Organizing for Operational Deception

A Monograph by MAJ Warren S. Weaver United States Army



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

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MAJ Warren Scott Weaver

Title of Monograph: Organizing for Operational Deception

Approved by:

 Alexander J. Ryan, Ph.D.
 Monograph Director

 Bruce E. Stanley, LTC, IN (Retired)
 Second Reader

 Stefan Banach, COL, IN
 Director, School of Advanced Military Studies

 Robert F. Baumann, Ph.D.
 Director, Graduate Degree Programs

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Abstract

ORGANIZING FOR OPERATIONAL DECEPTION by MAJ Warren S. Weaver, USA, 55 pages.

The operationalization of Military Deception (MILDEC) requires a unique combination of resources, detailed intelligence, significant preparation, operational security and secrecy to achieve maximum effects. It requires close synchronization horizontally and vertically through staffs regardless of echelon, while controlling the dissemination of information to maintain secrecy. Unfortunately, this has been lost in the process of deconstructing operational staffs and reorganizing them to manage complexity, and gain perceived efficacies by the decentralization of battle command functions. This monograph provides historical case studies and a doctrinal review of operational deception that provides a basis from which to evaluate theories of complexity and organizational design to provide recommendations for the organization of a special staff section to conduct MILDEC.

Two case studies from British and Soviet experiences during the Second World War (WWII) are used to assess the development and organization of General Staffs to conduct operational deception. WWII left both forces with a vast reservoir of experience concerning the battle command of operational deception. Despite their historical and cultural differences, both concluded WWII with similar lessons concerning the necessity of centralized control of deceptive tasks, the management of information, and the criticality of maintaining essential secrecy, and operational security.

The applicability of these lessons to contemporary conflicts is addressed by contrasting two simple models of regular and irregular warfare. It is possible to assert that MILDEC has the capability to provide supporting and decisive effects in support of operational objectives regardless of the form, level, or complexity of warfare experienced.

Some theorists such as Alberts and Bar-Yam propose that as the complexity of our operational environments increase so must the complexity of our organizations. Hierarchical organizations become less efficient and flat or networked designs are more effective in managing the complexity. Ivan Steiner counters this idea by asserting that different types of group tasks require different organizational designs, and decentralization is not always the best solution. Based on the case studies and unique operational requirements for conducting Battle Command in support of operational deception, MILDEC has the characteristics of a conjunctive task, which lends itself to centralized command and control.

Recent doctrine found in *FM 3-0* has deconstructed all Information Operations capabilities by assigning them as tasks to different cross functional and general staff sections. It does not recognize any unique Battle Command requirements, but refers to *FM 3-13* and *JP 3-13.4* as sources of current doctrine for its conduct. However *FM 3-0* does not support the doctrine it defers to, by placing MILDEC under the auspices of the G5, Plans section. This is in opposition to *FM 3-13* that recommends that the MDO should work under the supervision of the G7.

The habitual flattening and decentralization of military organizations is not the solution to all emerging problems. Rather, different functions require different organizational structures, tailored to the unique demands of the task. Based on historical case studies and the classification of MILEC as a conjunctive task, this monograph provides two recommendations for operational level commanders. First, commanders should establish Military Deception Officers and Deception Working Groups as described in FM 3-13. Second, commanders should ensure that Military Deception Officers and Deception Working Groups are supported by all cross functional and general staff sections through supervision by the Chief of Staff rather than through coordination by the G5 or G7.

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Introduction

As I was going up the stair, I met a man who wasn't there, he wasn't there again today, I wish that he would go away. —Hughes Mearns

There are great difficulties in reaching a common understanding of the role of Military Deception (MILDEC) within the complex social organizations that make up general staffs. Its applicability and how to coordinate and integrate deceptive executions across multi-functional staffs is an ongoing point of contention. Doctrine writers, functional leaders, planners and executors all look at MILDEC's associated tasks and capabilities from different perspectives, with unique bias's and objectives. Sometimes it just seems easier to ignore the benefits of integrating military deception due to its complexity, but like the man on the stair, this problem will not go away. It is necessary to develop a common understanding of deception so that the ever-expanding list of information capabilities can be synchronized to influence a wider variety of decision makers and meet the demands of combat commanders.

The Revolution in Military Affairs (RMA) and the decentralization of responsibilities throughout General Staffs have not increased our operational understanding and capabilities as envisioned. According to Antoine Bousquet, significant aspects of the network centric and self-synchronizing theories supporting the RMA are flawed.¹ Ivan Steiner supports this by going beyond the complexity of relationships with in organizations, and looking at how individual groups are best organized to execute a variety of tasks. He demonstrates that there is more to consider in organizational design than the simple desire to promote information sharing and reduce the perception of friction and complexity.²

The effective application of MILDEC is lost in the process of deconstructing operational staffs and reorganizing them to cope with complexity. This paper will demonstrate that MILDEC requires close synchronization horizontally and vertically through staffs regardless of echelon, while controlling the

¹ Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (Cambridge, MA: Columbia Unversity Press, 2008), 35.

² Ivan Dale Steiner, *Group Process and Productivity* (Burlington, MA: Academic Press Inc., 1972), 185-186.

dissemination of information to maintain secrecy and security. This monograph provides a historical and doctrinal review of military deception to develop a common understanding of the role of MILDEC. Based on this understanding, historical examples of deception efforts conducted by operational staffs will be compared to summarize the responsibilities of staffs for supporting the battle command of MILDEC operations. This information provides the basis for an evaluation of possible theories of complexity and organizational design to provide recommendations for the organization of a special staff section or working group to conduct MILDEC.

Military Deception

All warfare is based on deception. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.

-Sun Tzu

Deception and MILDEC are two related, but subtly differing concepts. Joint doctrine defines deception or a deceptive task as, "The measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce the enemy to react in a manner prejudicial to the enemy's interests."³ Army doctrine further describes it as being, "those actions executed to deliberately mislead adversary decision makers as to friendly military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly forces' mission."⁴ The difference between the two is that deception is any single act conducted to mislead the enemy, while MILDEC is a deliberately planned and executed series of deceptive tasks, or an operation, targeting a specific individual or group of enemy decision makers.

Ambiguity is the term used to describe the effects achieved by a MILDEC operation or a series of deception tasks to influence the amount of uncertainty an enemy leader perceives as part of their decision

³U.S. Department of Defense, *Joint Publication 3-13, Information Operations,* (Suffolk, VA: United States Joint Forces Command, Joint Warfighting Center, 2006), GL-7.

⁴ U.S. Army, *Field Manual 3-13, Information Operations: Doctrine, Tactics, Techniques and Procedures* (Washington, D.C.: Headquarters, Department of the Army, 2003), 4-1.

making processes. It is this level of uncertainty that can influence an enemy decision maker to act impulsively or delay actions in support of deception objectives and the friendly commander's intent for deception. The activities taken to control the level of ambiguity are described as being either ambiguity decreasing (M for misdirection) to increase the certainty of a proposed falsehood, or ambiguity increasing (A for ambiguity) to increase uncertainty.⁵ Both "M"- and "A"-type deceptions generate cumulative effects through a series of deceptive activities that are planned, prepared, executed and assessed through a battle command process designed to support secrecy and security requirements.

Misdirection is the process of reducing ambiguity in the mind of enemy decision makers, forcing them to seize upon a preconceived notion as being correct, causing them to be more certain of a particular falsehood. Whenever possible, the objective of MILDEC should be to convince the enemy to act in a specific way that supports the commander's operational objectives. This can be described as a form of illusion, or slight of hand, but instead of rabbits and top hats, MILDEC planners and operators use information capabilities to confound the enemy. These "M"- type deceptions are preferable because their positive objectives make success easier to define, quantify, assess, and exploit. Information requirements associated with these deceptions can directly support a commander's decision support template to ensure conditions are set for decisive actions. In the event that there is insufficient intelligence about the enemy's decision making process, it may be appropriate to simply "increase the noise" by using "A"-type deceptions to mask the observable signals of friendly forces. Such "A"-type deceptions may be sufficient to confuse the enemy of friendly composition, disposition, and intent.

Ambiguity is a lack of sureness about someone or something.⁶ It refers to a lack of clarity or consistency in reality, causality, or intentionality. Ambiguous situations cause decision makers to be less confident that any one thing is true. Ambiguity is related to, but distinguishable from, uncertainty. James March and Chip Heath propose that a leader's uncertainty refers to the imprecision in estimates of future

⁵ Central Intelligence Agency, Office of Research and Development, Deception Research Program, *Deception Maxims: Fact and Folklore* (Washington: Office of Research and Development, CIA, 1980), 22.

⁶ Ibid., 21-23.

consequences that are conditional based on present actions.⁷ They further posit that, a common response to both ambiguous situations and perception of uncertainty is the pursuit of additional information to resolve the lack of clarity.⁸ This may generate a delay in the enemy's decision to act, which provides time and space to allow friendly forces to gain a positional or situational advantage. Deception operations that generate "A"- type effects can be compared to denial of service attacks on the Internet, where an overwhelming number of believable contacts or observables produce information overload.

MILDEC is extremely dependent on intelligence concerning the information conduits that enemy decision makers use to conduct battle command. By understanding these conduits, they can be exploited through a series of synchronized deceptive actions. These actions affect the level of trust that an enemy commander has for his information management and decision making capabilities. Significantly higher levels of detailed intelligence are required for an "M"-type versus an "A"-type MILDEC. The better the level of understanding of an enemy commander's information environment, and decision making processes, the easier it becomes to plan, execute and assess its results. The less detailed intelligence collected, the harder MILDEC becomes, and the more likely that an "A"- type MILDEC will have to be attempted.

MILDEC and Operations Security (OPSEC) are complementary activities. Joint Doctrine posits that MILDEC seeks to encourage incorrect analysis, causing the adversary to arrive at specific false deductions, while OPSEC seeks to deny real information to an adversary, and prevent the correct deduction of friendly plans.⁹ Deception is not only used to support MILDEC operations, but can be used to protect indicators of Critical Information (CI) in support of OPSEC. In this role it can be referred to as Deception In Support of Operational Security (DISO).

To be effective, MILDEC cannot be conducted in a vacuum. Commanders receive strategic guidance and limited assets with which to execute their assigned missions. The same national assets that

⁷ James G. March and Chip Heath, *A Primer on Decision Making: How Decisions Happen* (New York: Free Press, 1994), 178.

⁸ Ibid., 179-150.

⁹ U.S. DoD, *JP 3-13*, II-2 – II-3.

commanders receive and disseminate to support full spectrum operations are also used in MILDEC Operations. The operational environment is complex and there are many observables that can have intended and unintended effects when not synchronized and coordinated within the commander's intent. The command and staff that are able to recognize this, find unique solutions to unique problems, and implement those solutions quickly at the lowest cost demonstrate the epitome of operational art. MILDEC and information capabilities are uniquely suited to shaping adversarial beliefs and actions, as they demonstrate the ability to influence adversary decision makers before the commitment of decisive military forces, or other forms of direct military power.

Case Studies

In a time of drastic change it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists. —Eric Hoffer

The use of deception in combat is not new. History is rife with examples of actions taken to confuse and mystify adversaries to gain any advantage possible. False fighting positions, mock ups and the use of noise, smoke or dust have all been used by tactical commanders at least since the time of Sun Tzu to deceive enemy combatants of the size, location, and intent of friendly forces. The advent of the industrial revolution, the growing scale of military formations, increased mobility, air power, and the first steps in communications technology resulted in both the opportunity and the requirement to synchronize operational deception across entire fronts. Michael Handel asserts that, "Until the close of the First World War, deception was always left to the initiative and creativity of individual military commanders, who usually improvised ad hoc on the lower tactical and operational levels – that is, on the battlefield... Since deception was not a systematically continued activity, it required little or no coordination. All this changed during the Second World War, when deception became the focus of formalized staff work."¹⁰

The following case studies will address the development of Military Deception as an element of Operational Art by British and Soviet forces during WWII. Of interest is how the different forces with decidedly different military histories, traditions, and operational environments organized themselves to conduct operational deception.

The Evolution of "A" – Force Methods and Organization

Never in the field of human conflict has so much been owed by so many to so few. —Sir Winston Churchill

The above quote is attributed to Sir Winston Churchill after his visit to the 11th Group at Royal Air Force Uxbridge on August 20, 1940 during a day of battle. It could as easily have been applied to the members of "A"- Force, if their existence could have been confirmed during the war. Without their ability

¹⁰ Michael I. Handel, *Strategic and Operational Deception* (Great Britain: Frank Cass & Co. Ltd., 1987), 20.

to conduct centralized battle command in support of the Middle Eastern Forces' (MEF) MILDEC objectives, the success of all Allied operations in the Middle East and Europe may have been in doubt.

Allied Operational Deception during WW II got its start in the Middle East in late 1940 as a part of normal military operations. During the course of these operations, it was found to be convenient to make use of turned agents to deliberately mislead the Germans, Italians, and later the Japanese. It was "A"- Force, directly responsible to the MEF Chain of Command, and under the inspired leadership of Lieutenant Colonel (later Brigadier) Dudley Clarke, that masterminded large scale successful deception planning and execution in 1941 and 1942. Conducting operational deception under a strategic cover plan that depended on "Double Cross" and "Ultra," "A"-Force confounded the German leadership around the Mediterranean, culminating with the Battle of El Alamein. Despite the works of Cruickshank and Masterman, David Mure maintains that the technique of using these agents in support of deception plans (rather than for the usual tasks of penetration and counterespionage) was developed by "A"-Force, as were all the other deception devices and arrangements so successfully used worldwide by the British and Americans.¹¹ These methods were essentially the same that later deluded the enemy during the invasion of Sicily in 1943 and D-Day in 1944.

Handel supports Mures claim stating that, "Double Cross was developed in the Middle East in coordination with Security Intelligence Middle East (SIME) and MI-5 in England. It eventually became the best means of communicating false information to the Germans in support of OPSEC and MILDEC. The guiding principle of the controllers of double agents was to supply their German counterparts with the greatest possible amount of accurate information in order to protect the deception plot with a bodyguard of truth."¹²

¹¹ David Mure, *Master of Deception: Tangled Webs in London and the Middle East* (London: William Kimber & Co., 1980), 15.

¹² Handel, *Strategic and Operational Deception*, 23.

He further describes that, "In conjunction with Double Cross which depended on it, Ultra was the single most important means of facilitating deception available to the Allies."¹³ A top secret British project to intercept and decipher encrypted German messages, it was the ideal tool for determining how to design a deception cover plan that would best reinforce existing German perceptions of the Allied threat. Handel adds that, "After implementing a particular ruse, the deceivers could rely on Ultra to monitor the degree to which it had been accepted by the Germans, then follow this up by fine-tuning continuing deception cover plans with the other means at their disposal. Ultra was essential for the protection and growth of the double-cross system because it provided the corrective mechanism to cover up mistakes and carry on with this most reliable communications link to the enemy from one success to another."¹⁴

Mure describes the starting point of "A"-Force by asserting that, "From the very start, it is clear that Clarke made a point of building up a false and exaggerated order of battle in support of deception plans for offensive operations. It was always the first task of his deception staff, "a dull hard slogging business," but time after time, from Abyssinia onwards, captured enemy documents proved its value."¹⁵ This was the method by which the enemy's appreciation of allied forces was increased by the addition of notional brigades, divisions, and later even corps and armies.

He further states that, "The main method of giving our notional forces all the appearance of reality was by foisting their identity on various non-combatant and even static formations and organizational areas, sub-areas, training schools, depots, etc... These formations were renamed as divisions, brigades, etc; and their vehicles wore divisional signs thought up by "A"- Force; from their headquarters, sufficient wireless and telephone traffic went out, or if it didn't do so naturally, was simulated so that once a bogus formation had been placed and identified, it behaved on the air like a real one. In some cases, its commander and members of his staff assumed local rank higher than the ones for which they were paid. The build-up of this notional order of battle, especially in the early days when the

¹³ Handel, *Strategic and Operational Deception*, 22.

¹⁴ Ibid.

¹⁵ Mure, *Master of Deception*, 82.

Middle East was swarming with spies and informers, was a long and tedious business. Without giving away secret plans, it was necessary to indoctrinate preoccupied and often mutton-headed officers into a procedure which might reasonably appear to them as incomprehensible.¹¹⁶

Mure recounts that Lieutenant Colonel Clarke established certain principles of deception planning and execution that became the cornerstones for all "notional" activities. His objective was to always induce an enemy commander or force to act in response to the observable activities provided. Because of this, deception was much more closely related to the operational priorities, as opposed to the ones driven by intelligence or counter-intelligence. Clarke held that intelligence was only as useful as the operational use to which it could be put. This is why for operational purposes; deception should be kept apart from counter-intelligence.¹⁷

Despite the seriousness of these efforts Dudley Clarke was not above whimsy to make his points know or ideas understood. According to Mure, he was particularly attached to the story of "The G'Muffin,"¹⁸ as retold in Appendix A. According to Mure, by March 1941, "A"- Force's eccentric, yet cunning leadership and methods had proved their worth. Wavell recommended that in the light of experience gained in North and East Africa and the remarkable degree of success achieved in both the campaigns against the Italians, a controlling authority be set up in London to coordinate deception operations in all theatres of war whose commands should each have its own deception unit."¹⁹

In early 1942, under Clarke's insistence and mentorship, Captain James Robertson of SIME took charge of the double agents in the Middle East. Deception was becoming more and more important to the operational efficacy of the middle-eastern forces, and Dudley was able to allocate certain double agents for his purposes. "Cheese", which had been the code name of a particularly useful agent, became the code word for an entire group of double agents, and the methods for which they were utilized in Cairo. In the

¹⁶ Mure, *Master of Deception*, 82.

¹⁷ Ibid., 9.

¹⁸ Ibid., 201.

¹⁹ Ibid., 83.

Middle East, unlike the London bureau, the civilian agents and private armies were brought firmly under command of the General Staff and operated under the control of the Commander-in-Chief through a close relationship between SIME and "A"-Force.²⁰

Fortunately, poorly thought out, elaborate and leaky procedures for managing double agents in Britain did take hold in the Middle East. David Mure states, that according to Colonel Noel Wild, officers that had information to pass to "Cheese" agents would give it to Captain Robertson at meetings held at "A"-Force HQ. Information to be transmitted was split between three information links at Robertson's discretion after consultation with Dudley Clarke. He always maintained that the choice of the link and the dressing up of the information was entirely a matter for Robertson. Mure goes on to claim that "the chairman of every deception committee, whether the one in Cairo or its offshoots, was always an "A"-Force officer and his decision was final, even over the senior officers he worked with, in all matters with the exception of the choice of link and the actual phrasing of the messages, that was left to SIME." This authority was firmly established and supported because the "A"- Force committee chairs worked directly for Clarke, who worked directly for the senior leaders of the Middle East Command.²¹

Handel reinforces this complexity by asserting that, "At the regional level, or preceding each battle, a deception operation had to be coordinated among those who planned the operations and those who implemented them. Troop movements had to be carefully orchestrated and camouflaged while dummy forces had to be positioned. Coordination on the local level at each front had become a full-time occupation."²² The trouble was that as the facilities for misleading the enemy increased and became more in demand, so the problems of control became greater. Dudley Clarke found he was not longer able to manage the complexity of ongoing deception efforts by himself, and began to need to the direct support of additional operational and intelligence assets. A narrow desk wedged into a converted bathroom in Wavell's headquarters no longer met his needs. Clark also found himself absent from the headquarters as

²⁰ Ibid., 77.

²¹ Mure, *Master of Deception*, 78-79.

²² Handel, *Strategic and Operational Deception*, 20-21.

he had to spend more time coordinating strategic deception activities around the globe. In his absence, the capabilities that he had worked so hard to build found themselves under the direct control of the MEF Chief of Staff, while Operations and Intelligence fought a protracted battle over their control.²³

To solve this debacle and reduce the friction perceived between Operations and Intelligence, the Chief of Staff reorganized the deception functions. He kept the responsibility for "Strategic Deception" and deceptive messaging with "A"-Force, but reassigned the role of "Tactical Deception" to a new organization in the Eighth Army, led by a "Chief Deception Officer" to handle the development, planning, and execution of deception units and schemes. Special deception officers would also be attached to corps, divisional and brigade headquarters to implement these plans.²⁴

As an attempt by the Chief of Staff to manage complexity by decentralizing the execution of tactical deception, these arrangements seemed to make sense, but made Lieutenant Colonel Clarke unhappy. Howard claims that in Clarke's eyes "strategic and tactical deception could not and should not be divorced: they were different instruments in a single orchestra for which there had to be only on composer and one conductor. Moreover to institutionalize deception so blatantly was to destroy its entire purpose: once everyone knew about it, adequate security would become impossible." Giving operational control of its execution to subordinate commanders undermined the secrecy and security that deception depended on. When the cat is let out of the bag, subordinate leaders begin to question the validity of their own information, make judgment calls regarding reporting requirements, and do not react in a natural manner required to provide believability to deceptive actions. Once everyone knew about the deception, it was useless.²⁵

The full weakness of this organization came to the attentions of the MEF Commander, General Auchinleck, in February of 1942. In that month, faced with recent failures and confronted with the threat of Rommel's counter attack, Clarke was tasked to develop a crash program in tactical deception to

²³ Michael Howard, *Strategic Deception in the Second World War* (New York: W. W. Norton & Company, Inc., 1990), 39.

²⁴ Ibid.

²⁵ Ibid.

mislead the Germans on the strength of British defenses. Howard asserts that Clarke made it clear he could not do this, asall tactical deception assets were no longer under his control, and belonged to the Eighth Army Headquarters. Auchinleck immediately ordered all deception activities to be placed under the centralized control of Clarke and "A"- Force, which itself would be directly responsible to the Operations Branch at General Headquarters, MEF.²⁶ According to the "A"-Force War Diary, Clarke believed that this debacle had taught them two fundamental lessons about the organization for and the conduct of deception:

1. Deception will pay its best dividends when both planning and implementation of all methods is made the responsibility of one controlling mind.

2. Control should lie with Operations rather than Intelligence. Operations are the user and dictate the objective, direct the tempo of the plan, and decide when it must be replaced.²⁷

The measure of the success of the false order of battle, and the centralized control of all deceptive actions under "A"-Force, emerges from a question which General Wavell asked Clarke during the first six months of the establishment of a Deception Unit in his Command. "What," he asked, "was the newly formed "A"- Force worth to him?" The answer, given directly by captured enemy documents and with precision, was "Three divisions, one armored brigade and two squadrons of aircraft."²⁸

In the end, it was to be much more like an Army. By 1944, German intelligence estimated that there were a total of 71 Allied Divisions in the Mediterranean Theater. Of this estimate only 38 were real, and 33 were attributable to "A"-Force.²⁹ Guns, tanks, men and aircraft which exist only in the enemy's mind cannot, it is true, fight and kill. However, what they can do is to influence an enemy commander's decisions to take action against forces that do not exist, or defend fiercely what you have no intention of

²⁶ Howard, *Strategic Deception*, 40.

²⁷ Ibid.

²⁸ Ibid., 83.

²⁹ Handel, *Strategic and Operational Deception*, 91.

attacking. These poor economy of force decisions increases defending troop concentrations in one area, weakens them in another, or leaves potential targets completely unprotected.³⁰

Although the specialized deception organizations were permanent due to security considerations, limited resources and the nature of the work, they were also all quite small. "A"- Force supported the entire Middle Eastern and Mediterranean theaters of operation,³¹ which at its peak states Handel, "included only 41 Officers, 76 NCOs, and three company sized elements specially trained in the operation of visual deception devices."³² This is significant because the efforts of this battalion-sized force provided deceptive, observable signatures equivalent to 33 allied divisions. These observables shaped German expectations in support of future "A"– Force efforts of misdirection that were essential to the defeat of Rommel at El Alamien.

Soviet Lessons in Military Deception and Operational Art

Everyone imposes his own system as far as his army can reach.

—Joseph Stalin

On 22 June 1941, German forces spearheaded by four panzer groups crossed the Polish-Soviet border and thrust deep into the Soviet Union. The devastating consequences of this surprise left a permanent mark on the work of Soviet military professionals. Although they had long appreciated the role of surprise in war and studied its application, it was not enough to prevent this catastrophe.

The Red Army as described by Jonathan House, was created in 1918 after the Bolshevik Revolution and therefore lacked the traditions and training of other major armies. Many of the new Red commanders had been noncommissioned or junior commissioned officers during WW I, but few trained senior officers of the Tsarist army remained with the new regime, and those who did were often suspected of anti-Bolshevik sympathies. As a result, the Red Army was open to change, unhampered by excessive traditions or past habits. It was also subject to the blunders of ignorance and ideological naivety. In

³⁰ Mure, *Master of Deception*, 83.

³¹ Handel, *Strategic and Operational Deception*, 72.

³² Ibid., 21-22.

addition, the Russian Civil War (1918-1921) was markedly different from most of the European campaigns of WW I. Because of the vast distances and under-strength armies involved in the civil war, penetration and encirclement were no longer difficult, and fluid maneuver, with little resistance was the norm. By the end of the civil war, elite Red Army units were patterning encirclements and pursuits after the best Tsarist cavalrymen.³³

Glantz asserts that during the course of the 1920s and early 1930s, a group of Soviet officers led by Marshal Mikhail Tukhachevsky developed a concept of Deep Battle to employ conventional infantry and cavalry divisions, mechanized formations, and aviation in concert.³⁴ House expands on this by stating that, "Instead of regarding the infantry as the premier combat arm, Tukhachevsky envisioned all available arms and weapons systems working together in a two-part battle. First, a massed, echeloned attack on a narrow front would rupture the defender's conventional defenses of infantry, artillery, and antitank weapons. The attacker's artillery and mortars would suppress defending artillery and especially defending antitank guns. Moving behind the artillery barrage and a few meters in front of the infantry, the tanks could safely crush wire, overrun machine-gun posts, and reduce other centers of resistance."³⁵

Despite frequent major exercises during the mid-1930s, the Soviet armored force needed several additional years of experimentation and training before it could reach its full potential. It never had that time. On 12 June 1937, the Soviet government executed Tukhachevsky and eight other high-ranking officers, as Stalin shifted his purge of Soviet society against the Red Army, the last power group that had the potential to threaten him. In the ensuing four years, the Soviet government imprisoned or executed at least 40 percent of the officer corps, including a majority of all commanders of units of regimental size or larger. Thus, posits John Erickson, that at the same time the Red Army was expanding because of the threat from Nazi Germany and Imperial Japan, it was losing its most experienced planners and leaders.

³³, Johathan M. House, *Combined Arms Warfare in the Twentieth Century* (Lawrence, KS: University Press of Kansas, 2001), 90-91.

³⁴ David M. Glantz, "Soviet Operational Formation for Battle: A Perspective," *Military Review 63*, February 1983, 4.

³⁵ House, *Combined Arms Warfare*, 91.

The politically reliable survivors were promoted into positions far above their previous training and experience, with disastrous effects on unit training and tactics.³⁶

The Soviet term of *maskirovka* covers a lot of measures ranging from disinformation at the strategic level to the skillful camouflage of an individual fighting position. ³⁷ Soviet doctrine defined *maskirovka* as, "The means of securing combat operations and the daily activities of forces; a complexity of measures, directed to mislead the enemy regarding the presence and disposition of forces, various military objectives, their condition, combat readiness and operations, and also the plans of the command...*maskirovka* contributes to the achievement of surprise for the actions of forces, the preservation of combat readiness, and the increased survivability of objectives." ³⁸

Glantz describes a meeting of the Red Army High Command in December 1940. Key figures to include Stalin, Timoshenko, and Zhukov discussed contemporary military issues in light of recent events in Europe and Asia. Long discussions about the use, planning, and execution of operational *maskirovka* ensued. After much debate it was ultimately accepted that operational *maskirovka* or MILDEC would be of use in an offensive which involved the mounting of multiple attacks on a wide front. It was also noted that to be successful, operational art practiced through detail planning, the coordination of all combined and supporting arms would be paramount.³⁹

Based on Soviet doctrine, operational-level deception was conducted at the Front (equivalent to a U.S. army group) and Army levels of command so battle preparations could be conducted secretly.⁴⁰ Armstrong notes that at this level, deception was achieved by maintaining radio silence; concealing command and control and troop regroupings; disseminating false information to the enemy; camouflaging

³⁶ John Erickson, *The Road to Stalingrad: Stalin's War with Germany* (New York, 1975), 19-20.

³⁷ David M. Glantz, "Soviet Operational Art since 1936," ed. Michael D. Krause and R. Cody Phillips, *Historical Perspectives of the Operational Art*, (Washington, D.C.: Center of Military History, 2007), 2.

³⁸ V.A. Yefremov and S.G. Chermashentsev, "*Maskirovka*" [Deception], *Sovetskaya voennaya entsiklopediya* [Soviet military encyclopedia], (Moskva: Voenizdat, 1978), 5:175.

³⁹ Glantz, David M, Soviet Military Deception in the Second World War, (Great Britain: Frank Cass and Company Limited, 1989), 15.

⁴⁰ P.Mel'mkov, "Operativnaya maskirovka" [Operational deception]. *Voyenno istoricheskii zhumal* [Military history journal] (April 1982).

the assembly areas of supporting units; and creating dummy troop concentrations, command posts, and defensive installations. Operational-level deception was achieved only by strictly observing the ongoing tactical security and deception measures executed by subordinates. He also highlights that while operational-level deception promoted the achievement of operational surprise, its practice provided a number of further positive side effects. These included masking force ratios, delaying enemy decisions, and misdirecting the enemy's attention and commitment of forces.⁴¹

While it is one thing to theorize about the concepts of *maskirovka*, it was another matter to apply it. As a result of the purges of the late 1930's, the Red Army lost the benefit of some of its most experienced and creative practitioners of Operational Art on the eve of the German assault. Soviet historians divide the their war on the Eastern Front into three distinct periods that demonstrate professional growth of Soviet Forces, the evolution of their operational theory, and ultimately the demonstration of Operational Art.

Glantz points out that during the first phase beginning in June 1941, the Soviet Union was immediately at a disadvantage against the Nazi blitzkrieg. Stalin's purges of the previous military leadership, weak mid-level leadership, and a hastily developed force structure built on lessons learned by observing and fighting fighting in the limited terrain of Spain, Finland and Poland. This left an armored force that was shattered by the Germans within two months. During the rest of the first phase, hastily organized strategic armored corps were thrown against the advancing Nazis to gain enough time and space to allow for a true reorganization to take place.⁴²

Handel posits that the weakness and desperation of the Soviets in 1941 left them with no hesitation whatsoever in resorting to deception on all possible levels – political, strategic, operational, and tactical. Land warfare on the Eastern Front was larger and more expansive than all land operations in all

⁴¹ Richard N. Armstrong, *Soviet Operational Deception: the Red Cloak* (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1988), 4.

⁴² Glantz, "Soviet Operational Art since 1936," 247-248.

the other theaters of war. This is also true of the scale on which the Soviets used deception.⁴³ During the initial period of the war, Red Army forces rarely resorted to operational-level deception, which was tentative and largely ineffective. Deception was limited to launching a series of diversionary attacks across a wide front, complemented by intensified reconnaissance activity. At the tactical level, division and lower units used only camouflage as a passive means of keeping manpower and equipment hidden from German aerial reconnaissance. This was an essential means for survival in the light of Germany's early dominance in armored and aerial warfare.⁴⁴ Furthermore, Armstrong suggests that little effort was given to planning and executing other deception techniques.⁴⁵

David Glantz noted that, "An early security weakness that persisted into the mid-war years, was an inability to master radio discipline and maintain communications security... On the positive side, the Soviets quickly learned camouflage techniques and were able to mask the movement of large forces when radio transmissions were not required. In addition, they severely limited the size of their planning circles and tightly controlled the timing and dissemination of operational plans to maintain a more secure planning environment."⁴⁶ Soviet planners soon realized that if an operational deception was going to be effective, any indicator of preparatory activities had to be kept secret. In the early part of the war this was comparatively easy. Operational objectives were limited and did not require intensive coordination as units were dispersed across wide fronts that facilitated OPSEC, undetected movement, and fluid maneuver.⁴⁷

Armstrong states that, "The Soviets were still learning about deception during the second period of the war. As the scope and scale of deception efforts increased, the Red Army experienced inconsistent results because not all branches of service, particularly the engineers, participated in the planning and execution of deception operations. Also, poor radio security repeatedly compromised deception efforts.

⁴³ Handel, *Strategic and Operational Deception*, 53.

⁴⁴ Glantz, Soviet Military Deception, 21.

⁴⁵ Armstrong, Soviet Operational Deception, 5.

⁴⁶ Glantz, Soviet Military Deception, 22.

⁴⁷ Ibid., 29.

Nonetheless, through the use of reconnaissance-in-force operations, the Red Army began to understand how suggestions could be planted in the Germans' minds. When the Soviets coordinated all their deception measures, the battlefield became a stage of smoke and mirrors, producing illusions for the Germans, who were closely monitoring all Soviet actions."⁴⁸

Glantz observes that by November 1942, Soviet forces had completely reorganized. They conducted deliberate counter-attacks against Nazi forces that had extended beyond their traditional operational reach and were culminating. While these initial attacks were successful, they were not decisive due to field commanders' inability to coordinate activities between large forces with differing capabilities distributed across a wide front. While their forces, equipment and leadership were in place, they lacked the systems, organizations, and experience to manage them properly.⁴⁹

Furthermore, from mid-1943 onward, "operational *maskirovka* became an integral part of every offensive operation."⁵⁰ Initially the Soviets used a variety of tactical deception measures, such as sending the assault infantry forward during a lull in the firing in order to lure the Germans from their bunkers, so that renewed Soviet artillery fire could destroy them. The emphasis on Operational Security also continued throughout the war. All Front and Army Chiefs of Staff received directives requiring them to implement stricter secrecy measures when regrouping forces and preparing for operations.⁵¹

In July of 1943 the Soviet Army demonstrated for the first time the capability to apply operational art on a large scale during the Battle of Kursk. Previous success had been demonstrated by individual tactical commanders, but this was the first time entire field armies were able to achieve decisive effects. The Soviet Senior Leaders were able to demonstrate their ability to command and control forces to disrupt, isolate, and destroy German forces. Sustaining continuous operations led to culmination toward

⁴⁸ Armstrong, *Soviet Operational Deception*, 14.

⁴⁹ Glantz, "Soviet Operational Art since 1936," 253.

⁵⁰ Glantz, Soviet Military Deception, 29.

⁵¹ Ibid., 22-23.

the end of their advance. The need for a more mobile combined arms support capability was recognized by the High Command, and this was remedied in preparation for follow on operations.⁵²

From 1943–1945, the Soviet Union held the initiative, although they were not always attacking the Germans and their Axis allies on all fronts. Before each new offensive, the Soviets used elaborate and usually successful deceptions, causing the Germans to concentrate their forces against imaginary attacks, while leaving themselves exposed to the actual offensive. House highlights that, "Given the meticulous German defensive preparations and the lack of Soviet armored personnel carriers, the Red Army had to combine engineers, infantry, and tanks in this manner, regardless of losses. By 1944 casualties were a subject of great concern for the Soviet generals. The best means to reduce casualties were deception, concentration, speed of penetration, and careful task organization of the attacking forces."⁵³

Armstrong describes what may be the ultimate example of planning and coordination of deceptive methods, by an Operational Staff. By the summer of 1944, the Red Army had become more sophisticated in its application of deception. Simultaneous deception actions on several Fronts dramatically increased the scope and employment of coordinated deception measures at the operational level. Soviet lessons learned continued to reinforce the idea that careful preparation and active execution strictly and centrally controlled by the front and army staffs produced the best results.⁵⁴

The magnitude of deception operations on the Eastern Front is staggering. By the Battle of Stalingrad, using highly sophisticated camouflage techniques, the Soviets managed to conceal the forward deployment of 160,000 men, 430 tanks, 600 guns, 14,000 vehicles, and 7,000 tons of ammunition. Before their offensive in Belorussia, German intelligence had identified 140 Soviet division equivalents and three tank corps facing Army Group Center. In fact the Soviets managed to concentrate in the same region no less than 168 division equivalents, eight tank or mechanized corps, and two cavalry corps (with significant armored strength). The Germans estimated Soviet tank strength to be somewhere between 400

⁵² Glantz, "Soviet Operational Art since 1936," 256-257.

⁵³ House, *Combined Arms Warfare*, 159.

⁵⁴ Armstrong, *Soviet Operational Deception*, 23.

and 1,100 tanks, when it was actually more than 5,000 tanks at the same front. To put this in perspective, Handel asserts that the difference between the number of forces the Germans were able to identify and those the Soviets were able to conceal was as large as the whole invasion force that landed at Normandy.⁵⁵

He further posits that to accomplish these amazing tasks, the Soviets had formed operational groups composed of representatives of the various branches of troops and services in the armies to organize and control the activities and resources dedicated to the deception effort.⁵⁶ An officer was appointed to each simulated assembly area and point of deception activity where he was responsible for conducting specific deception measures. The operational group coordinated the execution of all deceptive actions conducted by the various branches of subordinate troops. This use of centralized control ensured that critical deceptive tasks were executed simultaneously across all the regions where simulations were being conducted. Communications were maintained only via messengers and liaison officers to maintain security and secrecy.⁵⁷

In 1944, the Red Army went so far as to publish a *Manual on Operational Maskirovka*. It stated Soviet views on the art, and contained special instructions regarding the proper employment of cover and concealment, the use of various forms of maneuver, and even the application propaganda. It declared that success in an operation depended on concealed preparations and delivery of a surprise attack.⁵⁸ Armstrong claims that by cloaking various force groupings and activities, soviet military leadership, particularly in the latter stages of the war, created operational-level deceptions that surprised German intelligence and commanders.⁵⁹

Additionally, he points out that, "An important aspect in the operational deception plan was deception maneuver, a set of actual and false combat actions conducted by specified Front and Army

⁵⁶ Ibid, 26.

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⁵⁵ Handel, *Strategic and Operational Deception*, 54.

⁵⁷ Ibid., 44.

⁵⁸ Mel'mkov, "Operativnaya maskirovka" [Operational deception].

⁵⁹ Armstrong, *Soviet Operational Deception*, 1.

forces and resources intended to compel German commanders to transfer their basic forces to an advantageous position for Red Army forces. Deception maneuver had to be simple, executed quickly, and most importantly, a surprise to the enemy. Regrouping and maneuvering combat power often became the crux of the deception plan." ⁶⁰ Previous Red Army combat experience crossing water obstacles revealed the necessity for creating smoke screens at dummy crossing sites. But in order to successfully attract German attention, it was also necessary to increase troop activity and antiaircraft artillery fire at the dummy crossings.

House writes that one significant development during 1944 was the change in Soviet reconnaissance techniques before a deliberate attack. Prior to that year, the Red Army had been very effective in conducting small, time-consuming, long range reconnaissance patrols. To shorten the time required to prepare for a new offensive, the Soviets in early 1944 sent out company- and battalion-sized units to engage the German outposts or to reconnoiter by fire. This process identified the main German defensive organization much more rapidly than conventional reconnaissance and attacks. In the process, the Red Army received an unexpected bonus. Soviet reconnaissance units were often able to seize control of outposts that the Germans were defending only lightly, as part of the long-standing German doctrine of flexible defense-in depth. By late 1944 the Soviets had transformed their reconnaissance units into the first wave of the deliberate attack.⁶¹ This provided the Soviet leadership with immediate feedback concerning the disposition of German forces and the effectiveness of their MILDEC efforts.

World War II left both the British and Soviet militaries with a vast reservoir of experience concerning the planning, preparing, and execution of operational deception. Despite their historical and cultural differences, both concluded WWII with similar lessons concerning the operationalization of deception that dealt specifically with centralized control and execution of deceptive tasks, knowledge of enemy decision making process, the management of information pertaining to orders of battle, and the criticality of maintaining essential secrecy or operational security with regards to deceptive activities. The maxims

⁶⁰ Armstrong, *Soviet Operational Deception*, 15.

⁶¹ House, *Combined Arms Warfare*, 159.

or rules that guide these operational aspects of deception have been captured in various forms over the intervening years, two of these from U.S. and Soviet sources are represented in Appendixes B and C.

Applicability of Lessons to Contemporary Operations

As mentioned previously, the central premise of Operational Deception is to deceive enemy forces and leadership of the actual time, place, and extent of friendly operations, so as to gain a positional or situational advantage in support of the Commander's Intent and Concept of Operations. Historically, Western military forces only tend to deliberately plan and execute deception when they are deemed to be at a disadvantage. In both case studies operational deception was initially employed in reaction to a threat of operational survival within a theater, but grew into a critical element that directly supported strategic victory.

The case studies focused on regular warfare in a mid-twentieth century context, where after experiencing decisive defeats, the necessity of applying deception in support of economy of force considerations were essential to the survival of the studied combatants. "A"- Force supported economy of force efforts by developing a false order of battle, causing German intelligence to over-estimate British forces and increasing uncertainty about future actions. The Soviets protected the remnants of their forces by directing the application of intense OPSEC measures in the forms of dispersion, camouflage, night movements, and radio silence to make it difficult for the Germans to pinpoint their positions. While the methods varied, they both demonstrated effective examples of "A"- type operational deceptions.

As the military's organizations and methods became more effective, the cause and effect relationships initiated by the "A"-type deceptions generated more information about the German's presuppositions and decision making processes. Intelligence supported the execution of deliberate, operational, "M"-type" deceptions and future decisive military actions, such as the defeat of Rommel at El Alamein and the Belorussia offensives. One question arising from these case studies is how applicable lessons from WWII are to contemporary conflicts such as Iraq and Afghanistan. To explore this issue, two simple models of regular and irregular war are contrasted. Army doctrine suggests that in regular warfare, two comparable combatants apply operational art and maneuver at decisive points to achieve operational objectives.⁶² Both combatants are supported by similar combat and service support organizations. These organizations not only directly support the combatants, but serve to isolate and protect the population from their collateral effects. In this situation MILDEC takes on the characteristics of a duel between the two combatant commanders. As described by Carl von Clausewitz, "Each strives by physical force to compel the other to submit to his will."⁶³

All commanders have to make decisions concerning the disposition of forces to achieve operational objectives. These commanders must also consider where to apply forces to support and protect his main efforts. This balancing act between the applications of maximum power, with minimum support, is referred to as economy of force in Army doctrine.⁶⁴ The leader that is best able to control the information and observables that his adversary uses to make these decisions will be in the best position exploit that adversary's presuppositions to develop and maintain a situational advantage to gain victory at the decisive point. This logic is summarized in Figure 1.



Figure 1. MILDEC in Regular Warfare

⁶² U.S. Army, *Field Manual 3-0, Operations*, (Washington, D.C.: Headquarters, Department of the Army, 2008), 6-6

⁶³ Carl Von Clausewitz, *On War*, ed. and trans. by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989), 75.

⁶⁴ U.S. Army, *FM 3-0*, A-2.

Additional research and case studies are necessary to determine the applicability of Operational Deception or MILDEC in an environment of irregular warfare. However, considerations for the application of economy of force are not limited to regular warfare.

The Joint Warfighting Center states that, "Irregular Warfare (IW) is a form of warfare that has as its objective the credibility and / or legitimacy of the relative political authority with the goal of undermining or supporting that authority. IW favors indirect approaches, though it may employ the full range of military and other capabilities to seek asymmetric approaches, in order to erode an adversary's power, influence, and will."⁶⁵ This conflict takes place amongst the population, from which the adversary attempts to influence the population to gain physical and ideological support, and maintain freedom of action across their operational networks and lines of communication. David Galula supports this by proposing that the objectives of IW, are dependent on the support of an active population that is conditional based on the perceived levels of success demonstrated by the combatants.⁶⁶

He also asserts that friendly regular forces are restricted in their efforts due to limited resources and their regimented structures to defending the ideological base through their presence. The limited reach of conventional forces causes commanders to make economy of force decisions concerning their priority of efforts and dispersion, ultimately conceding a portion of the population to the activities of the enemy's networks.⁶⁷ MILDEC can have a decisive effect on those networks due to its potential influence on the population and adversary decision makers. This provides commander's the flexibility to commit more forces to their main efforts as required.

Unlike the duel between two opposing military commanders in regular warfare, in irregular warfare the use of MILDEC can be used to pit the enemy leadership within the network against themselves. Networks are made up of members of the population. Because of this they can be directly

⁶⁵ U.S. Department of Defense, *Irregular Warfare Special Study*, (Suffolk, VA: United States Joint Forces Command, Joint Warfighting Center, 2006), L-1

⁶⁶ David Galula, *Counter Insurgency Warfare: Theory and Practice* (Westport, CT: Praeger Publishers, 2006), 50 - 54

⁶⁷. Galula, Counter Insurgency Warfare, 50 - 54

affected by deceptive activities that decrease the trust or increase the uncertainty within the general population. In the case studies, successful "A"- type deceptions led to an increase in ambiguity as perceived by enemy decision makers. As with all information tasks, when properly controlled, perceived gaps between authentic strategic communications and deceptive actions can lead to even greater ambiguity. For example, by leveraging a public affairs event, adversarial leaders can be co-opted into demonstrating support for friendly activities or objectives. This has the potential for undermining the trust with in an adversarial network while strengthening the authenticity and legitimacy of strategic messaging. Further more, this lack of trust leads to adversarial demands for more information and intelligence, and an increase in friendly understanding about enemy decision makers. In IW this understanding can take the form of human terrain mapping, criminal network analysis, cultural and political points of competition, or the role of economic development in co-opting members of the population. This understanding makes "M'- type deceptions against specific leaders or decision makers in the networks possible to establish or maintain a decisive situational advantage against their organizations. This model for MILDEC in irregular war is depicted in Figure 2.



Figure 2. MILDEC in Irregular Warfare

This goes beyond using MILDEC in support of maneuver as exemplified in our case studies involving regular warfare. Thomas Hammes addresses the attacking of networks in this way,

The fundamental rules for attacking a network are different from those used when attacking a more conventional enemy. First, in counterinsurgency it is better to exploit a known node than attack it. Second, if you have to attack, the best attack is a soft one designed to introduce distrust into the network. Third, if you must make a hard attack, conduct simultaneous attacks on related links, or else the attack will have little effect. Finally, after the attack, increase surveillance to see how the insurgency tries to communicate around or repair the damage. As they are reaching out to establish new contacts, the new nodes will be most visible.⁶⁸

In the irregular warfare model, MILDEC can have decisive effects against enemy leaders and decision makers by disrupting or extending their lines of communication, co-opting ideologies, and destroying personal relationships. The deliberate and coordinated use of "M" and "A"-type deceptions in this way can lead to decisive effects on entire networks.

⁶⁸ Thomas X. Hammes, "Countering Evolved Insurgent Networks," *Military Review*, July – Aug 2006, 18

Organizational Complexity & Design

Fools ignore complexity. Pragmatists suffer it. Some can avoid it. Geniuses remove it.

—Alan Perlis

The increasing complexity of our contemporary operating environment has led us to seek out new technologies to solve an ever growing list of military problems we face every day. As the number of these capabilities and the technological expertise to manage them increases, so does the size of our organizational staffs. From 1998 to 2004, the size of a Light Infantry Brigade Headquarters nearly doubled from 78 to 140 personnel.^{69,} A Light Infantry Division Headquarters more than quadrupled, from 251 to 1119 personnel.^{70,}In the same time frame, a Corps Headquarters more than tripled from 320 to 994 personnel.^{71,}

This growth in size and potential capacity may appear to improve a commander's ability to address complex problems, but it is at a cost of increasing social complexity within the organization itself. As the complexity of our military organizations increase, the less effective any of the hierarchical, networked or semi-networked staff structures tend to be. Ivan Steiner asserts that, as these structures begin to lose their effectiveness, members of the organizations or task groups that recognize their role and responsibilities will seek out new internal and external relations in order to improve the way that business is being done.⁷² This requires a deliberate rethinking of command and control structures and the role of staffs as capability managers, planners, and/or executors in order to decrease the amount of complexity that commanders and subordinate units are exposed to.

⁶⁹ U.S. Department of the Army, *Light Infantry Brigade HHC, TO&E 77042C000*, Washington, D.C.: HQDA, April 1999.

⁷⁰ U.S. Department of the Army, *Light Infantry Division HHC*, *CTO&E* 77004C000, Washington, D.C.: HQDA, April 1999.

⁷¹ U.S. Department of the Army, *Corps HHC*, *DTO&E 52401C100*, Washington, D.C.: HQDA, October 1998.

⁷² Steiner, *Group Process and Productivity*, 4-5.

David Alberts proposes that traditional centralized command and control organizations and systems are not up to the tasks required on the modern battle field. In his vision, the lack of any hierarchy means that the most junior member has direct access to the most senior leader, creating span of controls problems for the leadership and increasing their level of perceived complexity by all concerned. Alberts also proposes that the individuals on the edges of our organizations must be empowered by providing them access to information and eliminating procedural constraints. Besides promoting peer to peer interactions, senior personnel must also change their roles to put them not just closer to the edge, but on the edge.⁷³

The promises of the Revolution of Military Affairs (RMA) suggests that solutions to our complexity challenges will emerge from a flat organization, capable of self synchronization , but this has not yet been demonstrated in a real world context. Antoine Bousquet supports both of these premises by asserting that while networks allow for the formulation of patterns of relationships that give rise to the emergence of complex adaptive organization.⁷⁴ He goes on to assert that both Vietnam and the second Iraq conflict potently illustrate the inadequacy of U.S. forces confronting a decentralized enemy operating in a complex environment.⁷⁵ Bousquet also proposes that as an evolution of cybernetics, network centric warfare is problematic, and has not yet demonstrated its theoretical potential.

Hierarchical organizations are associated with traditional military organizations, and take the form of a top-down directed hierarchy or chain of command. In an idealized hierarchy, information travels only up and down, with detailed directives coming from the leader to the most junior members via intermediate echelons. According to Yaneer Bar-Yam, in this organization the information that a leader sends and receives is filtered through lines of communication staffed by a multitude of subordinate leaders, creating delays and bottlenecks. Ultimately these bottlenecks restrict the ability of the command

⁷³ David S. Alberts and Richard E. Hayes, *Power to the Edge: Command... Control... in the Information Age* (Washington, D.C.: Command and Control Research Program, 2004), 4-9.

⁷⁴ Bousquet, *The Scientific Way of Warfare*, 237.

⁷⁵ Ibid., 243.

and staff to gain knowledge and develop a common understanding of the environment. ⁷⁶ While Alberts' discussion addresses Command and Control from an organizational standpoint, it fails to address the human dimensions, personal relationships, and the types of tasks that organizations are asked to plan, prepare and execute with regards to Battle Command.⁷⁷

One of the fundamental assumptions of complex systems science is that the way a system is organized, and what the relationships between its subsystems, is more important than the actual composition of its parts. The subsystems, or more importantly, the agents and population within the subsystems may choose to have cooperative or competitive relationships. They can struggle over power, seek credit for success, direct blame for failure, and pursue influence over decision makers.⁷⁸ This competition was demonstrated by the MEF Operations and Intelligence sections over control of "A"-Force capabilities during WWII. To resolve this conflict and reduce the complexity perceived by the Chief of Staff, authorities for operational deception were assigned to subordinate units. This ultimately led to the ineffectiveness of ongoing deceptive activities, trading military effectiveness for perceived efficiencies.

A common trait of all organizations is the positive relationship between their size, complexity, and the levels of friction, which are innate to all human endeavors. While the increasing size of an organization implies that it has the potential for greater productivity, its actual productivity is reduced due to losses resulting from group processes. This is represented by the Steiner Formula.

"Actual Productivity = Potential Productivity minus Loss Resulting from Faulty Processes"⁷⁹

In the late 19th Century, Maximilian Ringelmann studied the relationship between individual and group effort that became the foundation of Steiner's model.⁸⁰ Ringelmann had people pull a rope

⁷⁶ Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (Cambridge, MA: Knowledge Press, 2004), 62.

⁷⁷ Alberts, *Power to the Edge*, 213 - 232

⁷⁸ Bar Yam, *Making Things Work*, 79 - 85.

⁷⁹ Steiner, Group Process and Productivity, 9.

⁸⁰ Ibid., 32-33.

individually while he measured their pull force with a strain gauge. Then he put his subjects in teams and had them pull the rope together. He discovered that the group force was not as strong as the individual efforts added together. In other words, while the group pulled more than any one individual did, individual contribution actually declined. Ringelmann attributed his results to "social loafing," the tendency for people to apply less effort when they are part of a group.

In his own study, Steiner explained that the relationship between individual and group performance depends on the type of task performed. By categorizing task types, he believed he could predict how the presence of other workers helped or hindered individual performance. The four types of organizational tasks identified were classified as additive, discretionary, disjunctive, and conjunctive⁸¹. Steiner proposed that leaders can use his findings and classifications to determine how to employ human resources to improve collective behavior and improve organizational effectiveness. ⁸²

Additive tasks permit the efforts of every individual of a group to directly add to the overall performance of the group. This does not mean that all individual inputs are equal, but they are at least equally weighted. All members perform the same task, and group achievement is the sum of individual performances. A group will always accomplish more on additive tasks than one person will in the allotted time, but Ringlemann proved that individuals tend to contribute less when part of a group than they would while working alone. So although they outperform individuals on additive tasks, teams rarely achieve their full potential. ⁸³ Social loafing is a phenomenon that should be considered when organizing any group to conduct a task. By reviewing Ringelmann's results, it can be seen that two's company, three's a crowd, and eight's a waste of resources.

Group performance in discretionary tasks is the result of averaging together the efforts of individual members regardless of the methods that they use to find an answer.⁸⁴ For example, if you have

⁸¹ Steiner, *Group Process and Productivity*, 15 - 18.

⁸² Ibid., 185 - 186.

⁸³ Ibid., 32 - 33.

⁸⁴ Ibid., 35.

to guess the number of jelly beans in a jar, get a group of people together to offer their opinions.

Regardless of their methods, mathematical computations, volumetric comparisons, and wild guesses, the average of all opinions will be extremely close to the right answer. This is the same judgment process that James Surowiecki attributes to Francis Galton, whom in 1906 observed 787 county fair attendees attempt to guess the slaughtered and dressed weight of one live ox. When it was all said and done, the mean of all guesses was 1, 197 pounds, while the carcass weighed 1, 198.⁸⁵ Surowiecki goes on to assert that groups generally outperform individuals on analytical and reasoning tasks when the final results are a product of disagreement and contest, not consensus or compromise.⁸⁶

A disjunctive task tends to be unitary, and requires each member of the group to do the same tasks to find a solution, but none of the members are capable of consolidating their efforts. This permits the group to allocate the task to any one of its members, but maximum success can be achieved only if is assigned to the most proficient member.⁸⁷ Any individual with the necessary resources can solve the problem, and provide the results to the group, but this does not ensure group success. The group must accept the solution and execute it as directed to be successful. If they do not, regardless of the correctness of the proposed solution, the group's action or inaction will result in varying degrees of failure.⁸⁸ A sporting analogy of this would be a Pro-Am golf tournament, where every individual team member plays every hole, but only the best strokes on each hole are counted. Sometimes the amateur will get lucky, but usually the professional makes the best shot.

Multi-functional working groups in military organizations tend to be very good at conducting disjunctive tasks. By their hierarchical nature and skill-based training and assignment processes, groups can be organized and reorganized to facilitate information sharing, and gain expertise with regards to a variety of problems. Senior ranking individuals that lead these groups are often deemed to have the

⁸⁵ James Surowiecki, *The Wisdom of Crowds* (New York, New York: Random House Large Print, 2004), XI - XV.

⁸⁶ Surowiecki, *The Wisdom of Crowds*, XXVIII.

⁸⁷ Steiner, Group Process and Productivity, 19.

⁸⁸ Ibid., 21.

greatest expertise in a given area, or have the ability to grant authority to group members that do. This is illustrated by the Army in its organization of staffs into cross functional and general staff directorates to conduct the Battle Command Tasks of lead, understand, visualize, describe, direct, and assess.⁸⁹ Leaders are able to assign tasks to the best qualified or capable individuals with in specific working groups, while guiding and directing the acceptance of proposed solutions across the entire staff.

While disjunctive tasks tend to be unitary, conjunctive tasks require a wide variety of special skills or resources that are brought together to achieve a desired collective outcome. Because the overall task is subdivided and assigned to different individuals for later reintegration, Steiner asserts that, the least proficient or poorest performing individual has the greatest impact on group performance.⁹⁰ Moreover, every individual in a group conducting a conjunctive task needs to have access to resources (knowledge, abilities, skills and tools) necessary for the successful completion of their subtask. Task demands determine what specific resources that are need by individuals within the group. If a resource is not made available to the group, or there is friction between relationships in the larger organization that limit the distribution of resources and reintegration of work, the group's performance will be limited.⁹¹

Regardless of the type of task, if it is common to an organization it is assumed that written procedures or institutional knowledge is present to guide its planning and execution. If it is a new or uncommon task a detailed analysis may be required to define the type of task, and what resources are required to be successful.⁹² Mindlessly doing things the way they have always been done out of habit, may result in applying the wrong organizational model to the wrong task, leading to unacceptable results.

The challenge arises when an operational task, such as MILDEC, is identified that requires a wide variety of technical experts and no single person has premiere expertise; there are secrecy and security requirements that prevent full information sharing across the staff; and the planning and execution of this

⁸⁹ U.S. Army, FM 3-0, 5-3.

⁹⁰ Steiner, Group Process and Productivity, 28.

⁹¹ Ibid.

⁹² Steiner, Group Process and Productivity, 7.

task falls outside of the regular battle rhythm of Battle Command Processes. MILDEC is both an Information Task and a core element of IO with these characteristics. It is conjunctive in nature because the poorest performing member of the group conducting MILDEC, or the DWG, directly affects the results of the operation. A single security leak or unsynchronized "A"-type or "M"-type deception action can rupture a painstakingly organized MILDEC illusion. Once the adversary sees the illusion for what it is, the value of MILDEC is entirely negated. Operational forces will lose the benefit of MILDEC if this is not recognized. Even worse, our operations could fall victim to enemy deception efforts.

Organizing for Military Deception

Oh what a tangled web we weave, when first we practice to deceive.

- Sir Walter Scott

Organizing elements of a general staff to conduct centralized battle command in support of MILDEC seems to run counter to everything the Army does with regards to information sharing, decentralized execution and distributed operations. In a culture where the freedom of information is an expected right and honesty is a virtue, anything that restricts or controls the access to information is looked upon with a jaundiced eye. As a manual that provides guidance for the operational planning and application of U.S. Army capabilities, FM 3-0, Operations defines MILDEC as all actions conducted to deliberately mislead an enemy commander as to friendly military capabilities, intentions, and operations. At its most successful, military deception provokes an enemy commander to commit a serious mistake that friendly forces can exploit. However, effective military deception also introduces uncertainty into the enemy's estimate of the situation, and that doubt can lead to hesitation.⁹³ This definition is in accordance with other published doctrine regarding military deception as found in Joint Publication 3-13.4, Military Deception⁹⁴ and Field Manual 3-13, Information Operations.⁹⁵ Unfortunately FM 3-0 goes on to identify military deception as a capability that supports the Information Task of military deception. This confuses the application of military deception; because as a relatively new change to doctrine, it does not explain the relationship between the task and capability of MILDEC, and goes on to say that FM 3-13 and JP 3-13.4 should be referenced for the application of MILDEC.

Current joint doctrine identifies the five core IO capabilities as Psychological Operations (PSYOP), Military Deception (MILDEC), Computer Network Operations (CNO), Operations Security (OPSEC), Electronic Warfare (EW), and their associated or supporting capabilities. These additional

⁹³ U.S. Army, *FM 3-0*, 7-7.

⁹⁴ U.S. Department of Defense, *JP 3-13.4, Military Deception* (Suffolk, VA: United States Joint Forces Command, Joint Warfighting Center, 2008), I-1.

⁹⁵ U.S. Army, FM 3-13, iii.

capabilities include Public Affairs (PA), Joint Combat Camera (COMCAM), Civil Military Operations (CMO), Defense Support to Public Diplomacy (DSPD), and Physical Attack (PHYS ATK). These are either directly or indirectly involved in the information environment and contribute to effective execution of IO. The United States Army has created Information Tasks to bridge the gap between Joint Doctrine and the application of IO capabilities, shown in Figure 3. As stated before, the operationalization of MILDEC requires a unique combination of secrecy, technical skills, and the abilities to synchronize Information Capabilities. This becomes even more pertinent when these technical skills and abilities are not recognized in current doctrine concerning staff design, manning, and training requirements.

Task	Information Engagement	Command and Control Warfare	Information Protection	Operations Security	Military Deception
Intended Effects	Inform and educate internal and external publics Influence the behavior of target audiences	Degrade, disrupt, destroy, and exploit enemy command and control	Protect friendly computer networks and communication means	Deny vital intelligence on friendly forces to hostile collection	Confuse enemy decision- makers
Capabilities	Leader and Soldier engagement Public affairs Psychological operations Combat camera Strategic Communication and Defense Support to Public Diplomacy	Physical attack Electronic attack Electronic warfare support Computer network attack Computer network exploitation	Information assurance Computer network defense Electronic protection	Operations security Physical security Counterintel- ligence	Military deception

Figure 3. Army Information Tasks & Capabilities⁹⁶

While this framework simplifies the training, equipping, and application of military information operations, it artificially bounds capabilities that can be used to achieve other desired effects, and fails to recognize the difference between information capabilities by echelon. It also ignores the difference between information capabilities and the mediums that are used to communicate with designated audiences to achieve desired effects in support of stated objectives.

⁹⁶ U.S. Army, *FM 3-0*, 7-3.

The current Department of the Army information tasks as defined in *FM3-0, Operations* are insufficient for discussing and understanding the complexity of the contemporary operational environment and the application of MILDEC within the framework of operational art. In the process of deconstructing IO and reconstructing it within the limitations of tactical and operational authorities, doctrine writers have narrowed their understanding of the scope of MILDEC. To address these shortfalls, a model is proposed that incorporates IO capabilities, information conduits and designated audiences that can be applied to MILDEC efforts. They should be integrated and coordinated with the core capabilities, but also serve wider purposes in support of Strategic Communications and National Security Policy Objectives. The MILDEC Communications Model (see Figure 4) is an attempt to visualize the holistic role that MILDEC has in supporting the Commander's Concept and Intent for operations. By synchronizing deceptive activities or tasks performed by the various Information Operations capability providers through the appropriate information conduits, designated audiences can be engaged to gain the desired objectives and effects. This model is based on a combination of Laswell's and Berlo's communications models.

Political scientist Harold Laswell posed the question, "Who says what in which channel with what effect?" His model includes considerations of a variety of factors (communicators, messages, mediums, and audiences) and their relationships to determine the impact of communication.⁹⁷ Instead of focusing on these relationships, Berlo's model provides a menu of ingredients for each factor or element of communication.⁹⁸ By combining his ingredients with Laswell's factors it is possible to generate a wide variety of communication options to gain the greatest impact against any designated or intended audience.

A feature unique to the MILDEC Communications Model is that information conduits facilitate two way communications. This provides several means of delivering a common message, synchronized through the various capabilities, as well as providing multiple methods for the collection of information

⁹⁷ Harold D. Lasswell, "The Structure and Function of Communication in Society," *The Communication of Ideas*, editor, Lyman Bryson (New York: Institute for Religious and Social Studies, Jewish Theological Seminary of America, 1948), 37

⁹⁸ David K. Berlo, *The Process of Communication*, (New York: Holt, Rinehart and Winston, Inc., 1960).

from intended audiences to assess their effectiveness. By combining these feedback mechanisms to answer specific information requirements information capabilities can be responsive to the command and staff, but also serve to reduce the possibility of surprise generated by the enemy's deception or counterintelligence efforts.

This model clearly demonstrates the complexity of the operational environment that MILDEC officers must navigate to conduct battle command in support of the commander's intent for deception. They must be able to plan and coordinate IO Capabilities across the entire staff to leverage the appropriate information conduits that will be used to influence adversary behaviors, supervise the execution of deceptive tasks by staff section or subordinate elements that are not witted to the plan, and monitor information conduit managers to assess the effectiveness of the deception.



Figure 4. MILDEC Communications Model

Commanders organize their staffs to assist them in exercising command and control. Army doctrine states that the practice and execution of command is a personal function. It is the relationship that

a commander has with his subordinates to create an environment that fosters trust, mutual understanding and encourages optimistic action. A positive command climate, forged into an effective organizational design increases a commander's capacity to plan, prepare, execute and continuously assess ongoing operations through the Battle Command process.

Army doctrine defines control as the "regulation of forces and functions to accomplish a mission in accordance with the commander's intent."⁹⁹ It involves the entire staff to assist the commander in conducting Battle Command by helping them plan, prepare, execute and assess future and on-going operations. Assigning duties in accordance with these command and control tasks may be as simple as establishing a single staff section for each one, such as G5-Plans, G35- Future Operations, G3-Operations, or Assessments. As a staff gets larger, it gains new capabilities that due to technical specialties, sensitivity, or overall complexity do not fit neatly in these structures.

In recognition of the increasing complexity of operational staffs, Joint and Army Doctrine describes an organizational concept made up of cross functional staff sections or directorates. These directorates take the form of various groups and sub-groups identified as either boards, bureaus, cells, centers, working groups (B2C2WG), or planning teams.¹⁰⁰ When brought together in a cohesive organization, B2C2WG's enhance group understanding, planning and decision making. The intent of this organization is to promote close coordination, synchronization, and information sharing across the staff directorates. Military Deception does not fit neatly into these traditional hierarchical functional structures of the General Staff, nor are its requirements for secrecy and security conducive to open information sharing intended by cross functional coordination needed to conduct distributed battle command.

⁹⁹ U.S. Army, FM 3-0, Glossary-5.

¹⁰⁰ U.S. Department of Defense, *Joint Publication 3-33, Joint Task Force Headquarters* (Suffolk, VA: United States Joint Forces Command, Joint Warfighting Center, 2007), II-10 – II-14.



Figure 5. Cross Functional Organization of a General Staff¹⁰¹

The skills and experience necessary to conduct operational deception run the gambit from traditional firepower and maneuver, to the newest Computer Network Operations and Special Access Programs that require national approval. The sensitivity of these programs as well as general OPSEC concerns requires strict control over all MILDEC planning, preparation, execution and assessment. The coordination and synchronization of operational deception is also conducted on a different timeline than traditional operations. Deceptive tasks that require detailed preparations and national approvals must be front-loaded ahead of the traditional Battle Command processes to shape future operations or to prepare for the commander's decision to execute.

Steiner's description of a conjunctive task relates directly to the concept of MILDEC as a synchronizer of staff sections that manage the information capabilities and conduits used to conduct a series of deceptive tasks to achieve "A"- and "M"-type effects against enemy decision makers. In either case, if the "chain of deceptive events" is broken by the enemy's counter-intelligence efforts and not recognized through regular assessments it could prove disastrous. Enemy forces could simply recognize our attempts to bait them and fail to "bite the hook," or go so far as to conduct deliberate counter-

¹⁰¹ United States Army Information Operations Proponent, "The New Information Operations Construct: As Outlined in FM 3-0 Dated 29 Feb 2008," Presented by the Director, USAIOP on 11 May 2008.

deception activities and attempt to deceive us to the effectiveness of our efforts and gain their own positional or situational advantage. This implies that much like the lessons learned by "A"-Force and Soviet operational planners in World War II, the centralized control of deceptive activities is necessary to ensure that the "weakest link" doesn't negatively affect the outcome.

Army IO doctrine identifies the necessity for commanders to appoint a Military Deception Officer (MDO) to be appointed that is a special staff officer responsible for MILDEC. The MDO supports the G-7 in the execution of MILDEC as an Information Task. Like other operations, MILDEC operations conducted by Army forces follow the operations process. The MDO stays abreast of the situation. Planning and preparing in isolation results in a deception that does not correspond to reality and is therefore useless. Based on recommendations from the MDO, and support from the G7, the G-3 integrates MILDEC into the operation. This ensures the MILDEC operation does not conflict with other objectives and that all elements portray the same deception story.¹⁰²

Because of the scale of possible effects, diverse ranges of skills, and sensitive nature of MILDEC operations the MDO should be granted the authority to form a Deception Working Group (DWG).¹⁰³ The DWG can take on the characteristics of a basic planning team as found in joint doctrine.¹⁰⁴ It is tailored to bring together the special technical skills required to plan, prepare, execute and assess a specific MILDEC Operation through each phase.¹⁰⁵

When forming the DWG, the MDO balances OPSEC concerns with assurances that the requisite technical skills are adequately reflected during each phase. Adversaries must be denied knowledge of the MILDEC operation's existence, and protecting this information requires limiting the number of witting actors. According to Army doctrine, "A *witting actor* is an individual participating in the conduct of a military deception operation who is fully aware of the facts of the deception," and "An *unwitting actor* is

¹⁰² U.S. Army, *FM 3-13*, 4-17 – 4-19.

¹⁰³ Ibid., 2-6.

¹⁰⁴ U.S. DoD, *JP 3-13*, II-14

¹⁰⁵ Ibid., 4-17.

an individual participating in the conduct of a military deception operation without personal knowledge of the facts of the deception."¹⁰⁶ Additionally, "Commanders limit knowledge of the MILDEC operation's details to those who provide feedback, control execution, maintain balance of operational priorities, and assess the potential for inadvertent compromise."¹⁰⁷ Individuals that are allowed to know portions of the MILDEC can be referred to as being only partially witting actors, or half-wits.

Other than an OPSEC Officer, the two most critical members of the DWG include representatives from the G2 and the G7. These individuals should have the expertise and experience to support the targeting, delivery, and assessment MILDEC targets using all-source intelligence assets and IO capabilities. Partially witting participants from other staff sections or working groups may also be invited to assist in the coordination of technical and battle command tasks as needed. To ensure both secrecy and realism, unwitting actors are often tasked to portray deception events. As the MILDEC operation proceeds, proximate membership may change to reflect the specific requirements. Ultimately, the DWG must be able to build or leverage a wide range of information capabilities, and manage all the Battle Command tasks regardless of its membership.¹⁰⁸

¹⁰⁷ Ibid.

¹⁰⁶ Ibid., 4-8.

¹⁰⁸ U.S. Army, *FM 3-13*, 4-12.

Conclusion

Though fraud in other activities be detestable, in the management of war it is laudable and glorious, and he who overcomes an enemy by fraud is as much to be praised as he who does so by force. —Machiavelli

Despite assertions made by David Alberts,¹⁰⁹ it is not necessary to continually flatten an organization and decentralize authorities in anticipation of an emergent solution. Conjunctive tasks, such as MILDEC, are more effectively executed when control is centralized and battle command is limited to a small group. Both "A"- Force and the Soviets came to the same general conclusions about the need for centralized control of MILDEC, even though their operational experiences and types of deceptions varied.

"A"-Force started with centralized control over all MILDEC capabilities under Wavell and Clarke, but its elements used for the planning and execution of Operational Deception were split when Operations and Intelligence came into conflict over who controlled the various capabilities. Within six months, "A"- Force's authority over the MILDEC capabilities were re-established when it was found that complexity actually increased when key capabilities were separated and not consolidated under a single controlling mind. "A"-Force's initial efforts also took the form of ambiguity increasing ("A"-type) deceptions. The establishment of false orders of battle, supported by Double Cross and Ultra, increased the amount and forms of information flowing into the German intelligence service. This shaped the German leadership's understanding of Allied Forces in the Middle East, by establishing preconceptions necessary to successfully execute misdirection ("M"-type) deception later in the war.

The Soviet Union had little in the way of operational or even tactical deception at the beginning of the war. They were forced to develop their own methods of operational deception from the ground up starting with tactical-level skills and operations that focused on protecting their forces with camouflage, communications security, radio silence, and movements restricted to periods of limited visibility. As their skill in combined arms developed, so did the incorporation of engineers, air defense artillery, smoke,

¹⁰⁹ Alberts, Power to the Edge, 4 - 7.

reconnaissance and fires into tactical deception efforts to gain situational advantages over German defensive positions. By the third and final stage of the war, the Soviets had established centralized operations cells that planned, prepared and supervised maneuver-based operational deception in support of Front and Army commanders. Returning to their roots of force protection and OPSEC, they turned the entire Eastern Front into a stage that allowed them to gain positional advantage over German forces through the use of "M"- type deceptions.

While the case studies used in this research were based on regular warfare during the midtwentieth century, additional research is necessary in regards to its application in irregular warfare and contemporary operations. Nevertheless, based on the logic that resources will always be limited, MILDEC serves as a valuable force multiplier regardless of the form of warfare practiced. Further, even in different forms of warfare and as new technology emerges, MILDEC remains a conjunctive task. Small groups of people, granted authorities to conduct and coordinate battle command in direct support of a commander's deception objectives can be expected to continue to demonstrate effectiveness far beyond that which their small size would imply.

There are several remaining questions that need to be answered to fully address the applicability of MILDEC in the Contemporary Operational Environment.

- How can this understanding of operational deception be applied to strategic and tactical MILDEC?
- 2. What is the role of MILDEC in each phase of full spectrum operations to include, but not limited to decisive, shaping and sustainment operations?
- 3. How does the expansion and transparency of the Global Information Environment affect Operational Security, and our ability to protect information?
- 4. How can emergent technology be leveraged, and how will it effect or be adopted by traditional populations?

5. How do differences in cultural beliefs, norms, and values of both intended and unintended audiences affect operational and political responses if caught red handed?

Due to MILDEC's unique and secretive requirements a DWG needs to be capable of conducting all Battle Command tasks internally, while maintaining close coordination with their associated functional staff sections. The total number of personnel available to conduct Battle Command in support of it should also be kept to a minimum. The operationally holistic and exclusive nature of MILDEC becomes clearer when considering elements of Joint doctrine and recognizing that the effective employment of MILDEC takes on the characteristics of a conjunctive task within the framework of Operational Art and Design. Any supporting capability that is not up to the task of supporting a MILDEC operation, due to either a lack of personal skill, security, or organizational design, puts the operational deception and operation it supports at risk.

A recommendation for the organization of a DWG can be developed by applying Steiner's definition of a conjunctive task to the MILDEC Communications Model, and doctrine concerning the duties and responsibilities of the MDO. A core DWG should be made up of four personnel, the MDO, an OPSEC Officer, an Intelligence Officer, and an IO Officer to meet requisite tactical, operational, technical skill and expertise requirements. Additional or proximate members may be called upon as needed, but fully-witting members should be kept to a minimum.

The DWG should also operate in direct support to the Commanding General and the Chief of Staff to reduce organization friction and bottlenecking that can occur due to information overload with in members of the staff, while maintaining coordination authorities with other staff directorates, particularly the G2, G3, G5 and G7, as depicted in Figure 6.



Figure 6. Recommended Organization of DWG in a General Staff

By addressing the roles and confirming the applicability of deception operations using historical case studies, it is apparent that there is still a need for the centralized control of operational deception on a General Staff now.. There will always be friction between the human activities and with in the relationships that make organizations work. When commanders establish priorities for MILDEC and assign specific responsibilities, the contention between the leaders of functional and general staff sections will be reduced and their overall integration will improve. Ultimately the man in the stair must no longer be viewed as obstacle to success, but a facilitator, coordinator, and integrator with the capability of influencing a wider variety of enemy decision makers to act in support of the commander's intent.

Appendix A. The G'Muffin

Brigadier Dudley Clarke was always much attached to the story of the G'Muffin. Briefly, a man got into a train with a large cardboard box in the lid of which were bored holes and at each end a piece of sticking plaster so that it was possible to raise the lid enough to supervise whatever was inside without permitting it to escape.

After the train had started, the man would, at intervals, take down the box from the rack, slightly raise the edge secured with the sticking plaster, and peer inside. The third or fourth time, not only did he peer inside but inserted a small piece of lettuce and. Taking his fountain pen, reinforced the lettuce with a few squirts of ink. Not unnaturally, a man sitting opposite could not contain is curiosity.

"Excuse me. Sir," he ventured, "I hope you will not consider me unwarrantably inquisitive but I would, indeed, like to know what is that compartment," The man with the box displayed all the most extreme symptoms of guilt and embarrassment. He rushed to the door of the compartment leading into the corridor to ensure that it was tightly closed. As a protection against birds and aircraft, he pulled the window. Then, leaning forward conspiratorially, and placing a finger to his lips, in a stage whisper: "Hist," he said, "It's a g'muffin!"

The man opposite tactfully displayed extreme gratification at being vouchsafed this sensational information. "I'm most grateful Sir" he said, "for your confidence. Now that you have whetted my curiosity, could I have one more indulgence? You may not believe this but I am actually so ignorant that I do lot know the purpose of a g'muffin. Would you be willing, in short, to tell me what's a g'muffin for?"

The man with the box almost had a seizure. He leaned forward until his lips were almost touching the interlocutor's ear: "Hush!" he said, "Hush! I must tell you. It's for tigers. My brother's got tigers at the bottom of his garden."

"Thank you so very much," whispered the man opposite, "I am profoundly in your debt. Will you permit me to add to it by asking one more favor. Incredible though it may seem to you, I have never actually seen a g'muffin. Could I be permitted a glimpse into the box?" Looking anxiously over his shoulder, the owner of the box reached it down from the rack and, for the benefit of his new friend, just lifted the sticking plaster a couple of inches. Inside the box was a piece of lettuce and a few drops of ink.

"Ha! Ha!" almost shouted the man opposite, "I can see now. You've been pulling my leg! This isn't a real g'muffin."

"Quite so," replied the owner, "but, you see, my brother hasn't got any real tigers."¹¹⁰

¹¹⁰ Mure, *Master of Deception*, 201.

Appendix B. Deception Maxims

The following section contains ten principles or maxims that are relevant to deception. No claim is offered that this is a minimal, sufficient set, that these principles are entirely self-consistent or that they are all at the same level of generality.¹¹¹

Maxim 1: Magruder's Principle - the Exploitation of Preconceptions

It is generally easier to induce an opponent to maintain a preexisting belief than to present notional evidence to change that belief. Thus, it may be more fruitful to examine how an opponent's existing beliefs can be turned to advantage than to attempt to alter these views.

Maxim 2: Limitations to Human Information Processing

There are several limitations to human information processing that are exploitable design of deception schemes—among these, the law of small numbers and susceptibility to conditioning.

Maxim 3: The Multiple Forms of Surprise

Surprise can be achieved in many forms. In military engagements, these forms include location, strength, intention, style, and timing. Should it not prove attractive or feasible to achieve surprise in all dimensions, it may still be possible to achieve surprise in at least one of these. Thus, for example, if intentions cannot be concealed, it may still be possible to conceal timing (cry-wolf syndrome), place, strength or style.

Maxim 4: Jones's Dilemma

Deception becomes more difficult as the number of channels of information available to the victim increases. However, within limits, the greater the number of controlled channels the greater the likelihood of the deception being believed.

¹¹¹ CIA-ORD, Deception Maxims, 4-44.

Maxim 5: A Choice among Types of Deception

Where possible the objective of the deception planner should be to reduce the ambiguity in the mind of the victim, to force him to seize upon a notional world view as being correct-lot making him less certain of the truth, but ,,ore certain of a particular falsehood. However increasing the range of alternatives and/or the evidence to support any of many incorrect alternatives - in the jargon 'increasing the noise" - may have particular use when the victim already has several elements of truth in his possession.

Maxim 6: Axelrod's Contribution: The Husbanding of Assets

There are circumstances where deception assets should be husbanded despite the costs of maintenance and risk of waste, awaiting a more susceptible to rational analysis.

Maxim 7: A Sequencing Rule

Deception activities should be sequenced so as to maximize the persistence of the incorrect hypothesis for as long as possible. In other words, "Red-handed" activities should be deferred to the last possible instant.

Maxim 8: The Importance of Feedback

A scheme to ensure accurate feedback increases the chance of success in deception

Maxim 9: "The Monkey's Paw"

Deception efforts may produce subtle and unwanted side effects. Planners should he sensitive to such possibilities and, where prudent, take steps to minimize these counterproductive aspects.

Maxim 10: Care in the Design of Planned Placement of Deceptive Material

Great care must be exercised in the design of schemes to leak notional plans. Apparent "windfalls" are subject to close scrutiny and often disbelieved. Genuine leaks often occur under circumstances thought improbable

Appendix C. Soviet Rules for Deception

World War II left the Soviet military with a vast reservoir of experience. From their analysis of lessons learned, Soviet researchers in deception have identified the following important requirements for effective deception:¹¹²

- 1. Evaluate enemy intelligence collection and devise counteractions.
- 2. Develop deception expectations for operations, ensuring that operational deception measures conform to the friendly forces' ability to conduct them.
- 3. Plan all deception measures in detail and centralize their execution.
- 4. Systematize deception activities and maintain their credibility, continuity, and diversity.
- 5. Use initiative and creativity in organizing and executing deception measures.

¹¹² Mel'nikov, "Operativnaya maskirovka" [Operational deception]. 18-26.

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