "1st Marine Division and Operation IRAQI FREEDOM" in *Marine Corps Gazette*, Vol. 88, No. 2 (February 2004): 21.
- <sup>51</sup> Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 103, 109-112, 126-128. Author interviews with Kennedy, Lethin, Toal, Parrington and Vuckovich.
- <sup>52</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 134-136, 142.
- <sup>53</sup> Ibid, 144. Author interview with Groen; the information concerning the brigade was hotly disputed, but ultimately had to be considered as a plausible threat by the RCT CO.
- <sup>54</sup> Author interview with Vuckovich.
- <sup>55</sup> Nicholas E. Reynolds, U.S. Marines in Iraq 2003, 61.
- <sup>56</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 144-146. Author interview with Toal
- <sup>57</sup> On RCT-5s progress, see Ibid, 26. For RCT-7, see 7th Marine Regiment 5750 S-3 30 Jun 03, *Command Chronology for the Period 01 Jan 30 Jun 2003* (Archival Branch, United States Marine Corps Historical Division), 16. Also see Michael S. Groen, *With the 1st Marine Division in Iraq*, 2003, 157.
- <sup>58</sup> Map from Central Intelligence Agency DI Cartography Center, *Iraq* 761580AI 1-03, 1:2,000,000 (Langley, VA: Central Intelligence Agency, 2003). Movement diagrams are the author's own additions.
- <sup>59</sup> Mattis' battlefield leadership in the 23 March fight, along with his method of executing a plan on the spot, was highlighted in author interviews with Lieutenant Colonel Warren Cook (1 February 2017), who as a Captain was Mattis' Aide-de-Camp, and with Kennedy, who were both present with Mattis at the time.
- <sup>60</sup> 1st Marine Division, Command Chronology, 27.
- 61 Ibid, 27. Nicholas E. Reynolds, US Marines in Iraq 2003, 65-67.
- <sup>62</sup> On the CG and staff meeting, see Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq, 2003*, 187-190. Mattis' intent and end state were captured in the 1st Marine Regiment 5750 S3 22 Aug 03, *Command Chronology for the Period of 01 Jan 2003 to 30 Jun 2003* (Archival Branch, United States Marine Corps Historical Division), Enclosure E5, 4.
- <sup>63</sup> Dunford's order is found in battalion radio logs attached to 2nd Battalion, 5th Marines 5750 S-3 30 Jun 03, *Command Chronology for Period 1 January to 30 June 2003* (Archival Branch, United States Marine Corps Historical Division).
- <sup>64</sup> 1st Marine Regiment, Command Chronology, 13. Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 191.
- 65 1st Marine Division, Command Chronology, 27. Author interview with Parrington.
- <sup>66</sup> 1st Marine Division, Command Chronology, 28. For more information on the reasons behind the CFLCC halt, see Nicholas E. Reynolds, *US Marines in Iraq 2003*, 83-84.
- 67 Mattis' intent captured at 1st Marine Regiment, Command Chronology, enclosure E5, 7.
- <sup>68</sup> Map from Central Intelligence Agency DI Cartography Center, *Iraq* 761580AI 1-03. Movement diagrams are the author's own additions.
- <sup>69</sup> Nicholas E. Reynolds, *US Marines in Iraq 2003*, 85-86. Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 230-231.
- <sup>70</sup> 1st Marine Division, Command Chronology, 29.
- <sup>71</sup> On intelligence on the Baghdad RG Division and the Division's attack, see Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 240. Author interview with Vuckovich highlighted aspects of RCT pre-war preparation for the attack, while author interviews with Kennedy, Groen and Lethin underscored the "catastrophic success" of the attack.
- <sup>72</sup> Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 254-255.
- <sup>73</sup> 1st Marine Division, Command Chronology, 30.
- <sup>74</sup> On planning for Baghdad, see Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 254-55. Mattis' intent was captured at 1st Marine Regiment, *Command Chronology*, enclosure E5, 14.
- <sup>75</sup> Map from Central Intelligence Agency DI Cartography Center, *Iraq* 761580AI 1-03. Movement diagrams are the author's own additions.
- <sup>76</sup> Author interview with Vuckovich. Also see 1st Marine Division, *Command Chronology*, 30.
- <sup>77</sup> Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 285. Discussions of faulty information on Diyala trafficability from author interviews with Kennedy and Groen.

- <sup>78</sup> Mattis meeting with Dunford and Toolan to pass intent described at author interview with Toolan. Mattis' intent was captured at 1st Marine Regiment, *Command Chronology*, enclosure E5, 15.
- <sup>79</sup> 7th Marine Regiment, *Command Chronology*, 30. Details on the RCT CO's management of the crossing discussed at author interview with Vuckovich.
- <sup>80</sup> Author interview with Toolan.
- 81 Michael S. Groen, With the 1st Marine Division in Iraq, 2003, 295. Author interview with Parrington.
- <sup>82</sup> On the meetings, see Michael S. Groen, *With the 1<sup>st</sup> Marine Division in Iraq*, 2003, 296-297 and author interview with Cook. Also see 1st Marine Division, *Command Chronology*, 31.
- 83 Michael S. Groen, With the 1st Marine Division in Iraq, 2003, 315, 333.
- 84 Ibid, 344-346.
- 85 Bing West and Ray L. Smith, The March Up: Taking Baghdad with the United States Marines, 3.
- <sup>86</sup> For Mattis' direction on his staff size, see J.N. Mattis, 1000 CG 14 Aug 02 Commanding General's Staff Guidance, (Archival Branch, United States Marine Corps Historical Division), 5.
- <sup>87</sup> Author interviews with Toolan and Lethin. Also see Michael S. Groen, With the 1<sup>st</sup> Marine Division in Iraq, 2003, 11.
- <sup>88</sup> Mattis' relationship with his staff officers and the belief in the advantages of a small team discussed in depth during author interviews with Toolan, Lethin, Broadmeadow, Cook, Groen, and Kennedy.
- <sup>89</sup> Jim Storr, "Size Matters or Bob Gets It Wrong" in *The British Army Review*. No. 144 (Spring 2008), 72-73.
- <sup>90</sup> C. Northcote Parkinson, "Parkinson's Law" in *The Economist*, 19 November 1955. http://www.economist.com/node/14116121.
- 91 Clarke Lethin, "1st Marine Division and Operation IRAQI FREEDOM", 22.
- <sup>92</sup> Gary Klein, Sources of Power: How People Make Decisions, 24-30.
- <sup>93</sup> Neil R. McCown, *Developing Intuitive Decision-Making in Modern Military Leadership*. Unpublished thesis (Newport, RI: Naval War College, 2010), 1.
- <sup>94</sup> John Garrett, *Plans That Survive First Contact*, Unpublished monograph (Fort Leavenworth, KS: School of Advanced Military Studies, 2000), 32-38.
- <sup>95</sup> On Mattis' direction for planning, see see J.N. Mattis, *1000 CG 14 Aug 02 Commanding General's Staff Guidance*, 3-4. Use of MCPP in the Division was discussed in author interviews with Kennedy, Lethin, Toal, Vuckovich, and Parrington.
- <sup>96</sup> Author interview with Groen.
- <sup>97</sup> Author interview with Lethin. Also, see J.N. Mattis, 1000 CG 14 Aug 02 Commanding General's Staff Guidance, 8.
- 98 Headquarters United States Marine Corps, MCWP 5-1 Marine Corps Planning Process, 1/1.
- <sup>99</sup> Gary Klein, Sources of Power: How People Make Decisions (Cambridge, MA: MIT Press, 1998), 287-290. Gary Klein, Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making, 33-43.
- <sup>100</sup> Author interview with Groen.
- <sup>101</sup> Author interviews with Lethin, Toal, Parrington, and Vuckovich.
- $^{102}$  Mattis was emphatic on the importance of anticipation; see J.N. Mattis, 1000 CG 14 Aug 02 Commanding General's Staff Guidance, 2.
- 103 Gary Klein, Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making, 41-44.
- <sup>104</sup> J.N. Mattis, 1000 CG 14 Aug 02 Commanding General's Staff Guidance, 3.

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