

THE CHALLENGE OF APPLYING TACTICAL DECEPTION WHEN  
CONDUCTING LARGE SCALE COMBAT OPERATIONS  
IN THE 21ST CENTURY

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General Studies

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

THE CHALLENGE OF APPLYING TACTICAL DECEPTION WHEN CONDUCTING LARGE SCALE COMBAT OPERATIONS IN THE 21ST CENTURY, by MAJ Kenny D. Martinez, 150 pages.

The Army has used military deception in every major campaign since its inception. Military authors conclude that armies that practice the art of deception have significant advantages over their enemies. As noted in FM 3-13.4, deception can be applied to all levels of warfare and can be conducted at any phase of the operation. This thesis explores what gaps the Army has in applying tactical deception in Large Scale Combat Operations. It also examines how the modern American Army and our current pacing threats view deception and how they may apply it in future conflict. Lastly, this thesis rediscovers capabilities from previous doctrine to help bridge the gap to effectively conduct tactical deception against near-peer threats.

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## ACRONYMS

AAR	After Action Report
ADP	Army Doctrine Publication
ADPC	Army Deception and Planners' Course
ADRP	Army Doctrine Reference Publication
AI	Artificial Intelligence
AMDP	Army's Military Deception Planners
AOC	Advanced Operations Course
AR	Army Regulation
ASI	Additional Skill Identifiers
ATO	Air Tasking Order
ATP	Army Techniques Publications
AUTL	Army Universal Task List
BCT	Brigade Combat Team
BLUFOR	Blue Force
CAC	Combined Arms Center
CALL	Center for Army Lessons Learned
CARC	Chemical Agent Resistant Coating
CATS	Combined Arms Training Strategy
CEMA	Cyberspace Electromagnetic Activities
CENTCOM	US Central Command
CEWI	Combat Electronic Warfare Intelligence
CGSC	Command and General Staff College
CIA	Central Intelligence Agency



COE	Centers of Excellence
COIN	Counterinsurgency
CMDO	Command Military Deception Officer
CP	Command Post
CPX	Command Post Exercises
CTC	Combat Training Center
DATE	Decisive Action Training Environment
DCSLOG	Deputy Chief of Staff for Logistics
DISO	Deception in Support of Military Operations Security
DOD	Department of Defense
DOTMLPF-P	Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities- Policy
EC&D	Electromagnetic Cover and Deception
EEFI	Essential Elements of Friendly Information
EMS	Electromagnetic Spectrum
EW	Electronic Warfare
FM	Field Manual
FORSCOM	Forces Command
FTX	Field Training Exercise
HUMINT	Human Intelligence
IMINT	Imagery Intelligence
INSCOM	Army Intelligence and Security Command
IO	Information Operations
IoT	Internet of Things
IPB	Intelligence Preparation of the Battlefield

IRC	Information Relation Capability
JP	Joint Publication
JRMC	Joint Multinational Readiness Center
LSCO	Large-Scale Combat Operations
LTT	Leader Time Training
MCCoE	Mission Command Center of Excellence
MCTP	Mission Command Training Program
MDMP	Military Decision-Making Process
MDO	Multi-Domain Operations
MDPC	Military Deception Planners Course
MET	Mission Essential Task
MI	Military Intelligence
MILDEC	Military Deception
MISO	Military Information Support Operations
NATO	North Atlantic Treaty Organization
NCO	Non-commissioned Officer
NKPA	North Korean People's Army
OPFOR	Opposing Force
OPSEC	Operations Security
PDF	Panamanian Defense Force
PLA	Peoples Liberation Army
PME	Professional Military Education
POI	Program of Instruction
PSYOP	Psychological Operations
RGFC	Republican Guard Force Command

ROE	Rules of Engagement
SIGINT	Signal Intelligence
TAC-D	Tactical Deception
T&EO	Training and Evaluation Outline
TC	Training Circular
TOE	Table of Organizations and Equipment
TR	Training Regulation
TRADOC	US Army Training and Doctrine Command
TTP	Tactics, Techniques, and Procedures
UAV	Unmanned Aerial Vehicles
ULO	Unified Land Operations
UTM	Unit Training Management
VC	Viet Cong
VPAF	North Vietnamese People's Air Force
WfF	Warfighting Function
WFX	Warfighter Exercise

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## CHAPTER 1

### INTRODUCTION

#### Background

Mankind has used the art of deception for survival for as long as we dared to venture out of the safety of our caves. Using mud and leaves to disguise ourselves for effective hunting or in a group to distract prey while executing a skillful ambush, deception has played a vital role in our survival against a world where the odds are mostly unfavorable. Ancient philosophers and military theorists have written numerous books and stories explaining how creative deceptive techniques, when applied to warfare, proved to be a critical skill to master against superior and sometimes over-confident enemies. Military history has proven the need to use deception, from tactical to strategic levels, to gain necessary advantages against our enemies and demonstrates that this human trait will always be used to achieve a marked advantage.

Deception has deep roots in the foundation of American history. General George Washington and the Founding Fathers are considered masters of deception and great manipulators of the information environment.<sup>1</sup> Understanding that an emerging America needed to leverage every advantage against a numerically superior, better equipped, and better trained British Army, Washington employed a group of spies known as the Culper Ring to spy on the British Headquarters in New York, gaining information on troop movements and insight into British plans. To prevent unwanted battles, he would deceive

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<sup>1</sup> Thomas B. Allen, "Chapter 4: George Washington, Agent 711," in *George Washington, Spymaster: How the Americans Outspied The British And Won The Revolutionary War* (Lanham, MD: National Geographic Children's Book, 2007), 45-52.

British forces by ordering gunpowder barrels filled with sand and stored in warehouses where he knew that spies would report on the fake supply quantities. Washington was also known to inflate troop numbers on falsified documents destined to fall into British hands.<sup>2</sup> These documents were so convincing that it delayed the British from delivering several crushing blows to the rebel army. The British often were hesitant to believe their intelligence, providing respite for a usually exhausted, malnourished, and under-equipped force. Washington understood the value of deception and surprise in battle and used it every opportunity to gain an advantage. It was so valuable to him that he even planned for one of three river crossings to be a diversion from the main effort and prevent British and Hessian reinforcements from reaching his objective when crossing the Delaware River on the night of December 25, 1776. Although that river crossing failed due to extreme difficulties, planning for and committing sizeable resources against it proved just how vital that mission was to his plans.<sup>3</sup>

During the Civil War, many Generals used the art of deception to mask the number of troops in their formations, create false marching columns, and deceive their enemies into thinking they were better equipped to fight more robust battles. Union Major General William S. Rosecrans was given the mission to cross the Tennessee River and retake Chattanooga from the south from General Braxton Bragg in the summer of

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<sup>2</sup> Alexander Rose, *Washington's Spies: The Story of America's First Spy Ring* (New York, NY: Bantam Dell, 2006), 43-50; David Charters and Maurice Tugwell, *Deception Operations: Studies in The East-West Context* (McLean, VA: Brassey's Ltd., 1990), 269.

<sup>3</sup> Evan Andrews, "6 Ingenious Acts of Battlefield Deception," *History*, September 1, 2018, <https://www.history.com/news/6-ingenious-acts-of-battlefield-deception>.

1863. Wanting his force to remain undetected, he ordered the bulk of his Army to begin moving south while simultaneously ordering one of his most clever generals, Brigadier General William Hazen, to conduct a series of feint attacks to the north of Chattanooga. The feints worked so well that General Bragg ordered his Army to concentrate north on what he believed was to be the main attack. The deception plan was best described by Colonel John T. Wilder, the leading proponent for the feint attacks,

We then commenced making feints as if trying to cross the river at different points for 40 miles above the town, and succeeded in so deceiving them as to induce them to use an entire army corps to prevent the execution of such a purpose . . . Details were made nearly every night to build fires indicating large camps, and by throwing boards upon others and hammering on barrels and sawing up boards and throwing the pieces in streams that would float them into the river, we made them believe we were preparing to cross with boats.<sup>4</sup>

One of deception's modern-day maxims known as Magruder's Principal comes from the Civil War. Confederate General John Magruder faced General George McClellan's overwhelming Union force in April 1862 and was tasked to stall his advance into Virginia. With a contingent of only 13,000 troops, General Magruder used deception to convince McClellan that he was facing a force the size of 100,000. He ordered his troops to be spaced out, create false security patrols to appear to have more soldiers available than anticipated, and construct what were known as "Quaker Guns"—logs fashioned into decoy artillery pieces to appear that fortifications were more heavily defended. Magruder was able to successfully provide McClellan the information he needed to reinforce his expectations and interfere with his decision-making process. The

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<sup>4</sup> Maurice, D'Aoustand, "Hoodwinked during America's Civil War: Union Military Deception," HistoryNet, accessed October 16, 2020, <https://www.historynet.com/hoodwinked-during-americas-civil-war-union-military-deception.htm>.

deceit worked, delaying McClellan's forces for several weeks, giving the Confederacy the time needed to reinforce its line in Virginia.<sup>5</sup>

With the advent of advanced technology, complex formations, and new battlefield geometry, World War I saw a desperate necessity to protect forces in ways never possible on the battlefield. French and British forces turned to deception to creatively hide formations in plain sight, which ushered the innovation of battlefield camouflage and concealment. Many prominent artists supported the war effort to create spectacular camouflage patterns designed to keep troops and equipment safe. The "ghillie" suit was invented for snipers to observe from their forward positions.<sup>6</sup> Canvas and paint were used to hide command posts. Dummies and decoys were created to mask actual troop strength. The blending of art and science worked to apply natural patterns to irregular shapes to disguise familiar forms. Scientists used their understanding of optical effects to create "dazzle" paint on warships confusing the enemy at long distances and misidentify their target.<sup>7</sup> When the Americans entered the war, they quickly learned the inherent value of deception from their allies and adopted these tactics with the Corps of Engineers leading

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<sup>5</sup> Andrews, "6 Ingenious Acts of Battlefield Deception."

<sup>6</sup> Guy Hartcup, *Camouflage* (New York, NY: Charles Scribner's Sons, 1980), 16-26, 35-40.

<sup>7</sup> Cecille Coutin, "Camouflage," in *1914-1918-Online International Encyclopedia of the First World War*, ed. Ute Daniel, Peter Gatrell, Oliver Janz, Heather Jones, Jennifer Keene, Alan Kramer, and Bill Nasson (Berlin: Freie Universitat Berlin, last updated October 8, 2014, 1-3<https://encyclopedia.1914-1918-online.net/pdf/1914-1918-Online-camouflage-2014-10-08.pdf>).



the effort to master the art. They pioneered khaki-colored uniforms along with the British, wanting troops to blend into the natural environment.<sup>8</sup>

The art of deception had caught the eye of American commanders, most notably General John J. Pershing. Known for the Belfort Ruse, General Pershing sent Colonel Arthur I. Conger to Belfort, France on August 30, 1918. His mission was to write a false but detailed plan of the American Expeditionary Force commencing their offensive from Belfort, a small town in France that bordered Germany. Their true objective was to launch an offensive at St. Mihiel and capture the city of Metz from the Germans. Using a typewriter, Colonel Conger created a false operations order and threw the carbon paper into the trashcan, hoping that suspected German spies would police it. As he went for a walk away from the hotel, the plan worked, and the carbon paper was recovered. Soon after, Colonel Conger began ordering reconnaissance planes to fly over the area and send for multiple staff officers and equipment to flow into Belfort, creating a story credible enough for the Germans to believe the piece of intelligence they intercepted was legitimate.<sup>9</sup>

The Allies thought the Americans were too ignorant in the art of deception, believing Germans would see through their disorganized and amateurish ruse; however, American ingenuity prevailed, and the operation continued. On September 12, General Pershing launched his main attack on the St. Mihiel salient. The Germans, confused and

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<sup>8</sup> John Latimer, *Deception in War* (Woodstock: The Overlook Press, 2001), 56, 101.

<sup>9</sup> Robert Paschall, "World War I: The Belfort Ruse," HistoryNet, accessed October 17, 2020, <https://www.historynet.com/world-war-i-the-belfort-ruse.htm>.

dismayed, began to defend the salient; however, most of their units were displaced and already moving toward Belfort. The attack was much heavier than the Germans expected and began to retreat, realizing they were overpowered. General Pershing's deception plan was a great success and one of his highlights of the war, as mentioned in his Pulitzer Prize memoirs.<sup>10</sup>

Few young officers who witnessed the value of deception during World War I would remember the lessons learned and steward the art through the Interwar period. During this transition period, however, the conventional Army lost interest in camouflage and deception, shelving their progress of the art. The Americans may have forgotten about deception, but stewardship fell to the British, who kept practicing the lessons learned from American and French troops. General George C. Marshall, a veteran of World War I and primary planner for the Belfort Ruse, sought to keep the art of deception alive while serving as the assistant commandant of the Infantry School in Fort Benning from 1927-1931.<sup>11</sup> Gaining some interest, the Corps of Engineers once again picked up the mantle of deception. By World War II, deception became a full planning effort to reduce casualties and equipment loss. General MacArthur also championed deception and used it to great effect when Americans entered the Pacific Theater in 1944.

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<sup>10</sup> Lori S. Tagg, "Moments in MI History: The Belfort Ruse, August-September 1918," The Free Library, July 1, 2018, <https://www.thefreelibrary.com/Moments+in+MI+History%3a+The+Belfort+Ruse%2c+August-September+1918.-a0549160111>, 23-25.

<sup>11</sup> Barton Whaley, *Stratagem Deception and Surprise in War* (Norwood, MA: Artech House, 2007), 29-30.

These tactics gained notoriety due to the success of the Magnum Opus of deception planning: The Allied plans of Operations Bodyguard and Fortitude.

These two operations were more than a year in the making. It was a herculean effort conceived by the Allied powers to convince Adolf Hitler and the German Armed Forces High Command of where a mainland invasion of Europe would occur. Operation Bodyguard's intent was to convince Hitler that an invasion was imminent, but it would take the Allies until the spring of 1944 to build the combat power required to attack into Europe. This, in conjunction with a massive, Allied bombing campaign helped legitimize to German intelligence that the attack was focusing north on Pas de Calais, France. The intercepted messages ensured that Germans were not massing combat power on the true landing sites at Normandy. Operation Fortitude was designed to deceive the Germans on the timing and location of the Allied invasion. The messages German intelligence received indicated that the invasion would take place in the North, first through Norway and onward to eventually convince the Swiss to join the Allies and allow forward basing to stage for the invasion of Berlin. However, the main attack would be focused on Pas de Calais, and all the preparation and building of combat power were executed to look like it would be the course of action the Allies would choose for invasion.<sup>12</sup>

World War II is replete with examples of Americans using deception to gain advantages over the Axis Forces. Facing a peer enemy in the Germans and Italians during World War II, the lessons learned from the past were painfully but quickly relearned, and, once again, deception gained favorability among military leaders. Perhaps most

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<sup>12</sup> Latimer, *Deception in War*, 101.

notably is the 23rd Headquarters Special Troops. Known informally as the Ghost Army, this unit was specifically created by General Marshall to deceive the Germans into thinking the Americans had large fighting forces where there was none. The mix of artists, actors, fashion designers, radio operators, and some engineers proved to be successful masters of deceptions that played crucial roles in the Twelfth Army's plans. Their efforts saved thousands of American lives, particularly in the Viersen Operation, where the Ghost Army performed a feint across the Rhine, saving approximately 1,300 lives from heavy machine gun and artillery fire. The ruse was so effective that when the real divisions they were imitating attacked miles upriver, they were met with bewilderment and confusion from the German army.<sup>13</sup>

After World War II, military deception again fell out of popularity. As the United States emerged as a world power, American foreign policy shifted to portray itself as an honest, hard-working nation built on solid morals and ethics. The lessons previously cultivated throughout two world wars to deceive enemies again slowly faded away and would be forgotten until the Korean War.

Being an advocate for deception tactics in World War II, General MacArthur eagerly incorporated deception into his most successful operations. Operation Chromite, General MacArthur's plan to conduct an amphibious assault to stop the North Korean People's Army (NKPA) from invading the south included an elaborate ruse to confuse the enemy of where the United States would strike. US Forces staged false raids 105 miles south of Inchon the small port town of Kunsan two weeks before the main invasion.

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<sup>13</sup> Jack Kneece, *Ghost Army of World War II* (Gretna, LA: Pelican Publishing Company, 2001), 11-25.

The plan was to have the enemy focus on the town by conducting bombing missions, laying the groundwork that typically signaled a US invasion, then publicly showcasing Marines and troops receiving briefings on tidal information and soil conditions. Finally, unique equipment was brought forward with an ad hoc Special Operations Company whose mission was to create an elaborate scene where the forces appeared more abundant than perceived. These feints at Kunsan and two other equally viable landing options at Samch'ok and Chinnampo led to general confusion for the NKPA that resulted in the slow response at Inchon, where the main invasion finally took place.<sup>14</sup>

Strategic-level deception operations were not practiced during the Viet Nam War. Due to the unfamiliar guerilla-style warfare, small unit deception became the dominant form of deceit on the battlefield. These missions led commanders to employ deception at the tactical level to gain significant advantages over the Viet Cong (VC). With many rules of engagement restrictions, American fighter pilots needed to find creative ways to engage their well-hidden enemies. North Vietnamese MiG-21s were outmaneuvering and causing devastating losses for the US Air Force's F-105 bomber fleet in 1967. The Seventh Air Force's restrictive policy of engaging enemy fighters only when pilots received visual confirmation and forbiddance of bombing airfields were due to the rules of engagement agreed upon between the Nations, something the VC pilots understood well and exploited. The F-105 fighter-bombers were the Vietnamese favored targets due to their slow-moving, restrictive flight patterns but refused to come out of their airfields when the more maneuverable and powerful F-4 Phantoms were flying in escort.

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<sup>14</sup> Whaley, *Stratagem Deception and Surprise in War*, 448.

Operation Bolo was devised to counter that MiG threat. The plan used the restrictive flight patterns and radio frequencies that the North Vietnamese People's Air Force (VPAF) interpreted as F-105 bomber signatures to their advantage. F-4 fighters were equipped with the same F-105 radio systems and would fly the same flight patterns, airspeed, and altitude as the bombers, effectively imitating the slower aircraft's vulnerabilities. This mimicry lured the VPAF MiG fighters in the air where, upon visual confirmation, the F-4 phantoms would use their superior maneuverability and speed to engage the aircrafts. The deception resulted in seven destroyed aircraft of the VPAFs reported sixteen in one day.<sup>15</sup>

These deception tactics endured and were covered extensively in the Army's Field Manual (FM) 90-2, *Battlefield Deception*, published in 1988, where the military stressed the use of tactical deception. Many Viet Nam veterans who used small-unit deception continued to practice the skill leading to some benefits in Operation Just Cause to shape operations.

Operation Just Cause in 1989 used scheduled procedures against the Panamanian Defense Force (PDF) to condition them to see routine American exercises during the preparation phase of the operation. A Company, 1st Battalion, 7th Special Forces Group (Airborne), along with 3rd Battalion already stationed in Panama, used this tactic to great effect to get Soldiers to predetermined positions to await the beginning of the invasion. 3rd Brigade, 7th Infantry Division already conducting Peacekeeping missions in Panama,

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<sup>15</sup> Spencer Beatty and Matthew DiRisio, "Vignette 2: Operation BOLO," in *Lessons Learned Battlefield Deception: From Alexander the great to Norman Schwarzkopf* (Madison, WI: Mentor Enterprises, 2018), 22.

used their movements to set themselves in predetermined positions as well. Routine movements lulled the PDF into complacency and confused General Noriega's Forces when the invasion took place.<sup>16</sup>

The last great strategic deception was planned in the 1991 invasion of Kuwait during Operation Desert Storm. The operation displayed all the deception principles, and with US Central Command's (CENTCOM) support, the plan to deceive Saddam Hussein and his Republican Guard Force Command (RGFC) worked very effectively. Faced with superior numbers and well-defended positions, General Norman Schwarzkopf devised a plan to convince Saddam that the main attack force would come from the Persian Gulf in the East.

Even as successful as these operations were, they have not been convincing enough for the US Army to adopt deception as a standard practice in modern American Army tactics. As America crossed into the 21st century and declared war on terror, counterinsurgency operations (COIN) took precedence and left no time to plan, train, and equip deception plans for conventional forces. Tactical deception became tasks the special operations community would conduct, feinting attacks on villages or demonstrating false insertions into enemy territory. Civil-military relations became the priority, and the US Government did not want deception to be uncovered as it mended fragile relationships with the local populace. As a result, only very few senior leaders

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<sup>16</sup> Roland Cole, *Operation Just Cause, The Planning and Execution of Joint Operations in Panama February 1988- January 1990* (Washington, DC: Library of Congress, 1995), [https://www.jcs.mil/Portals/36/Documents/History/Monographs/Just\\_Cause.pdf](https://www.jcs.mil/Portals/36/Documents/History/Monographs/Just_Cause.pdf).

today remember the employment of deceptive tactics in their training, and even fewer remember how to plan for it effectively.<sup>17</sup>

Being recursively relegated to the annals of history, the art of deception's favorability fluctuates in the minds of military leaders. With the increase of advanced technology, the rigid structure of our modern military, and the challenges associated with execution, leaders usually do not consider employing deception in their planning. The lack of experience, training, resources, classification authority, restrictive permissions, and limited understanding underestimates the value deception can bring to their success and would deter any commander trained to look for a quick, decisive victory. Current doctrine indicates that the Information Operations, Electronic Warfare, Intelligence, and Engineer officers all have a responsibility to plan for deception operations, but this presents a set of challenges.<sup>18</sup> First, these planners do not consistently practice or are not allowed to employ deception tactics enough to be proficient. Second, military commanders are not formally trained to think about using deception in their decision-making process, leading to disinterest and unwillingness to accept the risk. Third, little evidence suggests that units at the tactical level have the means and training to employ physical deception such as dummies, decoys, and false battle positions effectively and have been left with rudimentary knowledge to employ camouflage. Lastly, there is no position trained to understand and weave the three means of deception (physical,

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<sup>17</sup> MAJ Christine A. Mau, "Military Deception in Counterinsurgency Operations" (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2009), 7.

<sup>18</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-13, *Information Operations* (Washington, DC: Army Publishing Directorate, 2016), 1-14.



technical, and administrative) capabilities together at the brigade level, creating a gap of understanding and employment, further perpetuating the disuse of tactical deception. As the Army focuses again on Large Scale Combat Operations (LSCO), the art of deception should find relevance and permanency once again in our military culture to enable the commander to take advantage of all their tools that provide an advantage against the enemy.

### Problem Statement

The Army has used military deception in every major campaign since its inception. Military authors conclude that practicing the art of deception leads to a marked advantage over the enemy. Deception, as noted in FM 3-13.4, *Army Support to Military Deception*, published February 2019, can be applied to all levels of warfare and can be conducted at any phase of the operation. The problem is that the Army has focused on counterinsurgency operations for the past twenty years and has lost much of the art and science of deception due to a loss of focus and training. As the Army pivots back to LSCO, deception can be a powerful force multiplier the commander has to maintain their advantage in a Multi-Domain environment.

The Army recently published a new field manual addressing the topic of military deception. Before that, for over forty years, the doctrine for deception remained unchanged. The Army has broken down what was once a single manual describing deception operations and has split the technical means of deception over two functional areas, Information Operations (IO) and Electronic Warfare (EW). Physical deception is covered in one chapter of the Engineers manual, Army Techniques Publication (ATP) 3-37.2, *Survivability Operations*, and brief mentions of administrative deception are present

in Army Doctrine Publication (ADP) 3-0, *Operations*. There is no assigned position qualified to understand and implement all three means (physical, technical, and administrative) of deception effectively at the tactical level. Having little experience in training, planning, and assessing tactical deception operations, it seems doubtful the Army can leverage opportunities that deception offers to employ during Division field exercises or Combat Training Center (CTC) rotations, let alone during LSCO.

As the Army transitions back to LSCO, tactical leaders need to be capable of applying the principle of war known as surprise. According to ADP 3-0, *Operations*, to surprise is to “Strike at a time or place or in a manner for which the enemy is unprepared.”<sup>19</sup> Commanders need to be proficient in deceiving the enemy to save time, equipment, personnel, and most importantly, win engagements, battles, major operations, and campaigns. Retired field manuals contain detailed planning considerations for the employment of physical deception means such as dummies and decoys. Currently, there is no doctrine dedicated to employ these techniques and only one chapter that mentions camouflage and concealment in ATP 3-37.34, *Survivability Operations*.<sup>20</sup> The risk of not fully understanding how to use deception against our enemies and how our enemies use deception against us could be devastating for the Army and cause unnecessary loss of life and equipment.

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<sup>19</sup> Headquarters, Department of the Army (HQDA), Army Doctrine Publication (ADP) 3-0, *Operations* (Washington, DC: Army Publishing Directorate, 2019), 2-1.

<sup>20</sup> Headquarters, Department of the Army (HQDA), Army Techniques Publications (ATP) 3-37.34, *Survivability Operations* (Washington, DC: Army Publishing Directorate, April 2018), 6-1 - 6-26.

### Purpose of the Study

The purpose of this study is to determine how tactical units, division and below, should employ deception in a multi-domain environment when conducting LSCO. It aims to identify how the Army can improve its organization, training, and leadership techniques to enable effective tactical deception against expected threats. This study will also examine our current pacing threats, Russia and China, to understand how they would use deception tactics in potential conflict. This study also aims to identify current gaps in our Army doctrine and address what capabilities from the previous doctrine should be reapplied to a modern LSCO environment. Finally, this study aims to contribute to the vast body of knowledge regarding military deception.

### Primary Research Question

How can the Army improve organization, training, and leadership to enable effective tactical deception against expected threats?

### Secondary Research Question

How do our pacing threats (China and Russia) view deception compared to the United States, and how would they use deception tactics during conflict?

### Tertiary Research Question

What capabilities from previous deception doctrine should be re-applied and updated at the tactical level to use in a modern LSCO environment?

### Methodology

This study will primarily use the case study, qualitative method to research tactical deception. According to John Creswell, author of *Qualitative Inquiry and*

*Research Design: Choosing among Five Approaches*, this research method “typically gathers multiple forms of data, such as interviews, observations, and documents, rather than rely on a single data source. Then, the researchers review all data and make sense of them, organizing them into categories or themes that cut across all the data sources.”<sup>21</sup> This research will primarily focus on a capabilities-based assessment, where it will outline perceived gaps the Army faces to conduct deception at the tactical level effectively. The secondary research method in this study will use previous doctrine, written literature, and thesis that have been produced in past studies to answer how our pacing threats view deception and how might they use it against their adversaries and why our Army does not use deception as another tool to achieve overmatch with a near-peer enemy. The tertiary research question will explore what capabilities from previous doctrine are currently missing and what the Army could possibly revise to implement again.

### Assumptions

For the purposes of this study, it is assumed that the reason why military commanders do not use deception to their advantage is due to deficiencies in training and leader development, lack of deception-specific equipment and materiel, and difficulty in obtaining approval to employ deception.

Since the knowledge of military deception is predicated on secrecy and surprise, the author assumes that there is sensitive information on deception preventing

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<sup>21</sup> John Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (Thousand Oaks, CA: Sage Publications, 2007), 35-50.

commanders' access to resources necessary for training. Furthermore, as deception is not a routine task conventional forces practice, commanders that operated most of their careers in a COIN environment did not need to use deception and would not understand how to employ it.

The author also assumes that, based on how the Army is trained to win quick, decisive battles, commanders would view the planning and employment of deception tactics as a slow, labor-intensive build with little payoff, based on the amount of time it takes to craft a deception story, follow it to its conclusion, and terminate its operations.

Finally, the author assumes that other branches of service use and have their versions of deception, including the Special Forces Community; however, due to the sensitivity of the topic, most of their body of knowledge is classified and will focus more on small-unit deception tactics that is incompatible with the conventional Army.

### Limitations and Delimitations

Due to the nature of deception and the secrecy it demands, this thesis will only focus on what is available at the unclassified level of Army knowledge. This thesis will focus on open-source documents, published military field manuals, and books regarding past attempts to revive the art of deception. This delimitation will allow for the widest dissemination possible within the military community.

This thesis will focus its scope to provide solutions to the conventional Army and does not focus on other branches of the military or specialized units such as the Special Forces community. The primary research question focuses on how the Army can improve organization, training, and leadership to enable effective tactical deception against expected threats. The Army's planning with other departments and instruments of

national power to achieve strategic deception plans is out of the scope of this thesis. The subsequent research questions will focus on understanding our pacing threats currently stated in the National Military Strategy published in 2018 and rediscovering capabilities from past doctrine that could be re-applied to LSCO.

### Definitions and Terms

The following definitions and terms will provide clarity and an understanding of concepts to the reader:

Army doctrine: Fundamental principles, with supporting tactics, techniques, procedures, and terms and symbols, used for the conduct of operations and as a guide for actions of operating forces, and elements of the institutional force that directly support operations in support of national objectives.<sup>22</sup>

Capability: The ability to achieve a desired effect under specified standards and conditions through a combination of means and ways to perform a set of tasks.<sup>23</sup>

Capability-Based Assessment (CBA): The analysis portion of the Joint Capabilities Integration and Development System (JCIDS) process. The CBA provides

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<sup>22</sup> Headquarters, Department of the Army (HQDA), Army Doctrine Publications (ADP) 1-01, *Doctrine Primer* (Washington, DC: Army Publishing Directorate, July 2019), July 2019.

<sup>23</sup> Chairman of the Joint Chiefs of Staff (CJCSI), CJCSI 5123.01H, *Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)* (Washington, DC: Joint Staff, 2018), GL-7, <https://www.jcs.mil/Portals/36/Documents/Library/Instructions/CJCSI%205123.01H.pdf?ver=2018-10-26-163922-137>.

recommendations to pursue a material or non-material solution to an identified capability gap that meets an established capability need.<sup>24</sup>

Capability Gap: The inability to execute a specific course of action. The gap may be the result of a no existing capability, lack of proficiency or sufficiency in an existing capability solution, or the need to replace an existing capability solution to prevent a future gap.<sup>25</sup>

Decoy: An imitation in any sense of a person, object, or phenomenon intended to deceive enemy surveillance devices or mislead enemy evaluation.<sup>26</sup>

Deception story: A scenario that outlines the friendly actions that will be portrayed to cause the deception target to adopt the desired perception.<sup>27</sup>

Demonstration: In military deception, a show of force similar to a feint without actual contact with the adversary, in an area where a decision is not sought that is made to deceive an adversary.<sup>28</sup>

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<sup>24</sup> Joint Chiefs of Staff (JCS), Force Structure, Resources, and Assessments Directorate (JCS J-8), *Capabilities Based Assessment (CBA) User Guide*, version 3 (Washington, DC: Department of Defense, March 2009, <https://acqnotes.com/wp-content/uploads/2014/09/Capabilities-Based-Assessment-CBA-Users-Guide-version-3.pdf>).

<sup>25</sup> Joint Chiefs of Staff (JCS), *Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS)*, (Washington, DC: Department of Defense, 2018), GL-15, <https://www.acq.osd.mil/jrac/docs/2018-JCIDS.pdf>.

<sup>26</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-13.4, *Army Support to Military Deception* (Washington, DC: Army Publishing Directorate, 2019), 1-12.

<sup>27</sup> *Ibid.*, 2-10.

<sup>28</sup> *Ibid.*, 1-7.

Diversion: The act of drawing the attention and forces of an enemy from the point of the principal operation; an attack, alarm, or feint that diverts attention..<sup>29</sup>

Electronic Warfare (EW): Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy..<sup>30</sup>

Feint: In military deception, an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and/or time of the actual main offensive action..<sup>31</sup>

Information-related capability (IRC): A tool, technique, or activity employed within a dimension of the information environment that can be used to create effects and operationally desirable conditions.

Military deception (MILDEC): Actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision-makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission..<sup>32</sup>

Military information support operations (MISO): Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments,

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<sup>29</sup> HQDA, FM 3-13.4, 1-7.

<sup>30</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-12, *Cyberspace and Electronic Warfare Operations* (Washington, DC: Army Publishing Directorate, 2017), 7-4.

<sup>31</sup> Joint Chiefs of Staff (JCS), Joint Publication (JP) 3-13.4, *Military Deception* (Washington, DC: Department of Defense, 2017), I-9.

<sup>32</sup> *Ibid.*, GL-4.



organizations, groups, and individuals in a manner favorable to the originator's objectives.<sup>33</sup>

Ruse: In military deception, an action designed to deceive the adversary, usually involving the deliberate exposure of false information to the adversary's intelligence collection system.<sup>34</sup>

Tactical deception (TAC-D): An activity planned and executed by, and in support of, tactical-level commanders to cause enemy decision-makers to take actions or inactions prejudicial to themselves and favorable to the achievement of tactical commanders' objectives.<sup>35</sup>

### Chapter Summary

This introductory chapter provided the necessary background to understand that deception, whether strategic or tactical, has been used to overcome a numerically superior or overwhelming enemy force. Deception is a human trait that has been used to ensure our survival and will continue to be a part of human development so long as we have the ambition to prevail over our environment. As the military has continued to apply the art of deception in warfare, this capability has proven to be a staple tactic for the future. The disenchantment of deception through periods of peace is only equal to the interest and prominence of the art in times of war. This chapter outlined the purpose of this thesis, its problem statement, scope, assumptions, and limitations necessary to focus the research.

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<sup>33</sup> JCS, JP 3-13.4, II-5.

<sup>34</sup> HQDA, FM 3-13.4, 1-7.

<sup>35</sup> Ibid., 1-2.

Chapter 2 will outline the literature review of various Army Doctrine from the past through the present and will explore various military authors on how they viewed the importance of military deception for future use. It will also explore many books, thesis, monographs, and white papers to understand what military leaders have thought about the resurgence of this capability.

## CHAPTER 2

### LITERATURE REVIEW

#### Introduction

The purpose of this study is to determine how the Army can improve its organization, training, and leadership to enable effective tactical deception against expected threats, compare our current pacing threats view of deception with our own, and examine previous deception doctrine for lost capabilities to apply at the tactical level for the modern LSCO environment. It will begin by using an abbreviated capabilities-based assessment to identify current gaps regarding tactical deception; then this work will focus on our current pacing threats, China and Russia, to examine how deception plays a role in their armies and to what extent they find value in using it against US forces. By comparing different perspectives, it may yield an answer as to why the US Army is so averse to using deception on a regular basis. Last, the study will provide a comprehensive review of past doctrine to determine what capabilities should be reapplied to TAC-D to use in a modern LSCO environment. This literature review covers many sources, including current and historical documents, past thesis and monographs, and prominent military historians to ensure a complete understanding of how deception's history has evolved in our military and how the military has viewed deception in the past, not just in theory but in practice.

The previous chapter established a brief historical introduction on when deception played a vital role throughout US Army warfare. It has greatly assisted our military leaders in times when the Army was not the best equipped or poorly trained, and it showcased when America, as a superior fighting force, continued to use deception to

enhance its combat power against the enemy. It also highlighted this thesis' problem statement as the US Army pivots back to LSCO. Assumptions, limitations, delimitations, and secondary and tertiary research questions were also introduced to shape the focus of the thesis.

The literature review will analyze prominent military authors, past research papers, and historical doctrine to understand what literature has already been published and how this thesis can contribute to the professional body of knowledge. This chapter will also cover various books, journal articles, and case studies to understand where deception fits in the military. Finally, this chapter will summarize the research and provide a conclusion for why tactical deception deserves a renewed focus as the Army shifts back to LSCO in a multi-domain environment.

#### Where does deception stand today?

Deception has had an incongruous history with the US Army. One of the most prominent writers on military deception, Dr. Barton Whaley, writes, "Deception is one of those odd strategic techniques of war, like psychological warfare, that seems fated to cycles of loss and reinvention despite being both older than history and international."<sup>36</sup> It seems that he is not alone in his conclusion. B. H Liddell Hart had a similar mindset when writing his book, *Strategy*. In analyzing World War I, he concludes that relearning what he called the indirect approach, surprise can be used to achieve victory over the enemy by placing them off balance before you strike. "This idea of the indirect approach is closely related to all problems of the influence of mind upon mind- the most influential

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<sup>36</sup> Whaley, *Stratagem Deception and Surprise in War*, 2.

factor in human history. Yet, it is hard to reconcile with another lesson; that true conclusions can only be reached, or approached, by pursuing the truth without regard to where it may lead or what effect it may be.”<sup>37</sup> In his other book, *The Strategy of Indirect Approach*, Hart synthesizes many of Sun Tzu’s tactics to understand how World War I was fought and attempts to showcase how major campaigns used the indirect approach to achieve victory over the enemy.<sup>38</sup>

Deception, or more commonly referred to as surprise by older doctrine, is commonly referred to as the ultimate form of warfare. Sun-Tzu, a famous military general and strategist, wrote one of his most quoted verses that many academics and thinkers who periodically revive the subject of deception in the military love to paraphrase, “all warfare is based on deception.”<sup>39</sup> The many adages espoused in a work over 2,500 years old were just as applicable then as they are today.

Our most revered Western military leaders also have praised the tactical advantage of deception as vital for victory. Even Carl von Clausewitz, a staunch proponent of the direct approach to warfare, writes that surprise is indispensable to basic operations in *On War*. In his third book, he writes that it is inconceivable to gain superiority at the decisive point without surprise in some sort of role. If executed correctly, surprise can be used in both the offense and defense, leading the army to

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<sup>37</sup> B. H Liddell Hart, *Strategy* (New York, NY: First Meridian Printing, 1991), xx.

<sup>38</sup> B. H Liddell Hart, *The Strategy of Indirect Approach* (Russel Square, London: Faber and Faber Limited, 1967).

<sup>39</sup> Sun Tzu, *The Art of War*, trans. Ralph D. Sawyer (Chicago, IL: Project Gutenberg, 2015), 24.

benefit from its psychological effects of rendering the enemy incapable of making coherent decisions.<sup>40</sup> However, Liddell Hart would constantly conclude that the indirect approach fell short when faced with an equally cunning and powerful opponent and would need to assert that using this approach was not always the general method to conduct war. This conclusion is echoed through our military references and reflected in our politics as we integrate more with our allies. As we enter the information age, intelligence becomes the primary source of combat power on the battlefield. Policy and military objectives become synonyms for each other, and the control of intelligence and information becomes a much more prioritized endeavor.

Technology has become a catalyst in the way modern warfare is fought. Surprise can come in the form of new equipment to gain a tremendous advantage that could determine the outcome of the war. This was not possible prior to the world wars, where the speed and tempo limited the mobilization of massive quantities of troops. These large formations would lend themselves to observation from the enemy and uncover an Army's intent. Since World War II, Michael Handel writes that stronger armies, like the US Army, tend to lack the "natural incentive" to conduct tactical deception as they feel like they can decisively win without it.<sup>41</sup> However, he argues that with larger forces, they must make a conscious effort to exploit the full advantage of surprise to achieve their

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<sup>40</sup> Carl von Clausewitz, "Chapter 9 Surprise," in *On War* (Princeton, NJ: Princeton University Press, 1976), 198-201.

<sup>41</sup> Michael Handel, *War, Strategy, and Intelligence* (Totowa, NJ: Frank Cass and Company Limited, 1989), 401.

objectives with minimal cost to the force.<sup>42</sup> Along with Barton Whaley, he concludes that “forgoing the use of deception is tantamount to undermining one’s own strength.”<sup>43</sup> Using deception effectively can be the deciding element if all other parameters of both armies are equal. This was highlighted in historical field manuals the military published in the 1940s and again reemphasized with the Army’s big push to revive the art of deception in the 1980s.

After victory in World War I, the appetite for deception techniques and training slowly began to dwindle. Nevertheless, the Army began to capture lessons from the Great War in Training Regulation (TR) 195-45, *Fortification and Camouflage for Artillery*, published 3 February 1926 and later with TR 195-40, *Fortification and Camouflage for All Arms*, 15 June 1926. These two preliminary texts emphasized using deceptive techniques to protect and hide the military’s most expensive equipment using camouflage and earthen materials from aerial reconnaissance and ground troop movements. FM 5-20, *Camouflage*, an engineer field manual published in 1940, was an effort to preserve the tactics, techniques, and procedures used to deceive enemy forces. The emerging technology in World War I and the Interwar period had the Army reconsider how to use different synthetic materials, paints, and fishnets, combined with natural materials, such as leaves, rocks, and branches to better protect troops from line-of-sight engagements (coined the direct method of observation) and from photographs (termed the indirect method) to preserve combat power. The manual described the roles and responsibilities

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<sup>42</sup> Handel, *War, Strategy, and Intelligence*, 400.

<sup>43</sup> *Ibid.*, 362.

the engineer played in creating, distributing, emplacing, and assessing camouflage equipment to the different branches and emphasized the importance of using concealment techniques from aerial photography and protection of ground vehicles on routes through the area of operation. With the advent of the automobile and its use in transporting troops and equipment, this update to deception included a weighted emphasis on creating false routes and concealment of main lines of communication used as supply routes. The manual also provided a general outline for the program of instruction of a camouflage school, where Engineer officers would learn techniques, tactics and focus on studying aerial photography to discern hidden and fake objects presented. These tactics and techniques were used during the Korean War, where survival depended on how well you could hide from enemy patrols and artillery bombardments.

Deception underwent another change in its primary manual, FM 5-20, changing the manual name to *Camouflage: Basic Principles and Field Camouflage*, published in 1959. Lessons learned from the war included the need to protect airfields, landing sites, and aircraft from bombers and thus, included a lengthy chapter on how to obscure these assets from the air to mask where engineers were building forward airfields for rapid deployment. This new manual would also improve on deception techniques used in different biomes.

FM 31-40, *Tactical Cover and Deception*, published in 1967, once again updated the techniques and procedures to reflect the advances in technology and focused more on the operational techniques to use while in the offense and defense. The manual would give several examples of how the enemy would be deceived and their expected reaction if the deception was successful or if it failed, informing staff officers of their options if they



encountered either scenario. FM 31-40 would also introduce additional measures, including electronic, sonic, and olfactory deception, signaling that both sides kept refining their techniques to deceive each other over the decades and were committed to master the art of deception to gain a marked advantage over their adversary.

FM 90-2, *Battlefield Deception*, active from 1988 to 1997, was the Army's most considerable effort in modern times to highlight the importance of deception and encourage commanders at all levels to embrace the capability. Recognizing its failure to focus more on deception techniques and realizing that many deception-related skills were in atrophy, the Army attempted to dispel myths and excuses as to why deception was not more widely used and encouraged commanders to keep practice using deception during peacetime. The doctrine outlines the use of deception at the strategic, operational, and tactical levels and emphasizes how essential it is to the commander to achieve their mission. It explained how tactical commanders should use deception in the close fight, a term that still applies to US Army operations today. Much like it does today, the doctrine recognizes that deception is not an end but a means to an end. It should not be the primary effort and instead should reinforce the main effort. It recognizes that the Operations officer (G3/S3) of the staff should plan for deception to generate the maximum amount of options for the commander. Finally, the doctrine also outlined and provided a deception training checklist and evaluation matrices to ensure that effectiveness was measured and that the deception plan was successfully executed. The checklists were tailored to the Operations and Intelligence sections to ensure the plan was synchronized among the staff and determine if the plan was successful. The previous FM 90-2, published in 1978, included an outline on applying deception to field exercises and

would detail its use during offense, defense, retrograde and relief-in-place operations. That manual did not include a checklist for staff planners; however, an update and synthesis of these two manuals would be beneficial to today's Army to begin to operationalize tactical deception.

The research conducted by Mark Lloyd focused on how deception has changed since the Viet Nam era, confirms that deception is still useful. In his research, Lloyd studies how deception contributed to psychological operations during Viet Nam. With the media having access to combat information, the VC were able to manipulate the sentiments of the American public through different forms of media. The United States grossly underestimated the cunning of the VC and were slow to react to an enemy who had defeated French and Russian forces before them. The VC proved to be masters of psychological and deceptive operations, tactics that were considered "un-American." After the Pentagon's many failed attempts to use psychological operations to their advantage, it decided to rely on superior firepower to accomplish the mission, leaving stealth, subtlety, and subterfuge as tactics of the enemy.<sup>44</sup>

Even with the advent of media on the battlefield, the United States has been hard-pressed to censor its media. Lloyd's study found, however, that no country can afford to tell the truth in times of war, and the United States found creative ways to divert cameras away from important decisive points that could expose plans and formations to the enemy who watched those same media feeds. He studies this phenomenon through the lens of the Gulf War and showcases that although deception can still be used, it could be exposed

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<sup>44</sup> Mark Lloyd, *The Art of Military Deception* (Barnsley: Pen & Sword Books LTD, 1997), 162.

quicker to a media hungry for publicity. This inherent resolve for the Government to act according to “just” values has swayed battlefield policy on more than one occasion. This policy has also brought limitations.

According to Joint Publication (JP) 3-16, *Multinational Operations*, the United States has been part of multinational coalitions since Operation Desert Storm in 1991. Due to the US standing in the North Atlantic Treaty Organization (NATO), this will be the trend for the foreseeable future. It is incumbent upon current and future leaders to support and collaborate as part of a multi-national force. These operations could include various agencies of the US Government, departments, and nongovernmental organizations. The lessons learned of coordinating between foreign governments and military forces and conducting stability operations during COIN operations will serve to benefit the US Army when the focus shifts to LSCO.<sup>45</sup>

Planning for deception will need to be carefully considered and coordinated with allies. Since tactical deception plans are on need-to-know bases, coordination with varying allies is critical to maintaining operational secrecy and ensures that partner forces do not encumber the mission or reveal the carefully laid plans. Deception tends to be a double-edged sword that could damage the reputation we have with our Allies and cause deep divides that prevent us from achieving our goals if used unwisely or incorrectly. JP 3-13.4, *Military Deception*, published February 2017, highlights a section under legal support to military deception. It mentions how commanders must be careful if attempting to employ deception operations with international partners. Coordination efforts must be

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<sup>45</sup> Joint Chiefs of Staff (JCS), Joint Publication (JP) 3-16, *Multinational Operations* (Washington, DC: Department of Defense, March 2019), 1-1-1-2.

made to ensure compliance with international law, treaties, policies, and rules of engagement (ROE), further complicating the access to use deception in the current operating environment.<sup>46</sup>

This presents a barrier to our current doctrine which states that deception should apply to all levels of war, at all echelons, and during each phase of the operation.<sup>47</sup> In his book, *Stratagem: Deception and Surprise in War*, Whaley presents a snapshot analysis of how different armies viewed deception and how their military structure influenced their use of military deception in times of need. His book primarily consists of numerous case studies where he looks at how deception influenced the battle, which leads him to conclude that deception, when used and appropriately resourced, is proven to save lives, time, and equipment and help the commander accomplish his mission.

Doctrine, Organization, Training, Material, Leadership,  
Personnel, Facilities- Policy (DOTMLPF-P) Review

Jon Latimer's study on successful deception during World War II highlights that deception is best conducted with one central person in charge of the deception plan and with special staff included on a need-to-know basis. His study found that there has been a sharp decline in the use of tactical deception since the Viet Nam war due in part to the US perception of deception as beneath us.<sup>48</sup> This has resulted in today's military commanders' preference not to use the art of deception when conducting operations

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<sup>46</sup> JCS, JP 3-13.4, II-10.

<sup>47</sup> HQDA, FM 3-13.4, 1-1.

<sup>48</sup> Latimer, *Deception in War*, 300.

against enemy forces. In turn, it has made American leaders, especially in the intelligence community, susceptible to deception. Additionally, since leaders do not train in deception in their formative years, the tactic is often misunderstood and misallocated at the division and brigade levels. According to current doctrine, this is still the case in that the Army values central planning and control when conducting tactical deception. However, doctrine charges the Chief of Staff Plans (G5/S5) with leading the effort instead of an intelligence officer or another staff position to incorporate deception into planning.<sup>49</sup> Since training for military deception is specialized, the chief planner will likely have no idea how to employ a deception plan, leading to a more traditional approach to warfare. Latimer's book reveals that there is a wide gap in the way Americans use the Intelligence Preparation of the Battlefield (IPB) process when conducting their Military Decision-Making Process (MDMP) and "if anyone had an understanding of deception, especially the use of the Russian *Maskirovka*, it would seek to exploit this weakness."<sup>50</sup> This gap in doctrine is one of many the Army has with using tactical deception in LSCO.

Current FM 6-0, *Commander and Staff Organization and Operations*, published May 2014, outlines all the steps the staff takes to go through the MDMP process. This vulnerability still exists as there is no deliberate step in the process to check whether tactical deception would be feasible, suitable, or acceptable for the operation. The manual mentions military deception in the MDMP process only once, when creating the commander's Essential Elements of Friendly Information (EEFIs) and only in the context

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<sup>49</sup> HQDA, FM 3-13.4, 1-12.

<sup>50</sup> Latimer, *Deception in War*, 303.

of protecting and masking our assets, a task known as deception in support of operations security (DISO), which can be conducted with a published Operations Security (OPSEC) plan, which most units fail to do. The field manual also states that when commanders issue planning guidance by war fighting function, Movement and maneuver is where tactical deception is concentrated.<sup>51</sup> FM 6-0 does have a robust chapter pertaining to military deception but states that although military deception should be considered in all activities of the operations process, there appears to be no step in either planning processes to determine whether deception is suitable for the operation. It only states that the “military deception officer presents the running estimate for deception during the mission analysis briefing.”<sup>52</sup> As it states, there should be a military deception officer assigned to incorporate the deception plan early in the planning process.

Current doctrine states that at lower echelons (division and below), the Command Military Deception Officer (CMDO) is designated by the commander when necessary. It states that deception is not a permanent tactic and may suffer from atrophy if not used regularly. The doctrine suggests that the staff member designated should understand the use of information-related capabilities, as these are most of the means that the commander is likely to use. However, most of the responsibilities lie with coordination with various staff leads to support a tactical deception plan.<sup>53</sup> Instead of assigning a staff

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<sup>51</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 6-0, *Commanders and Staff Organization and Operations* (Washington, DC: Army Publishing Directorate, May 2014), 9-15.

<sup>52</sup> *Ibid.*, 11-5.

<sup>53</sup> *Ibid.*, 2-22.

member the position of CMDO, it should fall more on a staff position to take the lead of the deception planning at the echelons below the Division level.

According to ATP 3-13.1, *The Conduct of Information Operations*, dated 2018, the IO officers are the members of the Armed Forces most likely to be assigned as the CMDO. However, it seems that this is not clearly stated. In a passage, it states that the IO officer leads the IO meeting, in which they expect the CMDO to participate. It is unclear if there would be more than one IO officer in the Division; however, doctrine states that IO officers are assigned to Aviation and Field Artillery brigades and none to Maneuver units. According to doctrine, these officers are afforded the opportunity to attend the Army's Military Deception Planners (AMDP) course, conducted by the 1st IO Command. The course's prerequisites, however, do not exclude any other specialized officers and only request that soldiers that are sent to the course be assigned by the commander to plan deception for the organization.<sup>54</sup> This training focuses on the deception planning cycle and covers proven tactics, techniques, and procedures. Army Doctrine seems to reveal another gap in tactical deception: the lack of training in the physical means of deception, which was encouraged post Viet Nam as noted in FM 90-2, *Military Deception*, dated October 1988.

After Viet Nam in 1978, the US military showed an interest in retaining the lessons learned of deception by expressing its importance to commanders through the written doctrine. As stated in FM 90-2, *Tactical Deception*, dated August 1978, training

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<sup>54</sup> Headquarters, Department of the Army (HQDA), Army Techniques Publication (ATP) 3-13.1, *The Conduct of Information Operations* (Washington, DC: Army Publishing Directorate, February 2018), Appendix A, A-5.

for deception should be incorporated as a regular part of unit training. This manual explains to the commander, in simple terms, the benefits of training tactical deception would bring to their unit. It would further explain how commanders can use their field training exercises (FTXs) and command post exercises (CPXs). Although rudimentary, it did show an effort by the military to incorporate this training in routine exercises.<sup>55</sup> This manual would soon be superseded by another considerable effort of the military to incorporate deception.

The Army renamed FM 90-2 to *Battlefield Deception*, and published a new version in October 1988 in its second attempt to push deception to regularity and going so far as to admit that the Army has lost an art form that greatly assisted in the victories of past battles. The doctrine outlined three causes as to why deception is no longer planned. These included the focus on acquiring new technological capabilities, which forces low-cost solutions not to receive attention, the belief that modern technology has rendered deception to be too difficult to achieve, and that commanders would refuse to dedicate already limited assets to a deception plan. Together with the Department of Defense (DoD), the Army aimed to revitalize tactical deception and have commanders add the capability to their arsenal.<sup>56</sup> The new doctrine updated its methods in deception planning and would explain to the warfighter how to employ physical deception effectively, including dummies, decoys, and camouflage. One indicator that showed how

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<sup>55</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 90-2, *Tactical Deception* (Washington, DC: Government Printing Office, August 1978), 5-0.

<sup>56</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 90-2, *Battlefield Deception* (Washington, DC: Government Printing Office, August 1988), 1-3.



dedicated the Army was to incorporate it was the introduction of the Deception Evaluation Checklist, where it attempted to evaluate measures of performance against deception employment. This first step covered all the deception process to include an evaluation of the emplacement of dummies and decoys. As technology progressed and means to deceive became more sophisticated, more specialized sections in the military show the need to discuss deception in their doctrine.

As mentioned earlier, ATP 3-13.1 states that the IO Officer can be the lead for deception, as delegated by the G-5 Plans Officer. When no IO officer is available, the commander may assign any officer as the CMDO. According to current doctrine, the Officers most likely to go to the Military Deception Planners Course (MDPC) would be the IO or Intelligence Officer, though it is not mandatory for either of them. Electronic Warfare Officers also have an obligation to participate in tactical deception operations and receive instruction on using their skills for deception. Doctrine failed to produce a training program for physical deception after FM 90-2 was rescinded in 1997.

Additionally, after 1997, Military deception did not have an updated manual until the publishing of FM 3-13.4, *Army Support to Military Deception*, dated February 2019. Other supplemental manuals were still active in circulation, including FM 20-3, *Camouflage, Concealment, and Decoys*, dated August 1999, but were superseded by ATP 3-34.39, *Camouflage, Concealment, and Decoys*, dated November 2010, which was rescinded and compressed to chapter six in ATP 3-37.34, *Survivability Operations*, dated June 2013. To date, Army Doctrine Reference Publication (ADRP) 1-03, *The Army Universal Task List*, published 2015, Army Tactical Task (ART) 5.11, *Conduct Military Deception* and 5.11.1, *Plan Military Deception* contains the basic checklists to measure

when units are correctly planning for and executing deception, which resemble the measures of past doctrine. However, according to the Combined Arms Training Strategy (CATS) website, no Army unit is tasked to practice deception.

### Our Pacing Threats: Understanding our Adversaries

The research conducted by David A. Charters and Maurice Tugwell studies the East-West perspective of deception through their historical context. In their study, they observe how the culture of both Russia and the United States influenced the way their militaries, through their governments, practice the art of deception. Russia's centrally controlled government lends itself to institutional secrecy, which permeates into different facets of the Russian culture, most notably, its military. This mentality can presume that it would give Russia an advantage in the use of deception. Its isolated nature contrasts with America's open and democratically free paradigm. This dynamic lends our culture to be very flexible regarding the use of information and can "absorb, dilute, or reject influence" that adversaries need to deceive our different social systems.<sup>57</sup> Our military reflects this nature as well and is structured to question odd or convenient truths. Eastern cultures cannot plan long-term deception operations and regularly feed consistent and ever-evolving information uncovering false operations.<sup>58</sup>

The research conducted by Michael Handel to study the military's use of deception attempts to understand the Western reluctance to keep it as a routine military exercise. In his study, he conducts a deeper dive into the western way of war than David

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<sup>57</sup> Charters and Tugwell, *Deception Operations*, 320.

<sup>58</sup> *Ibid.*, 334.

Charters and Maurice Tugwell, explaining the western teachings of morality and ethics and how the age of chivalry continues to play a critical role in how officers are supposed to act. The conclusion can be drawn that the classes taught in the Command and General Staff College (CGSC) today conflict with the promotion of tactics such as deception. He further explains that by studying modern military strategists, there could be a common denominator to leaders whose proclivities lean to the use of deception. Mr. Handel found that countries that tend to practice deception during peace and war time are more likely to suffer the feeling of isolation as countries strive to seek peace and do not appreciate being taken advantage of.

This study agreed with David Charters and Maurice Tugwell in the general acceptance that countries who practice deception in times of peace ultimately do so to their detriment. While they may seem to gain a short-term advantage in the long term, it greatly hinders their ability to operate free of suspicion from other governments. His conclusion holds that totalitarian regimes have fewer worries in using deception to get to their ends, as they see “peace” as the transition period between wars of resources and ideology. This again contrasts with the Western way of government and, more specifically, the American way of war, where truth is paramount to hold strong alliances. Truth and reputation are factors to consider when using deception. One must be careful when using these tools as destroying any of these two could have more negative implications than what the deception plan aimed to accomplish.

Jon Latimer’s study into the American reluctance to accept deception provides a hypothesis as to how our culture is averse to use it as a viable stratagem. Throughout western civilization, the code of chivalry has played a central role in Judeo-Christian

thought. His study analyzes how the US military epitomizes the character of honor in combat and makes connections to its use throughout the last five major wars. Deception was heavily used during World War II only due to America collaborating with the British and observing the success they had in using the art against the Germans. Korea saw some use of deception as national policy began to change and the United States. His study also gives a comprehensive look into Viet Nam and explains how that era showed the sharpest decline in the use of military deception due to various factors such as miscataloging the enemy as the same fought in Korea, American over-reliance on technology and superior firepower, and American failed policies in Viet Nam. The VC would learn to use deception and subversion masterfully against US soldiers, which only sowed the seeds of division in the US military psyche. His conclusion states that these factors make the United States turn away when thinking about using tactical deception. He observes as Americans are raised in a culture where they demand direct solutions to problems, this would play a crucial role to dissuade the American commander to think about other alternatives.<sup>59</sup>

This contrasts with the way Russia and China view deception. His study analyzes Chinese and Russian culture to conclude that authoritarian regimes tend to see deception as another tool to use against friends and foes. Mao Zedong was a big proponent of the use of subterfuge and deception. His influence over the Chinese culture in Maoism would conclude that the modern Chinese culture would still practice his teachings and influences. Russian culture is also still influenced by Marxist-Leninist thought, as stated

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<sup>59</sup> Latimer, *Deception in War*, 101-128.

by Michael Handel and David Charters. Totalitarian regimes have natural proclivities to use tactical deception whenever possible.<sup>60</sup>

Jon Latimer's look into the information age and how the media plays a major part in today's wars is also an indication of US troops' reluctance to use tactical deception on the battlefield. His study validates the theory that America values credibility to a high degree among its allies and goes to great lengths to prevent damaging it. With this heightened awareness to practice integrity, as our profession deems it, tactical commanders would rather forgo deception and rather keep relying on technology and firepower to accomplish the mission.<sup>61</sup>

In his work, *The Soldier and the State*, Samuel Huntington best describes where the state of the military is. He writes that "The essence of objective civilian control is the recognition of autonomous military professionalism."<sup>62</sup> Simply stated, the civil-military relation works by the political body assigning the military the mission, derived from the military commander's suggestion. In practice, this is not the case. In what he calls "subjective control," civilian authority reduces military autonomy, leading to military commanders' limitations when conducting tactical operations.<sup>63</sup> This is evident as recently as the war on terror, where political objectives would shift during the

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<sup>60</sup> Latimer, *Deception in War*, 129-159.

<sup>61</sup> Ibid., 294-311.

<sup>62</sup> Samuel P. Huntington, *The Soldier and The State* (Cumberland: Harvard University Press, 1981), 464.

<sup>63</sup> Ibid., 463.

administrations of several presidents, thus shifting and limiting the Army to what they could and could not do.

### Chapter Summary

This chapter reviewed the sources regarding the use of tactical deception through the history of the military. It showed how the military used deception to its advantage in times of great stress; however, this tactic still struggles to gain a solid foothold among American military tactics. It analyzed historical doctrine and compared it to the most recent versions to understand perceived gaps the US military must train for tactical deception in LSCO. Finally, it analyses how our pacing threats, Russian and China, view deception. This understanding demonstrates that if we do not know our enemies, they could take advantage of our vulnerabilities and leave us with a severe disadvantage.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### Purpose of the Study

The purpose of this chapter is to describe the methodology used to determine why the Army largely discontinued the use of tactical deception. As the focus of the Army changes from COIN Operations to LSCO, deception has received little attention. To remedy this problem, this thesis suggests recommendations for how the US Army can begin to incorporate deception at the tactical level to accomplish its mission. This thesis is only the latest exploration of why deception seems to ebb and flow with the US Army. Due to the scope and the nature of this topic, this thesis will answer the research questions using the qualitative method of research to gather from public sources and abstain from using sensitive or restricted material.

This study uses the qualitative method approach to understand why US Army leaders forgo the training and use of tactical deception. The qualitative research method is the best approach to study this topic in detail and answer why the Army does not regularly incorporate deception in training. This analysis helps uncover gaps the US Army currently possesses in organization, training, and leadership as it shifts its strategy from COIN operations to LSCO. More specifically, this study primarily uses the case study method to examine past doctrine and determine what can be reapplied when focusing on a LSCO environment. It will rely on the current information available to present recommendations to solve the US Army's current gap. To supplement the primary research question, a capabilities-based assessment will be used as the analytical method to identify gaps in the current Army structure using a truncated DOTMLPF-P

framework. Last, this section outlines the structure on which this research was formulated.

### Rationale for Research Type

According to Robert Yin, a case study has a two-fold definition, with the first defining the scope of a case study, “A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.”<sup>64</sup> The second part of the definition analyzes the technical aspect of the case study, “The case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as a result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result, benefits from the prior development of theoretical propositions to guide data collection and analysis.”<sup>65</sup> The case study method is designed to cover all aspects of data collection and analysis and presents a distinct advantage when addressing a “how” or “why” question. It will require the research to collect information available, analyze pertinent content, and interpret the reasons why tactical deception is rarely employed.

### Research Questions

To address the primary research question and determine how the Army can improve organization, training, and leadership to enable effective tactical deception

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<sup>64</sup> Robert K. Yin, *Case Study Research, Design and Methods*, 4th ed., vol. 5 (Thousand Oaks, CA: SAGE Publications. Inc., 2009), 52.

<sup>65</sup> *Ibid.*, 18.



against expected threats, this thesis will use a DOTMLPF-P framework to identify shortfalls in current Army doctrine. This method will outline where the Army presents perceived gaps to apply tactical deception when operating in a multi-domain environment during LSCO. It will also provide suggestions based on the research to what solutions could be applied to bridge the gaps as the Army shifts to conduct LSCO.

As mentioned in the introduction of this chapter, to answer the secondary research question, this study will address how our pacing threats (China and Russia) view deception compared to the US Army and its importance in their doctrine. The case study method will again be used to understand the psychological and sociological factors our pacing threats view the importance of deception and compare it to how the US Army views it to understand how our adversaries would employ it. It will be used to uncover underlying risks to the force if not addressed. Focusing on multiple studies on Russian doctrine will benefit this analysis by understating the adversary's mindset regarding deception and can conclude what the Army needs to counter this threat. Furthermore, acknowledging China as an emerging threat and researching their perception of the art of deception will distill what the US Army can do to protect itself from these two near-peer competitors. Finally, this thesis will examine US Army culture and attempt to understand why it sees the use of deception in warfare as an inferior tactic and not capitalize on its benefit.

The third research question will analyze the content of past and present doctrine, published professional works, and past thesis regarding the US Army's use of deception and conclude what past techniques and standards need to be reapplied to use again in a LSCO environment. It will compare how the US Army viewed deception when the

publications were in operation and attempt to answer when the Army degraded its interest in deception. The research will consist of data mining from multiple manuals to explain how deception was used in the past and assess how it can be used effectively in the future. It will require the author to collect information available, analyze pertinent content, and interpret why tactical deception is rarely employed.<sup>66</sup> This comparison will be used to conclude why the Army does not use tactical deception.

### Chapter Summary

This chapter explained the various methodologies and analysis this thesis focuses on to determine why the US Army does not use deception at the tactical level in a multi-domain environment during LSCO. As the Army shifts back to LSCO, these historical documents become invaluable and suddenly more relevant in understanding how tactical deception was used in the past and can be used as a basis to update current doctrine and understand forgotten tactics, techniques, and procedures. Using the capabilities-based analysis helps provide a framework to work with and address perceived gaps. It can determine what needs to be addressed at the organization and training level and provides an option to look at commercial-off-the-shelf equipment to add deception equipment to the Army's inventory. Finally, this chapter lightly explored the psyche of our pacing threats regarding using deceptive tactics to attempt to gain advantages over US forces in a multi-domain environment. Chapter 4 will distill the information to answer the primary thesis question on how the Army can improve organization, training, and leadership to enable effective tactical deception against expected threats.

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<sup>66</sup> Yin, *Case Study Research, Design and Methods*, 24.

## CHAPTER 4

### ANALYSIS

Chapter 4 contains the analysis of the challenges to apply tactical deception in LSCO drawn from the literature review and historical doctrine. This chapter uses the analysis to explore how the Army can improve organization, training, and leadership gaps that enable effective tactical deception against expected threats. This thesis will supplement the primary research question using an abbreviated capabilities-based assessment to identify gaps in the current Army structure using a DOTMLPF-P framework. Topics such as personnel, facilities, and policies will be addressed within the other topics as they support multiple observations. To answer the secondary and tertiary questions, the thesis uses the qualitative research method outlined in chapter 3 to gather multiple forms of data and analysis of literature to identify what capabilities and topics from previous deception doctrine should be reapplied and updated at the tactical level to use in a modern LSCO environment. This thesis intends to identify what deception capabilities the Army has lost from fighting a counterinsurgency conflict these last 20 years, why our military does not encourage the training of deception as a supplemental action to conserve combat power against its adversaries, and finally, to understand the American perspective when applying deception and how our adversaries differ from us.

#### Improving Organization, Training, and Leadership

Recursively relegated to history, the art of deception's interest fluctuates with leaders. Modern Army doctrine dictates that IO, EW, Psychological Operations

(PSYOP), Intelligence, and Engineer officers all have obligations to consider deception in their plan to support the operation. However, this presents a unique set of challenges.<sup>67</sup>

First, and most importantly, commanders and staff officers charged to plan and execute operations do not train in tactical deception as they advance in their military careers, leading to unfamiliarity and disinterest. Second, there is no current training, testing, and evaluation criteria used to measure the effectiveness of a deception plan and little doctrine that teaches how to employ the means of physical deception. The fieldcraft to employ dummies and decoys to confuse, deter, and confuse targets relies on the knowledge to combine assets that use the electromagnetic spectrum to deceive our adversaries.<sup>68</sup>

Lastly, there is no position assigned at the tactical level that understands how to weave all three means of deception without extensive training and communicate an effective plan down to the brigade level.<sup>69</sup> For tactical deception to function, units must use all of their resources to affect as many of the enemies' systems as possible to add validity to the deception story. At the tactical level, three types of deception means are available to employ: administrative, technical, and physical. These means can either be used singularly or in conjunction with one another to add credibility to the narrative. The administrative means of deception is defined as, "resources, methods, and techniques to convey or deny selected written, oral, pictorial, or other documentary information or

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<sup>67</sup> HQDA, FM 3-13.4, 1-13.

<sup>68</sup> The last Field Manual that referred to physical deception emplacement techniques was FM 90-2, *Battlefield Deception*, in 1988.

<sup>69</sup> HQDA, FM 3-13.4, 1-14.

signatures to or from the deception target.”<sup>70</sup> False manifests, incorrect maps, doctored photographs, made-up operations orders, and false themes and messages exclusively targeting enemy units and commanders are listed in this category. The technical means of deception are classified as “resources, methods, and techniques used to convey or deny selected information or signatures to or from the deception target.”<sup>71</sup> This category mainly consists of manipulating the electromagnetic spectrum, emission, sonic, acoustic signatures, or other forms of energy. Although it can be used alone, this means of deception is typically coupled with the last means to replicate units on the battlefield to confuse, distract or disrupt the enemy.

The last means of deception, physical deception, is defined as “resources, methods, and techniques used to convey or deny information or signatures normally derivable from direct observation or active sensors by the deception target.”<sup>72</sup> When thinking about deception and when employing TAC-D, this form typically comes to mind. False movements and exercises, dummies, decoys, false battle positions, and hidden equipment in the form of concealment and camouflage are defined in this category. The three means of deception are used throughout the analysis to emphasize that although there are personnel who have basic understandings of deception at the tactical level, it amounts to understanding one of the means and a nascent understanding of the other two. Officers assigned as the CMDO at the tactical level do not possess the

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<sup>70</sup> HQDA, FM 3-13.4, 1-12.

<sup>71</sup> Ibid.

<sup>72</sup> Ibid., 1-11.

knowledge or skill to employ the other forms of deception to lend tactical deception tactics the credibility needed to influence the enemy to their disadvantage.

The officers mentioned previously all have specialties that are involved with one or a combination of these three means of deception. Through professional military education and training, these officers learn to use their knowledge to weave the three means together at the tactical level. As the Army reverts to LSCO, the art of deception should be more prominently considered as a powerful means to conduct warfare in the modern environment. Today's Army's manuals describing the employment of deception are vague and decentralized, resulting in no interest to correctly assign a position at the tactical level the responsibility as a CMDO. With no champion for this position, leaders continue to receive no convincing reason to add TAC-D as a combat multiplier on the battlefield or show interest in adding it to their exercises.

### Doctrine

The latest Army doctrine published regarding military deception is FM 3-13.4, *Army Support to Military Deception*, dated February 2019. TAC-D, although introduced in previous doctrine, FM 90-2, *Battlefield Deception*, published October 1988, was never truly defined nor adopted when referencing the levels of warfare. Tactical deception is defined as “an activity planned and executed by, and in support of, tactical-level commanders to cause enemy decision-makers to take actions or inactions prejudicial to themselves and favorable to the achievement of tactical commanders’ objectives.”<sup>73</sup> One of the critical ways TAC-D differs from the overarching military deception term is that

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<sup>73</sup> HQDA, FM 3-13.4, 1-2.

the actions and requirements necessary for its employment only need to be tailored to the local commanders and not necessarily linked to the overall deception plan.

Tactical deception offers multiple options for commanders to exploit, gaining crucial advantages for their mission. Having staff members who are well-versed in the employment of the three means of deception can significantly improve the force's protection by obscuring critical vulnerabilities or influencing the enemy to commit resources to their disadvantage. This localized deception plan is intended to be short-lived and provides advantages against enemies in the tactical fight (corps and below). According to FM 3-13, *Information Operations*, published December 2016, IO is the proponent for all military deception as of 2006.<sup>74</sup> When IO officers are formally trained, they learn how to support MILDEC, not necessarily TAC-D, which creates a gap at the tactical level. MILDEC is defined as "actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision-makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission."<sup>75</sup> This action takes time, effort, and more resources than units concentrating on the close fight possess. The level of effort is conducted at echelons far above the tactical fight, which typically involves multiple echelons and authorizations. As stated in ATP, 3-13.1, *The Conduct of Information Operations*, published October 2018, IO officers have the training to synchronize multiple IRCs. IRCs are "a tool, technique, or activity employed within a dimension of

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<sup>74</sup> JCS, JP 3-13.4, II-1.

<sup>75</sup> *Ibid.*, I-1.

the information environment that can be used to create effects and operationally desirable conditions.”<sup>76</sup> According to doctrine, MILDEC is considered an IRC, and numerous military occupation specialties contribute to creating its effects.

EW officers play a significant role in the subject of technical means of deception. FM 3-12, *Cyberspace and Electronic Warfare Operations*, published April 2017, states that EW officers contribute to deception in the form of electronic attacks and electronic protection. These attacks involve “the use of electromagnetic energy, directed energy, or anti-radiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability.”<sup>77</sup> These actions can be taken defensively or offensively, depending on the target that will be affected. Notably, electromagnetic deception directly contributes to the capabilities tactical units possess to affect the enemy.

This deception “is the deliberate radiation, re-radiation, alteration, suppression, absorption, denial, enhancement, or reflection of electromagnetic energy in a manner intended to convey misleading information to an enemy or enemy electromagnetic-dependent weapons, thereby degrading or neutralizing the enemy’s combat capability.”<sup>78</sup> It is capable of three different effects: simulative, imitative, and manipulative. Electronic protection can protect personnel and equipment from the effects enemies may use in the electromagnetic spectrum (EMS) to degrade, neutralize, or destroy combat capability.

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<sup>76</sup> HQDA, ATP 3-13.1, 3-1.

<sup>77</sup> HQDA, FM 3-12, 1-104.

<sup>78</sup> *Ibid.*, 1-112.



These methods include emissions and acoustic control, which prevents the enemy from detecting and locating friendly forces. Conversely, TAC-D can use this method to simulate larger targets or imitate other equipment to deceive enemies and affect their decision-making process. Although the manipulation of the EMS is a powerful capability, very little equipment capable of these actions reside at the tactical level. This capability is often paired with other means of deception, particularly the physical means, to add to its legitimacy.

MISO, previously known as PSYOP according to FM 3-53, *Military Information Support Operations*, published as of January 2013, mentions that PSYOP officers are used during the planning of deception to reinforce the effects the information published. Doctrinally, “MISO staff planners synchronize and deconflict messages and psychological actions with the deception story and other IRCs to ensure unified and consistent messages reach the deception target.”<sup>79</sup> This method of tactical deception decreases the ambiguity for the enemy by presenting information to reinforce existing preconceptions from the enemy’s point of view. Deception and PSYOP are different from each other- PSYOP deals in the truth, but not necessarily the whole truth. Deception deals in lies. PSYOP can provide the “bodyguard” the deception needs to be effective.<sup>80</sup> This capability at the tactical level targets the enemy’s command and control and planning structures through deceptive messaging. These actions are described as the administrative

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<sup>79</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-53, *Military Information Support Operations* (Washington, DC Army Publishing Directorate, 2019), 4-9.

<sup>80</sup> Latimer, *Deception in War*, 79.

means of deception to influence enemy behavior and are a crucial aspect to lend credibility to the deception goal.

The Intelligence Warfighting Function (WfF) surprisingly mentions deception very little. Although by doctrine, intelligence officers have an identified tactical task to provide intelligence to support military deception, it only denotes that intelligence officers remain vigilant and concentrate on confirming intelligence data from multiple sources to prevent the enemy from using deception against friendly forces. According to FM 2-0, *Intelligence*:

When fighting a peer threat during large-scale combat operations, units must be prepared to fight for intelligence against enemy formations, a range of sophisticated threat capabilities, and many unknown conditions within the operational environment. The challenges to information collection include IADSs, long-range fires, counter reconnaissance, cyberspace, and EW operations, and camouflage, concealment, and deception.<sup>81</sup>

The role of the intelligence staff supports a more protective posture toward enemy deception. It understands that “anyone with an understanding of deception, including those schooled in *maskirovka*, will seek to exploit the limitations of IPB.”<sup>82</sup> Tactically, MI units will use organic EW capabilities to conduct electronic deception to deceive the enemy as to the location of the main body movement.

Since the inception of using deception in our military, engineers have played a lead role in deception activities. Once the proponent for deception, engineers conducted physical, technical, and administrative types of deception. To enhance the survivability of

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<sup>81</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 2-0, *Intelligence* (Washington, DC: Army Publishing Directorate, 2018), 6-1.

<sup>82</sup> Latimer, *Deception in War*, 304.

forces, engineers understood the importance of using all means of deception collectively to enhance the chances that the enemy will engage with the deception effort. Many of the lost capabilities and training techniques that need to be revised and modernized will be from past engineer doctrine discussed later in the chapter to answer the tertiary research question.

Today, according to FM 3-34, *Engineer Operations*, engineer doctrine recognizes that “Because they have distinct appearances and uses, engineer assets can assist in deception operations. For example, moving bridge trucks to various river-crossing sites can deceive the enemy about the actual crossing location.”<sup>83</sup> Engineers support commanders tactically to achieve surprise through obstacle reduction and emplacement. This surprise “includes the tempo and intensity in executing the attack plan and in employing unexpected factors (such as selecting a less than optimal course of action), varying tactics and methods, conducting deception operations, and ensuring operations security.”<sup>84</sup>

ATP 3-37.34, *Survivability Operations*, published April 2018, contains an entire chapter regarding cover and concealment. This chapter summarizes chapters 3-8 of the previous deception doctrine, FM 90-2, published in 1988. These methods mention how physical deception, augmented with technical means such as visual, acoustic, and multispectral sensors, helps sell the deception actions.<sup>85</sup> As technology improves and

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<sup>83</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-34, *Engineer Operations* (Washington, DC: Army Publishing Directorate, 2020), 2-5.

<sup>84</sup> *Ibid.*, 4-7.

<sup>85</sup> HQDA, ATP 3-37.4, 6-1.

more sensors are used to confirm targets, the human eye is still the principal sensor on the battlefield. Sophisticated sensor technology can fool aerial reconnaissance, satellite imagery, and even video imagery. Dummies and decoys can appear much more realistic, causing the enemy to commit to phantom forces to waste their time and resources. The physical means of deception often will be the primary means to use when executing TAC-D. Camouflaged battle positions, false headquarters locations, and dummy formations will be constructed to present the enemy with multiple dilemmas to overwhelm their data collection with conflicting information or confirm false preconceived information to lead the enemy to a position of disadvantage.

Although these officers all have some familiarity with deception actions, they generally understand how their function supports the operational plan better before understanding how to synthesize the different means to create a more robust capability for the commander. IO and EW officers focus on the technical means of deception. MISO focuses on the administrative means, while engineers focus on the physical means. According to FM 3-13.4, like everything else, the commander will determine the viability of incorporating TAC-D into the scheme of maneuver to achieve their objectives. To assist with the commander's intent, the principal staff officer for planning these tactics is the Operations officer (G-3/S-3) of the division or brigade with support from an IO officer. Their knowledge of the operational plan lends them to be the best equipped to understand how deception is best incorporated to project maximum effects on the enemy. The responsibility of the G-3/S-3 ranges widely from recommending a deception objective, story, or plan to the commander to submitting detailed RFIs that are key to the

deception planning.<sup>86</sup> There is an apparent gap with commanders and operations officers rarely understanding how to use TAC-D to their benefit due to no prior exposure to these tactics. With this unfamiliarity, commanders will tend to avoid taking the risk to employ TAC-D and favor instead more traditional tactics.

IO officers, when available, can serve as the CMDO. However, if they are not available, the commander can designate another officer that is knowledgeable in using IRCs to influence enemy decision-makers. Since few IO officers reside at the division and with the majority supporting echelons above division, the officer to help plan, shape, and communicate the deception plan is not clearly defined and, if so, not properly trained at the tactical level. Personnel such as MISO, EW, Intelligence, or Engineer officers may qualify for the role of CMDO; however, they suffer from the same lack of experience and training to understand the other means of deception. Those officers are at a disadvantage that is detrimental to plan and execute a convincing deception plan.

Currently, the new FM 3-90, *Offense and Defense* draft is entering its final draft for publication. In it, it mentions a chapter that will specifically address TAC-D and its benefits. It will describe how commanders play a critical role in integrating TAC-D into the plan and explains how its effects affect the enemy decision-maker. The chapter will clearly outline how deception would benefit commanders in the offense and defense and provide a guide on how to use deception principles for planners who have had little experience using it. It will clearly explain the steps planners should take to incorporate TAC-D and describes the steps needed to include TAC-D in the operations process. It

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<sup>86</sup> HQDA, FM 3-13.4, 1-14.

will mention that TAC-D is designed to enable operations to reduce operational risk for commanders. “A TAC-D should never be a decisive operation, although it may become an initial main effort for the operation.”<sup>87</sup> Resourced from within and executed locally, this capability is an effective way to cause the enemy to make mistakes in their decision-making processes. The chapter will also discuss TAC-D principles and its multiple variations, including feints, ruses, and demonstrations to achieve the desired effect against the enemy. Finally, it will discuss the three primary means of deception (physical, technical, and administrative) and how to apply these means at the tactical level.<sup>88</sup>

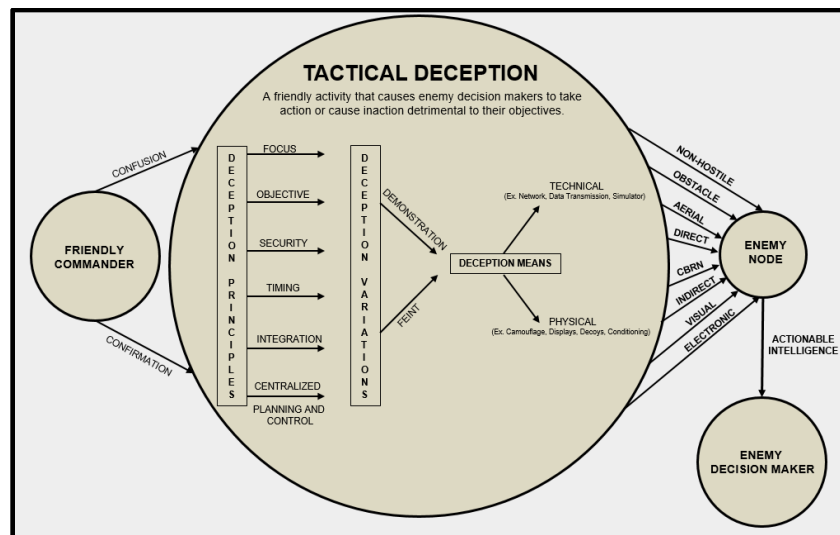


Figure 1. Tactical Deception Flow Chart

Source: Headquarters, Department of the Army, Field Manual 3-90-1, *Offense and Defense*, vol. 1 (Washington, DC: Army Publishing Directorate, TBP), 19-4.

<sup>87</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 3-90-1, *Offense and Defense*, vol. 1 (Washington, DC: Army Publishing Directorate, n.d), 19-4.

<sup>88</sup> Ibid.

Today, the Army debates if IO should serve as a separate warfighting function. In joint doctrine, Information is already its own separate function. Although considered an element of combat power within the Army, it is not itself a warfighting function, and until the new ADP 3-0, *Operations*, published July 2019, it served in the movement and maneuver warfighting function. Currently, it resides in the Fires WfF due to IO having the capacity to conduct cognitive effects on the enemy. A conclusion from this analysis recommends establishing Information as a warfighting function to better align with joint doctrine. Five separate specialties (IO, EW, Intel, MISO, and Engineers) mention deception in their doctrine; however, only one, IO, mentions who should be trained to conduct deception. As a warfighting function, this issue may be cleared as it will have personnel at the tactical level to resolve this ambiguity. Still, when addressing who can plan for deception at the tactical level, the doctrine remains vague. It assigns the responsibilities to plan and execute TAC-D to commanders and planners who themselves receive no training, evaluation, or experience to incorporate deception in the planning process.

### Organization

As previously stated, IO officers who have had the opportunity to be trained in deception reside at the Army Service Component Command, Corps, and select Division commands. As of May 2020, the IO community began reviewing the Table of Organizations and Equipment (TOE) documents along with the Centers of Excellence (CoEs) and the Combined Arms Center (CAC) to determine where the requirement for deception planners was needed during the three star Deception and Information Warfare

Portfolio Review.<sup>89</sup> The IO community recognized the gap previously mentioned between the echelons when it pertained to communicating deception plans to the tactical level and has worked with the US Army Training and Doctrine Command (TRADOC) since 2018 to select non-IO individuals to attend the 1st IO Command deception courses. Currently, to solve this deficiency in organization, doctrine dictates that commanders may appoint officers as their CMDO at their discretion when an IO officer is unavailable to fulfill the role at lower echelons. Officers, traditionally captains or above, who have focused on kinetic tactics to support mission accomplishment, are now charged to plan and execute these complex deception tactics that are supplemental to the operational plan with little training and even less proof of the effectiveness of the tactics. As stated in the doctrine section of this thesis, certain officers at the division level and below understand how their function supports the deception plan. Still, they are rarely trained to weave the three means of deception to full effect. EW Officers assigned to the Division understand that they can employ technical deception in the form of electromagnetic and cyber deception to mislead enemy organizations and degrade their electromagnetic capability. Engineers can plan for the use of physical deception to cover, camouflage, and conceal units to confuse, mislead or evade enemy formations. For commanders using administrative methods for TAC-D, Intelligence, PSYOP, and the OPSEC Officers are used to manipulate and confuse enemy data collection. Since deception involves so much

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<sup>89</sup> Commanding General, Combined Arms Center (CG CAC), and Commanding General, US Army Cyber Command (CG Cyber Cmd), “Deception & Information Warfare 3-star Portfolio Review,” (PowerPoint presentation, Combined Arms Center, Fort Leavenworth, KS, and US Army Cyber Command, Fort Belvoir, VA, 20 May 2020).



risk and complexity, commanders using TAC-D must have all the means available to deceive most, if not all, the means the enemy has of detection to be believable.

Officers assigned to weave all the means of deception together are now trusted to incorporate IRCs that influence enemy behavior. That task is usually the expertise of the intelligence and IO community. As the IO community is not staffed at echelons below division, the plan to mitigate this deficiency would be to train non-IO officers mentioned in deception planning to fill the gap at the tactical level. The number of officers capable of assisting a robust deception plan currently resides at the tactical level. It would only take a measure to codify these positions in the organizational TOE to ensure deception planners are available at the necessary echelons. Divisions and brigades have EW, PSYOP, and engineer officers capable of understanding how to use IRCs to impact enemy formations.<sup>90</sup>

The Army can also look at the position rather than military occupation specialties regarding understanding deception planning. The plans officer at the division and brigade levels can be coded to receive instruction on implementing TAC-D specifically. By assigning additional skill identifiers (ASIs), instead of the reassignment to a functional area, to positions rather than personnel, personnel can use their skills to benefit their current and future organizations. Personnel also assigned to the Reserves and National Guard to serve as tactical planners can receive training. Lastly, an ASI can ensure that coded positions in the CTCs and simulation centers are trained in deception tactics to assist trained IO officers and assess and evaluate incoming unit tactics better. CTCs will

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<sup>90</sup> CG CAC and CG Cyber Cmd, “Deception & Information Warfare 3-star Portfolio Review,” slide 9.

be addressed more in-depth in the Training section of this analysis. The addition of the ASI would mitigate the organizational gap when conducting TAC-D.

Over ten active Army doctrinal publications mention who can be organized at the tactical level to plan, synchronize, and resource the deception plan that FM 90-2, *Battlefield Deception*, published in 1988, had initially captured. Organizationally, the Mission Command Center of Excellence (MCCoE), located in Fort Leavenworth, KS, is the proponent for IO. As stated in the doctrine portion of the analysis, Information is classified as a war fighting function at the joint level. Based on the analysis on how the Army can improve the organization to enable TAC-D, the creation of the Information Center of Excellence can allow deception and the other Information Operations to be pursued and mastered as is intended by doctrine apart from the MCCoE. This CoE would serve as the proponent to address the next gap, training, where most of the Army's deficiencies appear to be.

### Training

Perhaps one of the most prominent gaps in today's Army regarding conducting tactical deception resides in Army training. When understanding why conventional forces do not use deception tactics, the conclusion is that deception is not trained at the tactical level as frequently as other activities such as maneuver, fires, or engineer operations. Manuals regarding techniques and procedures exist, but they reside at classified levels, thereby creating one of many barriers to its use.

Deception has fallen out of use before, particularly in peacetime during the Interwar period and after the Vietnam War when the Army underwent massive reform to modernize troops, equipment, and tactics. With manuals from World War II beginning to

end their classification cycle, the Army recaptured the lessons learned and published them into what we knew as FM 90-2, *Battlefield Deception* in 1988. To encourage commanders to pursue more cost-effective means to make up for deficiencies, the Army addressed the issues or “mythologies” surrounding the reasons leaders did not use deceptive tactics more often in their doctrine. Among the most prominent myths were, “Deception plays a trivial part in warfare and is not for real soldiers,” “Tremendous growth in intelligence collection capabilities has destroyed the possibility of deceiving a sophisticated opponent,” and “Surprise comes from luck.”<sup>91</sup> The myths the Army addressed more than thirty years ago remain valid today and did little to persuade commanders at that time to apply this form of warfare to their menu of options when facing an adversary. Unfortunately, when the Army concentrated its efforts to fight a COIN battle in Iraq and Afghanistan, the increased operational tempo of conventional forces led to a narrow focus on the tactics used. However, the Army did not entirely abandon TAC-D, and it found utility in the Special Forces community. The Army did not entirely discard this task as a capability conventional units could perform as it did save one task in the universal task list of Army capabilities.

The current reference for the Army units’ tasks is ADRP 1-03, *Army Universal Task List*, published in October 2015. Its purpose is to inform what the Army can contribute to the joint force in terms of tasks. Included is only one task that addresses military deception, ART 5.11: Conduct military deception. This reference can serve as a primer to begin translating deception measures of performance to training tasks units can

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<sup>91</sup> HQDA, FM 90-2, *Battlefield Deception*, 1-1.

perform.<sup>92</sup> The reference directs organizations and commanders to the CATS in the Army training system for training and evaluation outlines. Currently, there are no training and evaluation outlines regarding deception in CATS. The task to conduct deception operations of any type is also not assigned to any unit or a mission essential task (METs) assigned to any unit. There is no training requirement to practice deception at the division level and below. With the numerous tasks tactical units need to perform, adding one that is not assigned seems detrimental.

Today, very few senior leaders remember practicing deception along with their traditional combat tasks. These senior leaders (Division and Brigade Commanders) have forgone deception in favor of quicker, more familiar combined arms tactics. The art of deception is a perishable skill that leads to less options when encountering the enemy when not practiced. According to Jon Latimer, “What made British deception unique during WWII was its steady development. From an expedient start in the days when things appear bleak, it grew to a flexible and highly effective instrument capable of greatly enhancing operations at all levels.”<sup>93</sup> To master deception, emphasis on training becomes vital. Generally, deception, like the fighting itself, occurs at the small-scale, tactical end of the spectrum. Most of the tactical level commanders and their staff have little or no training experience practicing deception to enhance their war fighting skills. To these leaders who have operated in an Army where the primary method of fighting

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<sup>92</sup> Headquarters, Department of the Army (HQDA), Army Doctrine Reference Publication (ADRP) 1-03, *Army Universal Task List* (Washington, DC: Army Publishing Directorate, 2015), ix, 5-76.

<sup>93</sup> Latimer, *Deception in War*, 145.

was using COIN tactics, they have missed opportunities to understand how small units can contribute toward TAC-D. With no TAC-D training for decision-makers, there is no appetite to attempt deception from tactical commanders.

Tactical level FTXs, Warfighter exercises (WFXs), routine training, professional military education (PME) schools, and even soldier level tasks suffer from a lack of instruction that was once trained as frequently as combined arms maneuvers. Currently, the Army lacks the training evaluation standards needed to assess deception tactics. More so, it lacks a doctrinal reference outlining tactics, techniques, and procedures (TTPs) that could assist units to begin incorporating these actions into their planned training events.<sup>94</sup> The TTP manuals that do exist are classified documents and are beyond the scope of this thesis. Over the last thirty years, the Army has slowly lost more of the art of fieldcraft. Doctrinal manuals detailing tactics to cover and camouflage personnel, unit, and equipment, have been retired and today are mentioned as part of the Protection war fighting function relating to engineer tasks.<sup>95</sup> Our PME and Non-Commissioned Officer (NCO) schools lack any formal instruction to train in deception at the institutional level. The MCCoE, as the proponent for MILDEC, has realized this gap and understood that if the capability to conduct TAC-D, and to a lesser extent MILDEC, is not even offered a classroom environment, it is a capability that will go unused for the future. With this lack of training, tactical leaders opt not to use unfamiliar capabilities in unit training environments.

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<sup>94</sup> HQDA, FM 3-13.4, Appendix C.

<sup>95</sup> HQDA, ATP 3-37.4, 6-1.

The MCCoE has taken steps to mitigate this gap in training. Slowly, deception is being introduced into military schools in an attempt to revive the capability and present it as a viable option to commanders. TAC-D is discussed among the junior officer's education in specialties that naturally are inclined to practice deception. At the Command and General Staff College (CGSC), one course is currently offered dedicated to the study of MILDEC.<sup>96</sup> Additionally, in 2021, the CGSC began to incorporate a scenario where the students needed to plan a TAC-D operation in their Advanced Operations Course (AOC). Just how effective remains to be seen, as this was the first time many junior field-grade leaders, with differing military specialties, were required to plan and understand TAC-D. This introduction to incorporating a TAC-D plan into the MDMP process caused the field grade officers to be aware of capabilities, opportunities, and challenges that otherwise were not available. Since the population of IO officers are very small, few IO officers were available in the staff groups. The groups across the sections relied on specialties that could help reinforce the tactics used for deception. In the authors CGSC classroom, civil affairs, special forces, fires, and the engineer officer assisted in planning the operation. Together, the discussions drove the plan to conduct a false insertion with the effect of having the enemy commit forces away from the area we planned to conduct a wet gap crossing. The thought process to resource, synchronize, and deconflict combat elements revealed deficiencies in planning, training and familiarity regarding deception techniques. As a collective, there was a lack of understanding of TAC-D, coupled with a

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<sup>96</sup> U.S. Army Command and General Staff College (CGSC), "A502 Military Deception," accessed December 14, 2020, [https://cgsc.blackboard.com/webapps/FLVN-cgss\\_electives-BB59d68b9738f4e//detail.jsp?courseid=CGSS\\_RES\\_ELECTIVE\\_A502](https://cgsc.blackboard.com/webapps/FLVN-cgss_electives-BB59d68b9738f4e//detail.jsp?courseid=CGSS_RES_ELECTIVE_A502).

strong sense to avoid risk, resulting in fewer resources spent to credibility develop a proper TAC-D plan to convince the enemy commander of a false major operation, resulting in the enemy ignoring the deception effort, massing forces on the actual objective and making the execution of a wet gap crossing more difficult.

The monograph, *Systems Thinking and the Cynefin Framework*, by William Dettmer attempts to understand how leaders (managers) confront new environments when all the variables are not present to them. He puts this phenomenon into focus by stating, “Is it any wonder that such managers avoid experimentation, with its consequent risk of failure, in favor of options with quantifiable, predictable costs and benefits?”<sup>97</sup> The AOC exercise, in this instance, validated the gap between the personnel who have no familiarity with TAC-D and how much resources they dedicated to convincing an enemy of a deception effort. It validated that personnel who will eventually become commanders and staff planners will be strongly opposed to incorporate a new combat tactic because of no baseline knowledge or understanding if the plan will be successful or not. Individually, these may be small steps, but it opens the aperture to military leaders to allow this tactic to promulgate and keep this option available.

Still, several gaps appear to remain. To date, the Army has no course that is designed to teach soldiers physical deception and fieldcraft tactics. This course would have soldiers from any specialty learn survivability techniques that would use deception to protect personnel and equipment from enemy detection, aligning it with current

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<sup>97</sup> William Dettmer, *Systems Thinking and the Cynefin Framework* (Port Angeles, WA: Goal Systems International, 2011), 18, reprinted in Department of Command and Leadership, Advance Sheet, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2020.

doctrinal goals. As stated in ATP, 3-13.1, *The Conduct of Information Warfare*, “These activities aim to gain a tactical advantage over an adversary, to mask vulnerabilities in friendly forces, or to enhance the defensive capabilities of friendly forces.”<sup>98</sup> This course would help the Army to enable effective TAC-D against the enemy.

The Army has committed much of its resources in the 21st century toward training units in simulations and virtual war fighters. Simulations present a net benefit to the Army. It is remarkably easy to capture mistakes in real-time, adjudicate them, and quickly reset the scenario parameters to apply lessons learned. The Mission Command Training Program (MCTP) supports the collective training of Army units in simulation and warfighter exercises. They provide observer controllers and trainers to ensure well-trained forces learn the lessons from previous units and enhance skills for units to perform in Unified Land Operations (ULO). As sophisticated as they may be, these exercises currently have little technology to replicate deception effects on the enemy and to what extent deception efforts affect opposing force (OPFOR) commanders. These virtual platforms struggle to adjudicate non-kinetic effects, and many times, the scenario may itself be adjudicated by subjective opinion, degrading the quality of the training.

Additionally, war simulations that focus on deception objectives and capabilities must adhere to policies and rules that can lead to the exercise becoming highly classified, limiting the number of participants that qualify and erode the training objective. Tactical deception is an operation that must be deliberately planned for early in the exercises and requires to go through a simulated five-day cycle, much like the Air Tasking Order

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<sup>98</sup> HQDA, ATP 3-13.4, 3-5.



(ATO) cycle, to receive permission for deployment, negating the chance for deception to rapidly exploit any opportunities the battlefield may present. To improve this capability to practice TAC-D, game administrators need to establish rules early for certain deception actions. The simulation setup allows the Blue Force (BLUFOR) and OPFOR to share a common operating picture without allowing the other access to their strategies. The challenge arises in subjective adjudication, where deception is typically based on real-world experience and is difficult to assess. However, this may favor the simulation as the goal of deception and its effects are to affect the individual playing the OPFOR role and confuse their decision-making process. A little progress is being made to bridge this gap as the MCTP has seen its last two iterations of units introduce deception plans to their WFXs. The 1st Armored Division recently included deception as a major capability to enhance their primary objective to achieve complex tasks such as a wet gap crossing. As a result of employing deception, valuable lessons were relearned how best to employ deception equipment to create more believable stories and use more effective techniques to achieve desired effects in a resource-constrained scenario. The lesson learned from these events is yet to be published as of 2021.<sup>99</sup>

Currently, there are seven courses that are focused on deception in the Army. Of these courses, two of them are restricted to personnel assigned to joint billets, two courses are designed for specific operators (special forces and IO officers), and two are TRADOC courses designed for branch immaterial personnel. 1st IO Command (Land) currently

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<sup>99</sup> CG CAC and CG Cyber Cmd, “Deception & Information Warfare 3-star Portfolio Review,” slides 13-15.

offers these two courses to introduce planners to MILDEC.<sup>100</sup> One course of MILDEC has been recently introduced to the CGSC elective curriculum.<sup>101</sup> The Army Deception and Planners' Course (ADPC) and MDPC both state in their scope to:

prepare students to plan, coordinate, and monitor the execution of Military Deception (MILDEC) operations at any command and echelon level. Instruction is a combination of formal lectures and practical exercises using a realistic training scenario. Students are given a grounding in MILDEC terms and principles, legal and policy guidelines, and MILDEC resources during the course. Students also gain insight into time-proven tactics, techniques, and procedures.<sup>102</sup>

Due to the sensitivity of topics discussed during these courses, most of the information regarding course design is classified; however, the course map at Figure 2 offers a view of what the class offers. It contains no mention of Tactical Deception or its planning.

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<sup>100</sup> CG CAC and CG Cyber Cmd, "Deception & Information Warfare 3-star Portfolio Review," slide 10.

<sup>101</sup> Ibid.

<sup>102</sup> 1st Command (Land), "1st IO Cmd Training and Analysis Branch," U.S. Army, accessed November 12, 2020, <https://www.1stiocmd.army.mil/Home/iotraining>.

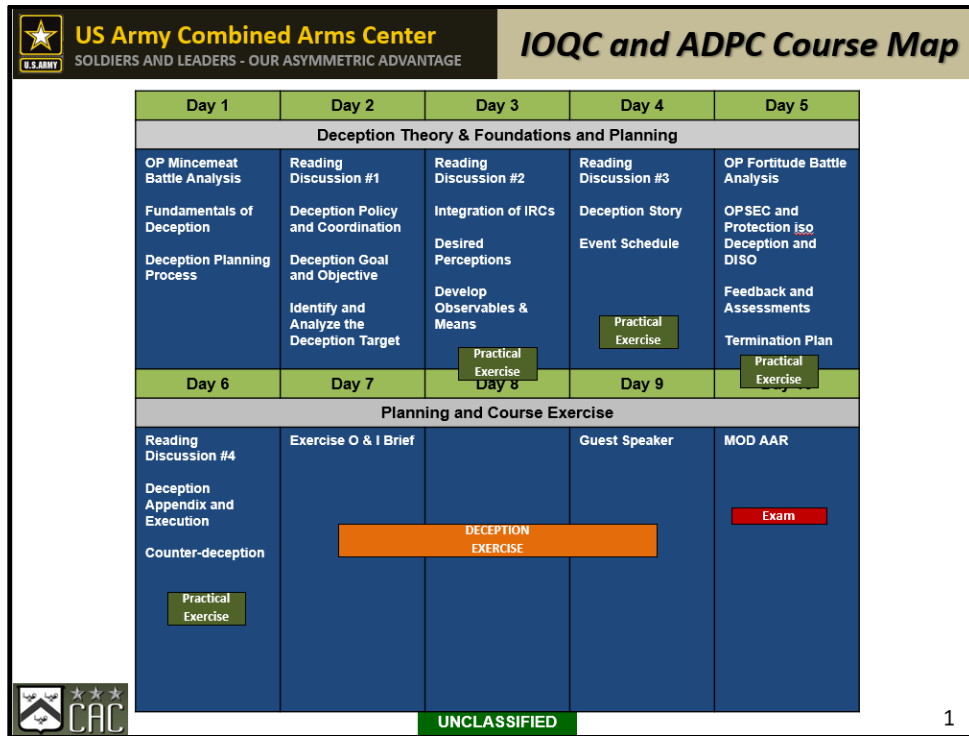


Figure 2. Army Deception Planners Course Map

Source: 1st IO Command (Land), “Deception Training,” U.S. Army, accessed April 12, 2021, <https://www.1stiocmd.army.mil/Home/iotraining?csrt=9733472726368815897>.

Although the MCCoE, in conjunction with TRADOC, has worked to introduce formal instruction to deception at the operational level, there appears to be a gap in training deception at the tactical level. Additionally, there appears to be a gap to translate deception plans into tactical tasks soldiers can perform to accomplish the objective. Officers and Soldiers lack the training events and evaluation required for employing the means of deception.<sup>103</sup> These courses can make units more adept at employment and

<sup>103</sup> MAJ Michael Weimer, “Tactical Deception Capabilities in the Heavy Division-Myth versus Reality,” (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1987), 15.

execution, just like all other tactics employed by the military. NCOs are unparalleled as small unit leaders and creating a course that exercises their critical and creative thinking skills could yield valuable techniques that protect the force and improve the Army. As stated by John Latimer in his book, *Deception in War*, “Some will naturally show a greater talent for deception, but this talent can only be encouraged by allowing as much lateral thinking as possible in training schemes, which are all too often structured and formulaic.”<sup>104</sup>

The current portfolio of institutional training does not address the gap that senior leaders face to familiarize them with tactical deception as an option. These leaders, charged with tactical decision-making, have abandoned deception as a viable option due to its difficulty, perceived myths, resource consumption, policies, and lack of familiarity. The staff officers who support them know less about implementing deception and do not even bother to address it as an option for fear of failure, lack of understanding, and difficulty in attaining approval to perform. Instead, they have learned best practices or at least good practices that have served them well in their careers and remain fearful to experiment with unfamiliar tactics.<sup>105</sup> They recognize that they reached their current position by doing the same, familiar things repeatedly, producing satisfactory results. Without this course, division and brigade level leaders remain skeptical that TAC-D can greatly help accomplish their mission. And remain unenthusiastic to incorporate deception techniques in their field training exercises or CTCs.

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<sup>104</sup> Latimer, *Deception in War*, 305.

<sup>105</sup> HQDA, FM 90-2, *Battlefield Deception*, 1-1.

Our premier CTCs are designed to validate unit tactics and training objectives when conducting ULO. It challenges units and leaders to adapt to dynamic battlefield conditions, force them to think critically, and act forcefully to enhance lethality and operation. To accomplish this, units practice the tactics, techniques, and procedures necessary to face a demanding and challenging peer enemy at their home station. Some units specialize in specific events, like Airborne Infantry Brigades, to remain proficient in Airborne Operations to conduct Joint Forcible Entry missions. Others, like Armored Brigade Combat teams, practice gunnery tables and combined arms maneuvers to close with and destroy the enemy. These units, however, are not tasked to practice deception to enhance survivability and combat power against their adversaries.

What is trained and exercised at the CTCs drives training across the Army. This training is reflected in books published by the Center for Army Lessons Learned (CALL). CALL examines trends, tactics, and procedures derived from the units attending CTC rotations to enhance readiness, resolve gaps, and inform modernization. As of 2019, no trends or attempts were observed of units attempting to use deception to influence enemy formations. One monograph, published in 1986, captured the last time a trend for deception was observed at the CTC. It observed 104 units with only “some” practicing some sort of deception. The report concluded then that units failed in the execution of deception due to inadequate training.<sup>106</sup> Although the 2019 CTC publication confirms the use of deception as an enabler for survivability operations, no units have been observed

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<sup>106</sup> MAJ Bradley Nelson, “Battlefield Deception: Abandoned Imperative of the 21st Century,” (Monograph., School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1998), 25-30.

to practice this tactic.<sup>107</sup> In 2020, at the CGSC elective, A344 Lessons Learned for S3s and XOs, one new observation was noted from the Joint Multinational Readiness Center (JMRC) that confirms the gap the Army faces when conducting tactical deception.<sup>108</sup> See Figure 3.

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**All: Tactical Deception**  
JMRC BCT OC/T Tm (MUSTANGS)

**Issue:** Minimal to No TAC-D planning and No execution of TAC-D

**Discussion:** Most U.S. Army units don't have Military Deception Planner trained individuals and less conduct tactical deception (TAC-D) planning during there CTC rotations. The few units that plan deception never execute their plan, because they make it to complex. Many units don't understand the difference between Military Deception (MILDEC), Tactical Deception (TAC-D), and Deception in support of Operational Security (DISO). This continues to become the art and science we continue to loss.

**Recommendation:** Most deceptions planning isn't because of staff willingness to plan, but because of their understanding of deception operations and understanding of capabilities. Units need to understand what there internal capabilities are, what the types of military deceptions are, and that TAC-D doesn't require difficult and complex methods; many times you don't need the deception to be long in duration, but long enough to gain an advantage over your adversary and that could be 30 minute to 2 hours in duration. Regardless of the duration of the effects, the planning, indicators, visuals, and signals take time to develop.

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Figure 3. Tactical Deception Trend in JMRC 2020

*Source:* Center for Army Lessons Learned (CALL), “JMRC Trends,” (PowerPoint Presentation, CALL, Fort Leavenworth, KS), slide 36, reprinted in, “A344 Lessons Learned for S3s and XOs,” (Advance Sheet, U.S. Army Command and General Staff College, Fort Leavenworth, KS), last modified February 17, 2021, [https://call2.army.mil/docs/ctc/docs/A344LL\\_JMRC\\_Trends.pdf](https://call2.army.mil/docs/ctc/docs/A344LL_JMRC_Trends.pdf).

<sup>107</sup> Center for Army Lessons Learned (CALL), *Combat Training Center Trends, 2019* (Fort Leavenworth, KS: CALL, 2019), 95.

<sup>108</sup> Center for Army Lessons Learned (CALL), “JMRC Trends,” (PowerPoint Presentation, CALL, Fort Leavenworth, KS), slide 36, reprinted in, “A344 Lessons Learned for S3s and XOs,” (Advance Sheet, U.S. Army Command and General Staff College, Fort Leavenworth, KS), last modified February 17, 2021, [https://call2.army.mil/docs/ctc/docs/A344LL\\_JMRC\\_Trends.pdf](https://call2.army.mil/docs/ctc/docs/A344LL_JMRC_Trends.pdf).

To drive the change required to emphasize tactical deception, the CTCs lack the proper evaluation criteria and facilities to conduct deception. The current decisive-action training environment (DATE) scenarios the CTCs exercise do not allow TAC-D to be trained:

The DATE involves a hybrid threat and the complexities the Army faces while fighting potential adversaries in the 21st century. It combines intricacies of threats woven into one dynamic environment. US forces conduct combined arms maneuver with near-peer conventional forces and wide-area security in an environment that includes guerrillas, insurgents, criminals, and humanitarian crises.<sup>109</sup>

The closest evaluators have to establish a standard criterion can be found in the current deception doctrine, under appendix C.<sup>110</sup> This evaluation checklist has not changed from the previous doctrine published in 1988. The gap exists when it fails to account for modern technology such as internet networks and cyberspace capabilities. The checklist remains vague, and it seems not to nest with other doctrinal manuals to determine specific effects of deception. Still, this checklist may serve as a base for conventional units to plan for deception at the tactical level.

What the CTCs do have is an OPFOR that practices tactical deception and can provide units with multiple dilemmas to react to deceptive tactics. Training Circular (TC) 7-100.2, *Opposing Force Tactics*, published in December 2011, contains tactics that the

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<sup>109</sup> Rory P. O'Brien and Maj. Michael H. Liscano "Decisive-Action Training Environment Preps Lieutenants for Future Operations," U.S. Army, January 14, 2014, [https://www.army.mil/article/117921/Decisive\\_action\\_training\\_environment\\_preps\\_lieutenants\\_for\\_future\\_operations/#:~:text=The%20decisive%20action%20training%20environment%2C%20or%20DATE%2C%20involves,intricacies%20of%20threats%20woven%20into%20one%20dynamic%20environment.](https://www.army.mil/article/117921/Decisive_action_training_environment_preps_lieutenants_for_future_operations/#:~:text=The%20decisive%20action%20training%20environment%2C%20or%20DATE%2C%20involves,intricacies%20of%20threats%20woven%20into%20one%20dynamic%20environment.)

<sup>110</sup> HQDA, FM 3-13.4, Appendix C.

OPFOR uses and outlines how deception plays a key role in forcing the enemy to act detrimental to their plans. The OPFOR integrates deception into every tactical action and employs all forms of deception, from physical decoys and electronic devices to tactical activities and behaviors. It may not have a standardized checklist, but the doctrine provides valuable tactics and force structures that Army units can adopt and train in their organizations.<sup>111</sup> Only with persistent training, assessment, and leader involvement will the Army effectively enable tactical deception against expected threats.

According to doctrine, deception is a significant portion of their plans. They are designed to continuously use deceptive measures to increase the chance of tactical surprise and survivability.<sup>112</sup> With their training, the OPFOR easily understands the effects they want to project on the enemy force. Through repetition and trial and error, they refine their deception skills and understand how commanders entering the CTCs generally act, anticipating the trends and leveraging the information to accomplish their deception objective. The training the OPFOR conducts is adept at identifying their tactical targets, primarily the enemy commander, but can target staff elements to affect their decision-making processes. The OPFOR can provide a believable deception story and calibrate what effects they demonstrate to the enemy commander to make it seem realistic, two key factors in successful deception activities. To accomplish this, deception forces are specifically assigned to create the deception story.

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<sup>111</sup> Headquarters, Department of the Army (HQDA), Training Circular (TC) 7-100.2, *Opposing Force Tactics* (Washington, DC: Army Publishing Directorate, 2011), 4-7.

<sup>112</sup> *Ibid.*, 7-7.



The OPFOR doctrine discusses how forces can create a separate deception force, usually a temporary team, to aid in curating the deception story. These units can create the illusion of real or more significant units or used as a team to conduct feints or demonstrations. These units work closely with the OPFOR staff to ensure their actions are creating the effect desired. The staff, in turn, constantly communicate with their next echelon of command to receive the latest intelligence and ensure their plans do not interfere with the central objective. The manual also mentions how deception Command Posts (CPs) are set up to achieve the required effect on multi-spectral sensors. It also lists multiple tactics for employing technical, physical, and administrative activities.<sup>113</sup> These ideas and many more are what Soldiers need to start understanding deception and stimulate creative thinking in commanders and staff planners to use the equipment they have in non-standard but beneficial ways.

As of the 2021 Forces Command (FORSCOM) training guidance, many of the deficiencies of tactical deception training parallel the issues our modern Army face. According to GEN Michael Garret, FORSCOM Commanding General, “Recent observations at our training centers reveal some areas we should look to improve. Brigade Combat Teams (BCTs) must get better at defending/protecting critical nodes and securing their rear areas while conducting offensive operations.”<sup>114</sup> The training guidance also states that small unit tactical proficiency is a problem, primarily in the

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<sup>113</sup> HQDA, TC 7-100.2, 7-8 – 7-14.

<sup>114</sup> Army Training Network (ATN), “FORSCOM Training Guidance FY21,” accessed May 12, 2021, <https://atn.army.mil/hqda-commands-training-guidance/commands-training-guidance>.

areas of mastery of warrior tasks and battle drills. GEN Garret calls for leaders to underwrite risk to promote growth of our leader and teach subordinates how to train and fight. Units should be disciplined in using the Unit Training Management (UTM) system to enhance their focus on training requirements and focus on the collective tasks that are prescribed in the CATS and evaluated using the Training and Evaluation Outline (T&EO). As mentioned above, this presents an issue to train in TAC-D as units do not have a task to conduct any type of deception. It is further stressed that leaders need to learn to say no to exercises or training events that do not build the readiness in their units. The training of TAC-D can assist the intent of the FORSCOM commander to protect and support our small units by beginning to incorporate deception training at the lowest level during Leader Time Training (LTT). Tactics like camouflage and concealment, preparing false battle positions and protecting critical assets can be tasks that can be trained during this time and incorporated when collectively training for a CTC rotation. Although no specific mention to use tactics like deception in their training, TAC-D may be a solution to some of these deficiencies the CG has noted. “We have seen that our BCTs struggle to synchronize the full effects of their combat power. As we work to continue to build lethality and overmatch in our brigade and division maneuver formations, I will use CTC trends like these to focus our efforts.”<sup>115</sup>

### Materiel

Most of the equipment the Army currently has fielded that can conduct some form of electronic deception resides at the Secret and Top-Secret levels of classification and is

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<sup>115</sup> ATN, “FORSCOM Training Guidance FY21,” 3.

out of the scope of this thesis. This reveals a gap in materials the Army has in equipment used to support TAC-D. In terms of using equipment for deception, “low-tech” innovations and creativity are the critical tools that the Army can invest in to augment units to practice TAC-D. With rapid advances in technology and the critical and creative thinking that deception demands, commercial off-the-shelf and emerging technologies become viable options to enable effective TAC-D against expected threats.

The Army is traditionally slow to leverage emerging technology and to assimilate new equipment into doctrine. The rapid proliferation of technology during the 21st century has put the Army at a disadvantage to search for possibilities the private sector can offer. This gap between doctrine, tactics, training, and materiel acquisition highlights the detriment the current acquisition processes has to deliver cutting-edge capabilities to modernize our Army. As we return to fight in LSCO in 2021, certain truths must be acknowledged before analyzing how the Army can improve its organization. As the world has become more interconnected, civil-military relations have become symbiotic in how our organizational culture is structured. Using commercial logistic supply chains, partnering with industry, and working with local populaces to augment our capabilities for a more lethal and efficient Army has proven successful in the major wars of the 20th century. It will come as no surprise that Army soldiers will develop innovative ways to use new technology to benefit their current situation. If deception training were made routine, soldiers would begin to change their mindset and find innovative ways to use emerging technologies.

To highlight gaps in physical deception materials, new breakthroughs in inflatable technology have been introduced since late 2015. Commercial companies have

significantly updated design technology and patterns to have inflatables look more accurate than the traditional inflatables used during World War II. To date, according to contracting companies like GovTribe (United States), the DOD, Defense Logistics Agency, Air Force, Department of the Navy, and Department of State have taken notice and awarded approximately \$10.9 million between 2018 and 2020 to contracts to work on Camouflage and Deception equipment.<sup>116</sup> These contracts include the construction of dummy artillery, aircraft, Bailey bridges, and various vehicles. With microchip technology installed, simulated acoustic, emission, and heat sensors can be affixed to these dummies to simulate actual equipment under differing conditions (visual, thermal, and audio). Other American Companies such as i2kdefense have reportedly made inflatable vehicles including tanks, airplanes, and missile launchers for the military since 1993; however, they do not come equipped with other sensors.<sup>117</sup>

International companies are also producing dummy equipment and inflatables for various governments. Companies such as Inflatech (Czech Republic),<sup>118</sup> Lubawa

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<sup>116</sup> GovTribe, “1080 - Camouflage and Deception Equipment,” accessed October 18, 2020, <https://govtribe.com/category/psc/1080-camouflage-and-deception-equipment#details>.

<sup>117</sup> i2kDefense, “Military Inflatables Gallery,” accessed March 1, 2021, <https://i2kmilitary.com/military-inflatables-gallery/>.

<sup>118</sup> Inflatech, “Inflatable Military Decoys,” InflatTech Decoy, accessed March 7, 2021, <http://www.inflatechdecoy.com/>.

(Poland),<sup>119</sup> Fibrotex (Israel),<sup>120</sup> Shape (China),<sup>121</sup> and Rusbal (Russia),<sup>122</sup> offer versions of different military vehicles already equipped with multispectral sensors designed to imitate real vehicles and confuse enemy radar. The merger of these technologies means that more electromagnetic signatures are present on the battlefield, creating more dilemmas for the enemy at a much cheaper cost than real personnel and equipment. The variety of global companies and diverse options they offer indicates that armies worldwide still use dummies and see a viable use for deployment on the battlefield.

Robotics technology can play key roles in augmenting modern decoys. Robotics and remote-control technology are small and cost-effective to Army units opening a wide array of opportunities to have objects move around the battlefield either autonomously or semi-autonomously, achieving the desired imitative effect of real vehicles. These possibilities coupled with proper tactics can imitate large-scale formations that can match the speed of real vehicles to confuse enemy decision-makers. Robotics can also help build fake CPs or assembly areas that can lead the enemy to believe that what they are facing is a real headquarters element or the indication of the main assault.

Camouflage has also been updated since its continual use during the latter half of the 20th century. Quantum stealth is an emerging technology that has the capability to

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<sup>119</sup> Lubawa, “Dummy Equipment,” accessed March 10, 2021, <https://www.lubawa.com.pl/en/signature-management-decoys/decoy>.

<sup>120</sup> Fibrotex, “Decoys,” accessed March 7, 2021, <https://fibrotex-tech.com/>.

<sup>121</sup> Shape Inflatable, “Inflatable Military Decoy,” accessed March 7, 2021, <http://www.shapeinflatable.com/inflatable-military-decoy/>.

<sup>122</sup> Rusbal, “Decoys,” accessed March 7, 2021, <http://eng.rusbal.ru/list/40/1/>.

protect our forces on the battlefield tremendously. Companies like the Canadian company, Hyperstealth, have worked with the US military before researching new materials that bend light around the user, rendering them “partially invisible.” This, in theory, renders soldiers nearly undetectable as it can also block thermal, motion, and heat sensors. The applications are nearly limitless as the materials can conceal vehicles, equipment, and eventually structures from satellites, drones, reconnaissance forces, and observation planes.<sup>123</sup>

Another gap in our physical deception measures is our current camouflage pattern. Since the application of the Chemical Agent Resistant Coating (CARC) patterns in 1985, the military has experimented with many forms of camouflage to enhance the survivability of its equipment. As of late 2020, our British allies are currently testing new digital camouflage patterns on their tanks in an effort to add delays to the enemy targeting cycle. This new material and digital pattern distorts the shape of the tank by visual and thermal means and can absorb enemy radar and thermal capabilities.<sup>124</sup>

Drone technology is another means that can be used to enhance TAC-D. As drones become more prolific in today’s modern battlefield, using drones for deception operations seems logical. As they are generally silent, they can be coupled with small

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<sup>123</sup> Hyperstealth Biotechnology Corporation, “Quantum Stealth,” International Preliminary Report on Patentability, Patent Cooperation Treaty, last modified February 5, 2020, [https://patentscope.wipo.int/search/docs2/pct/WO2020006621/pdf/1AgPVUS135c90qYVRVO9304RdtANcMdQQ5HIkmeuz6jfNbHWdnajFqCvonhs0VbnVwfHBF-E\\_Ohg\\_W0hD63JDdKT209QdNecLOV\\_DdA\\_9CUc\\_1qZCr5SLsX0CbuaK6s?docId=id00000057804630](https://patentscope.wipo.int/search/docs2/pct/WO2020006621/pdf/1AgPVUS135c90qYVRVO9304RdtANcMdQQ5HIkmeuz6jfNbHWdnajFqCvonhs0VbnVwfHBF-E_Ohg_W0hD63JDdKT209QdNecLOV_DdA_9CUc_1qZCr5SLsX0CbuaK6s?docId=id00000057804630).

<sup>124</sup> Global Defence Technology, “How to hide a tank: Challenger 2 gets digital camouflage,” accessed March 2, 2021, [https://defence.nridigital.com/global\\_defence\\_technology\\_mar21/challenger\\_tank\\_digital\\_camouflage](https://defence.nridigital.com/global_defence_technology_mar21/challenger_tank_digital_camouflage).

puck-like devices designed for noise replication or listening. Drones can drop these sensors behind enemy lines and cause threats to lose tempo as they attempt to adjudicate sounds like soldiers breaking brush or talking or simulating low rumbling sounds of heavy equipment through any environment. Swarm technology is another way drones can enhance TAC-D capabilities to confuse the enemy by using light patterns to replicate fixed-wing formations in the sky or used in conjunction with remote control technology to simulate vehicle formations.<sup>125</sup> Lastly, the field of additive technology (3D printing) has had various breakthroughs in cost and capability in recent years. These printers can currently print individual parts and pieces to build dummies and mock-ups without bringing extra material to the battlefield. These physical means coupled with the sophisticated sensors can lend further credibility to threaten enemy decision-making.

Controlling the digital media space is a new domain the current and future Army will be contested in. Artificial Intelligence (AI) is another gap where the Army finds itself lacking. AI has been the most transformative technological evolution since the industrial revolution. Concepts like deep learning and producing what is known as “deep fakes” quickly become a global threat that future leaders will confront. The ability to manipulate photos and edit videos have the potential to cause catastrophic results when attempting to stabilize a conflict zone. AI algorithms can take pictures of faces and turn them into moving videos. This, coupled with a voice synthesizer, can cause illegitimate

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<sup>125</sup> Jules Hurst, “Robotic Swarms in Offensive Maneuver,” *Joint Force Quarterly* 87 (4th Quarter 2017): 105-111, <https://ndupress.ndu.edu/Publications/Article/1326017/robotic-swarms-in-offensive-maneuver/>.

messages to spread. PSYOP and Cyberspace Electromagnetic Activities (CEMA) units will play a more important role in controlling these administrative means of deception.

Lastly, the practice of photo manipulation has been greatly enhanced since the Soviet Union began this form of deception in World War II. As more sophisticated systems rely on technology to function and synchronize, the Army needs to understand the Internet of Things (IoT) and how most systems will be interconnected. To influence and deceive future command and control nodes, these systems will need to be understood to control the information that the enemy is receiving. The power to control the intelligence enemy planning nodes gather by transmitting manipulated photos, fake orders, and deep fake videos will confuse the enemy to the extent that they cannot distinguish between real and false information. This type of leverage given to tactical commanders can greatly benefit them if faced with near-peer threats. To accomplish this, adequate facilities and proper training to practice these tactics need to be made available, but more importantly, the demand for such capabilities must come from the leadership. Only then will the Army change its culture enough to see TAC-D as a powerful tool to influence the enemy into disadvantaged positions.

### Leadership

Today's tactical-level leaders have served their careers engaged in a COIN fight. Except for some senior leaders who served in the 1990s when the Army fought in LSCO, most organizational level leaders have little to no training on conducting any form of deception and, therefore, have no frame of reference to understand the benefit deception can bring to the operation. "Generally, deception, like the fighting itself, takes place at



the small-scale, tactical end of the spectrum.”<sup>126</sup> With few references to begin standardized training, leaders who attempt to incorporate these tactics find themselves having to discover their own way to assess TAC-D that can result in lackluster training at best. Doctrine is vague on conducting TAC-D, and manuals containing more detailed knowledge on TTPs are classified. Commanders may quickly find themselves involved in legal issues should they train on certain tactics to their subordinate formations. The classification requirements to use deception are impeding the ability to conduct deception. Furthermore, the gap is further widened by the fact that leaders face a deficiency in training their own as these tactics and experiences are foreign to them.

The gap in training in the virtual simulation environment, field training exercises, and CTCs rotations further restrict leaders’ interest. Important publications and references studied by senior leaders do not mention deception, generating any interest or conversation. Most importantly, there appears to be hesitation among senior leaders and a lack of leader emphasis at the unit level that further drives the disinterest in TAC-D. Without a demand signal from tactical commanders and no directives from senior leaders to show interest in this type of training, it remains difficult to bring deception activities to routine exercises. The lack of enthusiasm suggests that military deception is likely to be used only when the doctrine, planning, training, and means are made easier to conduct. “A military organization lacking these means, or whose appreciation of the doctrine and

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<sup>126</sup> Latimer, *Deception in War*, 268.

whose means of deception have atrophied, will have to overcome strong inertia to restore them.”<sup>127</sup>

The demand for learning deception tactics has ebbed and flowed in the latter half of the 20th century. When demand was high to use deception tactics, the Army normally was quick “to put the commander on notice that they were an integral part of all (sic) operational planning”<sup>128</sup> in matters of cover and concealment. However, guidance then, much like it is now, was slim at best:

In developing such plans the commander must visualize and understand the enemy viewpoint and he must take into account the impact on his operations should the deception fail. The plans adopted must be such that if unsuccessful they will not cause the operation to fail. Then, the commander is cautioned that “coordination . . . with higher, adjacent and lower units is essential to insure against compromise of other operational or deception plans.”<sup>129</sup>

Authorities to employ TAC-D are doctrinally held at commands two levels higher than the commander attempting it, meaning that the authorization timeline may exceed the operational usefulness of the deception, as TAC-D is meant for commanders to leverage emerging situations and be creative enough to use equipment in nonstandard ways to achieve the desired effects on the enemy.<sup>130</sup> These authorities serve as checks and balances during combat operations but quickly become one of the biggest obstacles to deter training.

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<sup>127</sup> Latimer, *Deception in War*, 309.

<sup>128</sup> Whaley, *Stratagem Deception and Surprise in War*, 30.

<sup>129</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 100-5, *Field Service Regulations Operations* (Washington, DC: Government Printing Office, February 1962), 50.

<sup>130</sup> HQDA, FM 3-13.4, 1-2.

With obstacles such as difficulty finding proper doctrine for tactics, lack of training, knowledge, resources, no assessment standards, and difficulty obtaining the required permissions, it is no wonder commanders avoid attempting any form of deception. As stated in a previous thesis from CGSC, “When one considers that commanders must constantly juggle limited resources and that deception cannot replace men or materiel, this attitude becomes understandable.”<sup>131</sup>

As the Army returns to a more fiscally conservative military, Leaders will need to find creative ways to affect enemy decisions and protect the force. It is still true that “training in deception involves teaching commanders to make the enemy make mistakes, a task that requires imagination.”<sup>132</sup> Leaders see and experience a larger number of possible outcomes and options, but experience only goes as far as what they have been exposed to. There are plenty of historical vignettes and case studies to prove that mastery of this tactic is beneficial; however, for leaders to use deception techniques, they must be shown evidence of deception’s utility. Deception will need to become more accepted to become an effective tool that entails leader commitment and prioritization. Steady development, dedication, and exercise are the keys to turn a poorly understood and executed tactic into a flexible and highly effective instrument. The reluctance or lack of enthusiasm to incorporate deceptive tactics will be further explored by understanding

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<sup>131</sup> MAJ Jack Spencer, Jack, “Deception Integration in the US Army,” (Master’s Thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1990), 108.

<sup>132</sup> Latimer, *Deception in War*, 306.

how commanders think and how the perception of the western way of war differs from our current adversaries.

### American Perception toward Deception

Every leadership style is different. Generally, American commanders tend to naturally ignore deception as they have not needed to use it in their past. Some commanders will not understand how to employ it properly, causing unnecessary harm to their units. Others, given the opportunity, would embrace it and show great proficiency.<sup>133</sup> However, there is a deeper root cause of why American commanders oppose deception as a viable tactic to defeat their enemies. Our society is founded on the belief in strong moral philosophies and religious teachings. As Mark Lloyd illustrates, “The western Judeo-Christian idea is of God sanctifying a social order, a way of life and national values to create a ‘just’ war in which hardships and danger have to be endured as a price for victory of good over evil.”<sup>134</sup> Its foundation is rooted in ethics, principles, and morals that value truth and honesty that make deception a difficult concept to assimilate as a part of our daily operation. Our democracy has spent the latter half of the 20th century promoting free and fair markets. This philosophy naturally places a premium on matters of truth. Frenchman Alexis de Tocqueville observed of the ordinary American citizen: “if you scratch most Americans, you find a general respect for honesty and a deep-rooted belief in the old adage, ‘honesty is the policy’ . . . Honesty and reputation for

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<sup>133</sup> Latimer, *Deception in War*, 308.

<sup>134</sup> Lloyd, *The Art of Military Deception*, 171.

honesty are necessary for the efficient conduct of normal day-to-day transactions among people.”<sup>135</sup>

This sentiment was observed over 150 years ago and generally holds true today. It, therefore, becomes difficult for Americans to conceive of a modern society that does not share those same beliefs.<sup>136</sup> The foundations of our society and history are embedded in the personnel who form our military. In studying Western military philosophy and practice, our leading military theorists emulated the beliefs espoused in the European code of chivalry. The “gentlemanly” education received by modern military officers still reflects parts of this training. Truth, honor, integrity, esprit-de-corps, and expertise are highly valued as essential characteristics of the Army profession. The code of chivalry frowned upon deception and ran counter to military honor.<sup>137</sup> Pride in professionalism and tactical prowess is lauded.

This is not to say that the west has not used deception in warfare. In fact, it is used quite often and to great effect. Although the ethical implications of using deceptive tactics have been recognized since our country’s founding, military theory has often recognized the benefit deception has added to our military. Our leaders receive the formal education and reinforcement of military characteristics throughout their careers. They are introduced to military figures like Napoleon, Clausewitz, and Jomini, who studied ancient Greek and Roman philosophers to reinforce their theories.

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<sup>135</sup> Brian Dailey and Patrick J. Parker, *Soviet Strategic Deception* (Lexington: Lexington Books, 1987) 511.

<sup>136</sup> *Ibid.*, 512.

<sup>137</sup> Handel, *War, Strategy, and Intelligence*, 363.

As Barton Whaley describes it, our leaders study in the “three main modern schools of Western military theory: the ‘classical,’ the ‘romantic,’ and that of the ‘indirect approach’.”<sup>138</sup> Briefly summarized, the classical periods include Roman and Greek works like the *Strategemata* by Frontinus and the *De Re Militari* by Flavius Vegetius Renatus, which describe military theory, doctrine, and stories of the era. The Romantic periods of study include the works of Niccolò Machiavelli as he established the similarities between the politician and the military commander and the qualities needed to succeed. The indirect approach is what most leaders are most comfortable with. Philosophers like Clausewitz, Jomini, and contemporaries like B. H Liddel Hart fall into this period. These leaders credit surprise and deception as an important strategy on the battlefield. As convinced as these leaders were that practicing deception in times of war should be used to the utmost advantage, Western society views deception as immoral and a tactic that weaker enemies with limited resources execute.<sup>139</sup> British General Sir Garnet Wolseley observed on the ethics of western officers:

We are bred up to feel it a disgrace even to succeed by falsehood; the word spy conveys something as repulsive as slave; we will keep hammering along with the conviction that honesty is the best policy, and that truth always wins in the long run. These pretty little sentiments do well for a child’s copybook, but a man who acts on them had better sheathe his sword forever.<sup>140</sup>

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<sup>138</sup> Whaley, *Stratagem Deception and Surprise in War*, 50.

<sup>139</sup> David M. Glantz, *Soviet Military Deception in the Second World War* (London: Frank Cass, 1989), 326.

<sup>140</sup> Whaley, *Stratagem Deception and Surprise in War*, 53.

With these sentiments nurtured throughout the 20th and 21st century wars, it presents a strong case as to why officers reject the use of deception.<sup>141</sup> World Wars I and II favored more direct approaches to defeat their enemies. Relying on massive firepower and cutting-edge technology to gain the advantage, it provided a convenient excuse to abandon subtlety and be more direct. Deception fell out of favor quickly during the Interwar period, with America attempting to restore credibility among its allies. Deception fared better in World War II, where strategic deception was the cause of success for Operation Overlord. MILDEC was heavily encouraged among the top military and political leaders leading to critical successes over the German Army.

Culturally, it is observed that deception ebbs and flows with global affairs. In times of war, deception is much more tolerated and sometimes even encouraged. As David Charter and Maurice Tugwell concluded:

In principle, deception and democracy are inimical. War however, erodes democratic freedoms as survival becomes the predominant concern and as governments accept that ends justify the means. Deception of an enemy in wartime is certainly legitimate and, to a lesser extent, so too is government deception of its own public, provided that it is temporary and can subsequently be explained. When peace returns, all these doubtful means are supposed to be set aside; open government, respect for the law, and regard for the conventions of international behavior are expected to be the guiding principles of democratically elected governments.<sup>142</sup>

Machiavelli also observed something similar in 1630 when he wrote, “Although deceit is detestable in all other things, yet in the conduct of war it is laudable and honorable; and a commander who vanquishes an enemy by stratagem is equally praised

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<sup>141</sup> Whaley, *Stratagem Deception and Surprise in War*, 54.

<sup>142</sup> Charters and Tugwell, *Deception Operations*, 320.

with one who gains victory by force.”<sup>143</sup> These statements can help explain why certain military leaders condone the use of military deception, and others revile it.

During the Vietnam War, tactical deception, when used, was used sparingly. America entered a new form of warfare, guerilla warfare, which uses all forms of deceit and secrecy to gain an advantage over the numerically superior and stronger enemy. Americans learned from the Korean War to rely on superior firepower tactics and advance technology to destroy their enemy. This method of war was rooted in World War II, where American small unit tactics fared poorly against the German Army, constructing a closed mindset for tactical commanders.<sup>144</sup> American leaders would come to regard “stealth, subtlety, and subterfuge as the prerogative of the enemy.”<sup>145</sup> US Soldiers adopted this sentiment and began to view all forms of deception and physiological operations with great disdain. Roger Beaumont noted, “Americans raised in a culture which seeks direct solutions to problems and which hungers after rectilinear forms in work, in play and battles, saw deception as just another commie trick.”<sup>146</sup>

The rejection of deceptive tactics was further exacerbated by the introduction of the media during Vietnam. What Government and military leaders failed to realize in the

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<sup>143</sup> Nicolo Machiavelli, *Discourses on Livy* (Gardnerville: University of Chicago Press, 1998), 208, <https://thefederalistpapers.org/wp-content/uploads/2013/08/Discourses-on-Livy.pdf>.

<sup>144</sup> Latimer, *Deception in War*, 283.

<sup>145</sup> Lloyd, *The Art of Military Deception*, 161.

<sup>146</sup> Roger Beaumont, *Maskirovka: Soviet Camouflage, Concealment, and Deception* (Austin: Center for Strategic Technology, Texas Engineering Experiment Station, Texas A&M University System, 1982), 42.



beginning was that unconventional warfare meant fighting to win the hearts and minds of the civilians and shift public sentiment to their favor. To their detriment, Americans regarded practicing psychological operations as beneath them. To counter this, American media was present and reported on wartime efforts; however, a new dilemma emerged as American tactics were transmitted for all to see. Deception, if used, could now be witnessed by the public. As a result, deception, already a forgotten art, was viewed as dubious and un-American and saw little use.<sup>147</sup>

In an interview with General Don Starry, one of the chief architects of the 1980s operational manual, he admits that there was a gap in understanding deception, saying:

[we] just didn't have time to think about it. It had a spotty history and we didn't have time to think about it in sufficient detail, there was really no organized body of history research, historical research that would cover that and I just kind of chickened out trying to get it in there lest we say something that was not relevant and not useful, better leave it out than expose your ignorance by trying to write something about it.<sup>148</sup>

Regardless of little doctrine and training to fight from, a resurgence in deception occurred again in 1991 when American leaders, who were young men fighting in Vietnam, used the media to their advantage to execute one of the most studied campaigns that included deception in modern history. Operation Desert Shield was the American plan to obfuscate the direction the military attacked the Iraqi Army by ensuring media coverage was focused on the disembarkation exercises of troops and equipment in the Gulf of Oman. Understanding the Iraqi military was watching American news reports to determine unit locations, American forces secretly launched an attack from Saudi Arabia in the west,

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<sup>147</sup> Lloyd, *The Art of Military Deception*, 197.

<sup>148</sup> Spencer, "Deception Integration in the US Army," B-1.

catching the Iraqi Army by surprise. The stain of deception, secrecy, and “unfair” tactics that were considered offensive to our ethical standards was discarded, resulting in catastrophic success. Leaders were able to execute these tactics due to many of the manuals from World War II becoming unclassified, which resulted in the publication of the field manual for *Battlefield Deception* in 1988. Curiously, even with this concept proving that deception tactics in warfare can give the attacker an enormous advantage, the military did not choose to incorporate deception into its standard arsenal of tactics.

COIN operations have dominated as the primary military fighting paradigm in the 21st century. The characteristics of modern warfare have changed dramatically as technology further connected the world. Population sentiment now plays a critical factor in how America shapes its policies both politically and militarily. The perception of truth and credibility is even more coveted, ensuring that powerful Armies remain restrained not to cause excessive destruction.

With the lessons learned from the Vietnam and Iraqi wars, modern warfare is just as much a psychological battle as it is physical. Still, “the tendency in the 19th and 20th century has been for the great majority of professional soldiers to either reject stratagem [deception] entirely or to avoid it by passing such an ‘unsoldierly’ task to the limbo of the secret services along with psychological warfare, covert operations, and the other black arts.”<sup>149</sup> The external pressures put forth by our culture to strive for honor and integrity are brought in by our military officers and soldiers. Societal pressure to “do the right thing” is in the minds of all who call the military their profession. Dr. Edward Luttwak,

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<sup>149</sup> Whaley, *Stratagem Deception and Surprise in War*, 38.

consultant to the Department of Defense regarding strategy, organization, and force structure, put it succinctly in a 1990 interview:

Now this thing about culture. I have spent a lot of time around with armed forces. I've been on patrols with the Israelis, Koreans, Salvadorans, Finns, with all sorts of armed forces over the years. I've noticed how, in some of these armies, routine is the essence of the activity. That's associated with a desire to be orderly and be efficient. Their routines are all exemplary and spring from their cultures desire for efficiency, order, making proper use of personnel, being careful with government property, and all these other things. For these sorts of forces deception is extremely difficult. Deception is an awkward made-up thing, a willed thing, a hard to do thing. Which is done very imperfectly and inefficiently.

Other armed forces which are not procedure oriented, but are goal oriented instead, their job is to do this or do that and then they do it, they focus on another goal for a while. For this sort of unit deception comes naturally.<sup>150</sup>

Still untrained at regular intervals, the US Army remains deficient when conducting deception. Military professionals acknowledge this gap, but with no demand from senior leaders to encourage or mandate deception training, shifting our fighting paradigm back to LSCO will result in the US Army confronting near-peer enemies who have studied, trained, and practiced deception tactics since the Cold War. As Jon Latimer explains, "commanders should be under no doubt that they will be deception targets themselves, and the greater their own predilection for trickery, probably the greater their own awareness of that likelihood."<sup>151</sup> Constantly labeled as evil or cowardly over the last 100 years, it is not hard to imagine why people who have been told to live a true and honorable life may seem reluctant to adopt these tactics. During peace, our society has great disdain for any form of deceit, political or in our everyday lives, and tend to reject

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<sup>150</sup> Spencer, "Deception Integration in the US Army," C-2.

<sup>151</sup> Latimer, *Deception in War*, 303.

its premise outright. This may put our military at a disadvantage when confronting other nations that do not feel compelled to follow Western traditions.<sup>152</sup> Several officers today have convinced themselves that technological advances discredit the need for deception. With the introduction of highly sensitive sensors capable of detecting heat, light, electronic radiation, odor, sound, and movement, it is improbable to “fool” enemies. When military leaders do attempt to practice tactical deception, the benefits of their success often are not fully exploited due to a lack of confidence, experience, and aversion to risk. Finally, as Latimer highlights:

Most western Soldiers seem to consider personal camouflage as the limit of their deceptive responsibilities, and deception is usually passed over on exercises with the excuse that resources are scarce . . . A military organization lacking these means, or whose appreciation of the doctrine and whose means of deception have atrophied, will have to overcome strong inertia to restore them.<sup>153</sup>

There is currently no incentive to push this capability. Until there is, it will remain an obscure principle of warfare that is rediscovered again in times of need and at the high cost of American blood and treasure.

#### Russian Perception toward Deception

The Russian way of war could not be more foreign to the American mind. Where Americans appear disinterested in deception in terms of individuals collectively disregarding or doubting lessons from past military theorists, the authoritarian structure of Russia’s government, past and present, lends to discuss the predilections of its leaders

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<sup>152</sup> Handel, *War, Strategy, and Intelligence*, 363.

<sup>153</sup> Latimer, *Deception in War*, 306.

and the adoption of their desires. While the United States considers deception to be a wartime activity, it exists in both peace and war for the Russians.<sup>154</sup>

Russian deception history predates the 20th century authoritarians and has been a vital feature in their society since the Slavic era, where the Mongol methods of deception were adopted and cultivated by the Tsars.<sup>155</sup> What we study about Russian deception ideology can be traced to what scholars like Robert Conquest call “Marxism-Leninism.” This ideology promoted the one-party state and argued that it possessed the correct interpretation of the laws of history.<sup>156</sup> The adoption of Marxism in the 20th century also, according to Charter and Tugwell, “claimed a monopoly of truth and emphasis on unity of theory and practice in the propagation of revolutionary ideas.”<sup>157</sup> From its inception, Marxism contained all the necessary tools to influence and hold control over the people. Lenin himself once wrote that “ideas are weapons. Propaganda, therefore, was deemed to be among the most important tasks of the revolutionary.”<sup>158</sup>

Deception, therefore, was a legitimate tool for peace and in war. Never was a government so focused on controlling the minds of the population. This practice of control became second nature to Russians, with deception becoming a routine matter.

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<sup>154</sup> Handel, *War, Strategy, and Intelligence*, 416.

<sup>155</sup> John Dziak, “Soviet Deception: The Organizational and Operational Tradition,” in *Soviet Strategic Deception*, by Brian D. Dailey and Patrick J. Parker (Lexington: Lexington Books, 1987), 3.

<sup>156</sup> Robert Conquest, “Ideology and Deception,” in *Soviet Strategic Deception*, by Brian D. Dailey and Patrick J. Parker (Lexington: Lexington Books, 1987), 119-131.

<sup>157</sup> Charters and Tugwell, *Deception Operations*, 11.

<sup>158</sup> *Ibid.*, 12.

Lying and deceit are fundamental to the interpersonal relations among the Russians. One reason for this, according to Parker:

the despotic nature of the Russian government, both then and now, which demands the appearance of total loyalty to the state (the party) and enforces loyalty through a massive system of secret police and internal spying and reporting on deviant behavior by one citizen on another or even by a member of one own's family.<sup>159</sup>

The belief that all civilized people value honesty makes America susceptible to Russian deception campaigns, especially in peacetime.

Although this interpretation is dated, mainly analyzed from studies when the Soviet Union was a competitor against the United States during the Cold War, the sentiments and way of thinking remain unchanged, especially in their military. The umbrella term for deception we use, MILDEC, is instead decentralized in Russian doctrine into three branches: active countermeasures, counterintelligence, and *maskirovka*. Active measures relate to politics and messaging, counterintelligence is the use of spycraft to acquire intelligence, and *maskirovka* is what we think of as military deception. These activities are intertwined in their organization's political and military sectors and are given priority for execution. This gives dictators a distinct advantage when planning and implementing deception operations than it is for the United States.<sup>160</sup>

For the Russians, *Maskirovka* is a military concept defined as an operational function rather than a staff function. This structure lends *maskirovka* to be implemented

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<sup>159</sup> Dailey and Parker, *Soviet Strategic Deception*, 512.

<sup>160</sup> *Ibid.*, 23-25.

by its military leaders with coordination or synchronization.<sup>161</sup> The term deception does not quite define what *maskirovka* is. As Jon Latimer observed:

Maskirovka must be varied, and this requires forethought and originality if it is not to become stale and predictable. It is this embedding of maskirovka in the very fabric of every activity, this level of awareness and training throughout the structure, that perhaps most clearly differentiates maskirovka from Western concepts of deception.<sup>162</sup>

There are four broad categories that are still in use today: camouflage, simulation, feints and demonstrations, and disinformation. These categories reflect the US's ability to conduct deception as well; however, they are unrestricted by policy, authority, and morality. Their belief of the ends justifying the means, whether in peace or war, means that Army leaders must remain vigilant when confronting Russian adversaries.

During early World War II, the Russians implemented poor *maskirovka* tactics that led to devastating losses. Joseph Stalin immediately downgraded deception and surprise in favor of more direct forms of maneuver. However, throughout the war, the Russians secretly continued to practice deception tactics and became adept at using camouflage, dummies, and decoys to conserve their combat power. Dr. Luttwak points out how Russians began to think of deception:

It comes naturally, therefore, that you cannot work with a deception scheme when you've come up with your deception scheme then you turn around and you start worrying about how your [sic] going to muster your forces what kind of orders your [sic] going to cut for your artillery, infantry and so forth. Then there are other kinds of cultures in which you make a plan, your [sic] going to do this, your [sic] going to use your means to achieve this result and then having worked everything out you then around to the G3 and ask him to come up with some sort or deception plan that will mess that which you have decided to do. In the first instance, you are able to achieve major results by deception, in the second

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<sup>161</sup> Dailey and Parker, *Soviet Strategic Deception*, 42.

<sup>162</sup> Latimer, *Deception in War*, 260.

instance you have a marginal effect on deception . . . . Every single Soviet operation, every major Soviet operation conducted after the summer of 1942 was a deception first operation.<sup>163</sup>

Upon Stalin's death, Russian military leadership installed deception once again as a central theme in their doctrine.<sup>164</sup> Russia continues to see *maskirovka* as indispensable to their central idea of warfare.

Since the collapse of the Soviet Union, the Russian Federation Armed Forces underwent an extensive modernization period where the Russian government updated its equipment and doctrine. Observing the United States closely, they invested toward countering command and control systems and electronic warfare capabilities. This, as US military intelligence collection efforts fell into general decline. The unexpected invasion of Crimea in 2014 and Ukraine in 2016 demonstrated that Russians were highly adept at using new forms of *maskirovka* in their tactics. Hackers were used to enter a cell phone application used by Ukrainian soldiers to identify targets for artillery fires. Once accessed, the Russians turned the Ukrainians cell phones into location beacons and fired artillery on their locations.<sup>165</sup> Russian troops dressed in all green uniforms with no identifiable insignias deployed into Crimea from military trucks to annex the region. The Russian President, Vladimir Putin, denied any Russian involvement at first, but once their goal was accomplished, he would later admit to the deception. Modern *maskirovka*

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<sup>163</sup> Spencer, "Deception Integration in the US Army," C-1.

<sup>164</sup> Dziak, "Soviet Deception," 43.

<sup>165</sup> David Martin, "Russian Hacking Proves Lethal after Ukrainian Military App Hijacked," *CBSNews*, December 22, 2016, <https://www.cbsnews.com/news/russian-hacking-proves-lethal-after-ukrainian-military-app-compromised/>.



doctrine, or at least what can be analyzed, has a threefold goal. *Maskirovka* is designed to create surprise, preserve its forces, and attempt to control enemy actions. The Russian school of thought suggests that deception is paramount throughout planning and execution and is the best way to achieve surprise at any level of warfare. *Maskirovka* will interfere with the enemy's decision-making process. It seeks to influence the actions of the enemy and leave them at a disadvantage. Lastly, *maskirovka* can assist in the protection of combat forces. This includes all aspects of cover, concealment, and misinformation. *Maskirovka* requires unity of effort to compound the power of deception into more credible ruses. All three levels of warfare will work together to achieve the best results.<sup>166</sup>

*Maskirovka* is still practiced today. As late as 2017, the Russian Defense Ministry constructed the 45th Separate Engineer Camouflage Regiment, which is dedicated to hiding important military equipment and facilities from satellites, air reconnaissance, and unmanned aerial vehicles (UAV). The unit also contains a diverse array of decoys and inflatable vehicles designed to confuse the enemy commanders to commit expensive weapons to false targets. The creation of this dedicated unit exemplifies that Russia is intent on using this style of warfare against future adversaries. The unit has deployed to exercises with the Russian military as well, gaining experience and practice to understand how best to conserve their combat power.<sup>167</sup> *Maskirovka* also came to be used as recently

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<sup>166</sup> MAJ Morgan Maier, "A Little Masquerade: Russia's Evolving Employment of *Maskirovka*," (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2016), 9.

<sup>167</sup> Chuck Bartles, Ray Finch, Les Grau, and Kaitlyn Johnson, "The Russian Camouflage Regiment," *OE Overwatch* 7, no. 10 (November 2017): 20,

as April 2021, when the Russian military massed approximately 150,000 troops on the border of Ukraine in the region's largest military build-up. The 45th was credited with deploying their arsenal of dummy vehicles and tents to appear as a more credible threat. *Maskirovka* is alive and well in the Russian military and is being exercised routinely to perfect the art and confuse their adversaries.<sup>168</sup>

Totalitarianism, much like communism philosophy, does not hold objective truth, as we understand it, to be either desirable in principle or practicable in application. As noted in the Central Intelligence Agency (CIA) deception statistics, "In every way, from the smallest deception gimmick—such as the planting of misinformation in the press—up to secrecy on the national decision-making process, they hold enormous advantages over us."<sup>169</sup> Russians will continue to leverage deception tactics against their enemies, and with their modernization program focusing on information warfare, they will become a formidable opponent to the United States. This is made easier by the fact that most of its *maskirovka* is state-sponsored and even protected. Since the fall of the Soviet Union, they have carefully observed us and implicitly focused on us as their primary threat. While

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<https://community.apan.org/wg/tradoc-g2/fmso/m/oe-watch-past-issues/213749/download>.

<sup>168</sup> Ed Southgate, "All Hot Air Russia Deploys 'Decoy Army' of Inflatable Tanks, Missiles & Fighter Jets to 'Trick the West' Amid Ukraine Tensions," *The Sun*, April 22, 2021, <https://www.thesun.co.uk/news/14730411/russia-inflatable-army/>.

<sup>169</sup> Sherman Kent, "CIA Deception Statistics," Center for the Study of Intelligence, Central Intelligence Agency, last modified September 18, 2020, [https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a05p\\_0001.htm](https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a05p_0001.htm).

their doctrine and strategies do not explicitly state that we are a “military threat,” it allows them to compete below the level of warfare to sow suspicion in their intentions.

### Chinese Perception toward Deception

Out of three perspectives viewed in this thesis, The Chinese hold the oldest traditions of theory and doctrine regarding deception.<sup>170</sup> In fact, when the conversation surrounding deception arises, it is not Clausewitz, Jomini, Machiavelli, or Liddell Hart that people immediately refer to, it is the works of the ancient philosopher Sun Tzu. More commonly referred to as Sun Tzu, General Sun Wu wrote is famous his famous monograph around the 4th century B.C during the Warring States period. His underlying thesis for his treatise has been quoted by most books and other thesis regarding deception that states, “all warfare is based on deception.”<sup>171</sup> What Dr. Luttwak described as a characteristic of Russian doctrine also applies to the Chinese when he describes that cultures that start with the intent to deceive and build their plans around that are more prone to use deception. The scarcity of resources during the Warring States period led to the popular strategy of sacrificing less blood and treasure to achieve their goals and instead accomplish it through practiced skill. Tactics like ruses, deception, and feigned retreats became highly admired, and leaders that could master these skills became highly prized.

Interestingly, as central as deception and surprise is to the Chinese culture, it, too, has experienced periods of emphasis and neglect during its history. According to Dr.

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<sup>170</sup> Whaley, *Stratagem Deception and Surprise in War*, 42.

<sup>171</sup> Sun Tzu, *The Art of War*, 1.

Whaley, this was likely caused due to internal bureaucratic policies and the introduction of Western military doctrines. After the Sino-Japanese war, Chinese military academies began to build more European-style armies. Adopting German doctrine and training, the art of deception remained dormant. This slowly changed as the Nationalist-Communist party's military academy, the Whampoa Academy, introduced Soviet instructors, who promoted the Marxist-Leninist strategies of deception and the principle of surprise. The resurgence of deception reached its highest period of practice and study in the 1930s under Mao Zedong. Mao, a fervent student of Sun Tzu and Clausewitz, understood both ideologies and used them together to great effect to deliver devastating losses to the Chinese National Party.<sup>172</sup> He would write extensively on Sun Tzu's maxims, mainly to understand oneself and the enemy and use deception to help the enemy defeat themselves. Although Sun Tzu's principles endured, they were interlaced with Marxist ideology.<sup>173</sup>

The tactics of guerilla warfare closely reflect the teachings of Sun Tzu and are still followed by the Peoples Liberation Army (PLA) and its government. Dr. Whaley describes a characteristic of the Chinese military that has survived in the Chinese government today:

A characteristic feature of the Chinese style in warfare is the cautious avoidance of battle. Ideally, every effort to gain victory without battle is exhausted before battle is joined, and even then only if the odds are overwhelmingly favorable. The object of this Chinese "tradition of victory through non-violence," as Whitson calls it, is to induce the enemy to capitulate before battle by bribery, treachery, or tricking him into a position that he

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<sup>172</sup> Barton Whaley, *Prevalence of Guile* (Washington, DC: National Intelligence Council, 2007), 29-35.

<sup>173</sup> Latimer, *Deception in War*, 275.

perceives is hopeless. The Western (and Japanese WW II) fight-to-the-last-man syndrome is not congenial to Chinese soldiers, generals, or politicians.<sup>174</sup>

Psychological predispositions of the current dominant party stem from the Maoist victories over General Chang Kai-shek. The overconfidence of the Nationalist party was used against them by Mao's Communist Party to defeat them in 1949. This event stressed the Chinese view of caution and matters relating to "control, foreknowledge, economy of force, and risk reduction."<sup>175</sup> Yet, this victory came at a cost. One of the differences between Sun Tzu and Mao's writings was Mao's emphasis of a protracted-war. Mao developed a long-term vision of conflict that was in direct contrast to Sun Tzu's teachings of a quick victory. Today, the Chinese are known to be masters of this tactic, particularly in their government affairs. This, coupled with an understanding of what the West calls "perception management," gives the Chinese an opportunity to curate narratives that benefit them over long periods of time. The strategy of perception management can be described as "actions to convey or deny selected information and indicators to foreign audiences to influence their emotions, motives, and objective reasoning."<sup>176</sup> The US DOD categorizes military deception as a technique used in perception management and is a tactic that the Chinese are adept at utilizing.

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<sup>174</sup> Whaley, *Prevalence of Guile*, 29-34.

<sup>175</sup> Donald C. Daniel and Katherine Herbig, *Strategic Military Deception* (Elmsford: Pergamon Press, 1981), 288.

<sup>176</sup> Eric C. Anderson and Jeffrey G. Engstrom, "China's Use of Perception Management and Strategic Deception," (Paper Prepared for the U.S.-China Economic and Security Review Commission. Science Applications International Corporation, Reston, VA, revised November 2009), 4-5.

Since deception is so pervasive in Chinese culture, the conversations surrounding the stratagem can include the military as well as political aspects of their society. The maxims, so intelligently penned by Sun Tzu, are encoded in all aspects of their lives to include their psyche, linguistics, culture, and history. The Chinese acknowledge how necessary the role of deception is to their way of life. The use of strategic deception and perception management is not just meant to affect military affairs, as that is not how the Chinese view this activity. Deception transcends the different facets of its society and often includes lying to its people, media manipulation, statecraft, and military organizations, both in peace and wartime, with a specific focus on causing its target to commit errors in their decision-making. This is layered on top of the strategy of protracted warfare to curate how enemies and other Nations perceive China. <sup>177</sup>

Currently, in 2021, the PLA still values deception, especially in the realm of cyberspace. Although highly adept at using cyberspace to target and influence its adversaries, the Chinese, much like the Russian's, have deep psychological scarring of when they physically confronted the US Army in World War II. This precept leads the Chinese to think that they face the same situation of an inferior force fighting a superior one, just in the cyberspace domain. A current article, published in the *Science of Campaigns*, recently described how the PLA has continued to incorporate the art of deception:

In *Science of Campaigns*, an important text for training Chinese commanders in the art of warfare at the operational level (or, for the Chinese, the campaign Zhanyi level), basic principles for warfighting reveal stratagem-laced

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<sup>177</sup> Anderson and Engstrom, "China's Use of Perception Management and Strategic Deception," 6.

thought of manipulating the enemy with rapid, sudden actions to deceive, mislead and then catch the enemy by surprise.<sup>178</sup>

This sentiment applies to all domains but is especially relevant in the focused areas of space and cyberspace. As the paper notes, “Stratagem emerges as a decisive technique in the intellectual contest between commanders, as the PLA seeks to outwit their opponent using various types of activities that may include deception, united by a single plan or scheme.”<sup>179</sup> Regardless of the operation or the domain they choose to fight, the commander remains the center of gravity to Chinese deception strategies. Two requirements are needed for success which is stated in the journal. First, to use the informational space to influence the enemy’s decision-making, and second to employ conventional and special activities to sever the technological dependence of the superior force. China, much like the United States, has identified that in modern warfare, the objective of targeting the enemy’s decision-making capabilities and skills is a strong determining factor for victory. The report to Congress concludes that “Chinese thinking identifies psychological weaknesses as an opponent’s Achilles Heel—.”<sup>180</sup>

In conclusion, The PLA still practices and will continue to practice deception against its enemies. Chinese commanders, who have been raised in a culture where

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<sup>178</sup> Anderson and Engstrom, “China’s Use of Perception Management and Strategic Deception,” 10.

<sup>179</sup> Ibid.; Zhang Yuliang, *In Their Own Words: Foreign Military Thought: Science of Campaigns (2006)* (Montgomery, AL: China Aerospace Studies Institute, Air University, 2006), 13, [https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2020-12-02%20In%20Their%20Own%20Words-%20Science%20of%20Campaigns%20\(2006\).pdf?ver=hma387iK8lQcZQ1x9ktt-Q%3d%3d](https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2020-12-02%20In%20Their%20Own%20Words-%20Science%20of%20Campaigns%20(2006).pdf?ver=hma387iK8lQcZQ1x9ktt-Q%3d%3d).

<sup>180</sup> Anderson and Engstrom, “China’s Use of Perception Management and Strategic Deception,” 11.

deceptive activities reside in every facet of life and politics, will undoubtedly attempt to influence the decisions made by their adversaries when competing in all domains. They, much like the Russians, understand the value of psychological operations and deception and will continue to prioritize activities conducted in cyberspace to compete with the United States. Since antiquity, their literature has written about how inferior enemies must overcome their stronger opponents through cunning and guile. They are unrestricted in the use of deception and can run the gamut to affect other facets of society, including media, and to some extent, their politics. Finally, they are rewarded by their government for their skill in deceptive tactics instead of wasting the national resources to achieve their objectives. The routine exercise of critical and creative thinking makes the Chinese Army an opponent not to be underestimated. Because of this and how the Russians will use the instruments of their national power, our Army needs to revise our doctrine on deception and address the gaps we face when moving towards a conceptual framework of LSCO.

#### What We Have Lost Since the Gulf War

The success of the Gulf War proved how the operational concept of Air-Land Battle, when applied effectively, could devastate a traditional standing Army. After the Gulf War and the collapse of the Soviet Union, the enemy began to change. The United States learned that destroying the enemy Army is important, but if the political structure that sponsored it is not influenced to change, then a resurgence would likely occur. In other words, the center of gravity needs to be targeted for change to happen. The military shifted to a counterinsurgency fight in 2004 to attempt to do just that. While doing so, many tactics, techniques, and procedures were not used in favor of more rapid and direct-



action tactics. The Army is currently changing its operations model from COIN back to LSCO. Many of the manuals associated with deception were labeled “defunct” or superseded by others that abbreviated the contents in those manuals. Deception, in general, was relegated to the proverbial bookshelf again, used sparingly in the conventional Army, but finding utility in the Special Forces community. Although the current manual for deception, FM 3-13.4, was updated as of February 2019, it leaves much to be desired. This section of the thesis will analyze the past doctrine to determine what was not updated that could be relevant to today’s revival of deception. This section will address the tertiary question of this thesis, What capabilities from previous deception doctrine should be re-applied and updated at the tactical level to use in a modern LSCO environment?

Due to the current decentralized style of today’s deception doctrine, this analysis will break down what theories and capabilities the Army could bring back to help modernize deception for LSCO in a multi-domain operating environment into the three primary means of deception practiced today: physical, technical, and administrative.

### Physical

The current field manual for most physical deception tactics, techniques, and procedures is ATP 3-13.34, *Survivability Operations*, published April 2018. Although deception is not its total focus, it does a remarkable job capturing most of the lessons learned from past doctrine dating back to 1940. Much of the tactics and techniques from the past have been rendered obsolete by new techniques and technologies and have been replaced with more efficient ways to deceive the enemy. Still, since the manual is focused on survivability operations in general, some tactics and techniques were not included that

with few modifications and could prove useful to reduce the reluctance to use tactical deception.

Engineer FM 5-20, *Camouflage*, published in 1940, introduced the various ways we still plan for the use of cover, camouflage, and concealment today. Much of these techniques have proven effective, while some have been rendered obsolete by technological advances (ex. looking up to avoid aerial photography). The primary effort emphasized in the manual was surrounding the protection and camouflage of the lines of communication, a topic that is not emphasized in current doctrine. Although logistical sites are described as critical assets in current doctrine, little discussion surrounds the roads leading to these sites.<sup>181</sup> FM 5-20 described varying tactics and procedures designed to protect and mislead the enemy away from real logistical sites that were not published in the current doctrine. Although the manual title is not titled deception, this was the Army's first attempt to capture the actions taken to influence the enemy to perform actions counter to their objectives. Although a small point, including the discussion of creating false roads and dummy positions (see Figure 4) in today's doctrine, would serve to stimulate the creativity of the soldiers charged to protect these positions in the future.<sup>182</sup>

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<sup>181</sup> HQDA, ATP 3-37.34, 8-1.

<sup>182</sup> Headquarters, Department of the Army (HQDA), Field Manual (FM) 5-20, *Camouflage* (Washington, DC: Government Printing Office, June 1940), 31.

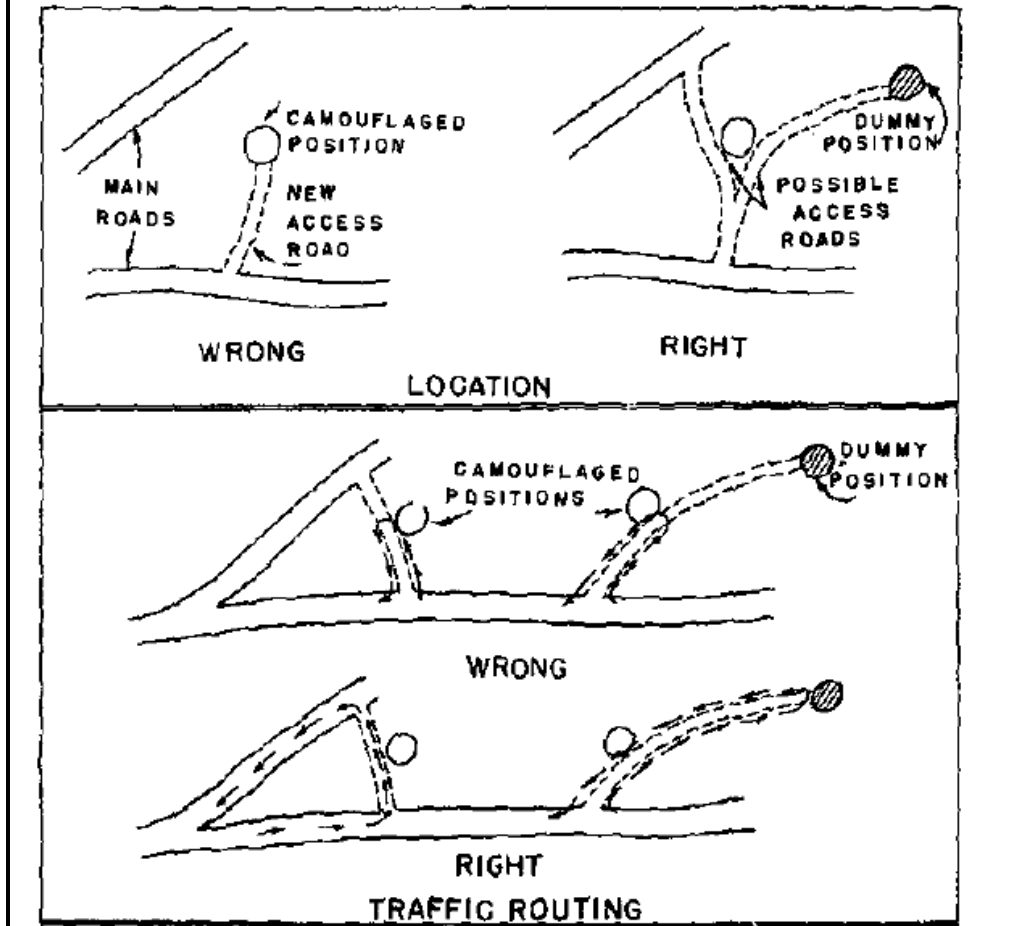


Figure 4. Example of How to Construct False Roads

*Source:* Headquarters, Department of the Army, Field Manual 5-20, *Camouflage* (Washington, DC: Government Printing Office, June 1940), 31.

As deception evolved to incorporate practical lessons learned from the wars, Army writers understood that deception was more of an art form and that the best way to convey complex techniques would prove difficult without pictures to illustrate what they meant. The revised FM 5-20 was a stand-alone manual dedicated to camouflage until 1968. The first manual used numerous hand drawings, as seen above, to convey the

correct application of deception. As the manual evolved, it began to incorporate pictures to show examples of correct and incorrect methods of physical implementation.<sup>183</sup>

Chapter 6, Camouflage and Concealment, of the current manual, has no pictures describing the techniques it writes about. Currently, there is no way to distinguish what is correct vs. incorrect emplacement techniques. Additionally, there is no training course in the Army that soldiers learn the tactics and techniques required to apply effective tactical deception.

Army FM 90-2 *Tactical Deception (How to Fight)*, first published in 1978 and superseded in 1988, was the first manual to describe the reasons and utility of military deception. In it, it grapples with the morality of whether the tactic should even be applied. More evidence of a just American way of war. This manual is the inception of many of our deception processes. To encourage the use of deception, the manual included a section titled “Deception Ideas” (see Figure 5), designed, again, to stimulate thoughts of different ways and scenarios where it could apply. Helpful and creative methods like this put ideas into the minds of Army decision-makers and give them options that might otherwise have not been available.<sup>184</sup>

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<sup>183</sup> HQDA, FM 5-20, 69.

<sup>184</sup> HQDA, FM 90-2, *Tactical Deception*, 4-13.

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**MORE DECEPTION IDEAS**


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The following are thought-provokers—ideas for you to expand, adjust, and envision on the battlefield; but, most of all, these ideas should trigger your imagination.

Consider the simulation of unit movement. Convoys, reserves, or an armor unit can be simulated by jeeps dragging branches behind them, raising clouds of dust. This movement should terminate in a logical area.

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Such a deception can be enhanced by using a loudspeaker system and a tape of noises normally accompanying such a move. If the physical aspects of the notional location are suitable, you will have created a fictitious unit with minimum assets.

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Adding antennas to other vehicles in a formation will tend to deceive enemy gunners and observers as to which is your true command and control element.

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If there are waterways in your area, fake and regular bridges should be augmented by the construction of underwater or rapidly emplaceable bridges as an alternate secret means of crossing.

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Consider using planned communication security leaks. Perhaps while flying over an area you could chew out a commander for his poor use of camouflage in one of the decoy areas. Accompanied by a corrective action in the decoy area, this provides strong confirmation of the realism of that installation.

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When a unit must, secretly withdraw from an area to prepare for an operation, have the troops remaining in the area and/or the replacing unit assume the identity, patches, bumper markings, call signs, frequencies, etc. of the replaced unit.

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Changing aircraft markings may result in the assumption by the enemy that a new aviation unit has been introduced into the area.

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If conditions permit, consider causing confusion in enemy rear areas. Dropping empty parachutes behind enemy lines at night or conducting fake helicopter insertions can divert enemy resources from their primary mission.

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To further confuse the enemy in his rear area, consider counterfeit posters placed where he can see them as he advances. Such posters might warn against moving into radioactive areas. Others might warn that while particular color US flares are not radioactive, some are.

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Rumors can be circulated deliberately by allowing civilian personnel or indiscreet military personnel to see and hear what is desired, or by making demands on civilian resources to supply mythical forces.

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Figure 5. Military Deception Ideas

*Source:* Headquarters, Department of the Army, Field Manual 90-2, *Tactical Deception* (Washington, DC: Government Printing Office, August 1988), 4-13.

The updated manual in 1988 perhaps has the most striking contrast to today's manuals. In its Appendix A, it mentions a Battlefield Deception Element that was

assigned to each corps and division.<sup>185</sup> These deception sections, part of the Corps Military Intelligence (MI) brigade and battalion Combat Electronic Warfare Intelligence (CEWI) respectfully, provided the planning and means for deception. These elements ensured that the deception plan was nested with the operational plan and would monitor and assess the deception operations. Its sections contained a communication, physical, and electronic signature team that worked in concert to recommend the best tactics and methods to protect the units and affect the enemy's commanders' formations.

Missing from today's current manuals is an explanation and application on how to deploy decoys on the battlefield. FM 90-2 outlines recommended techniques, ideas, and procedures to employ decoys to confuse the enemy. According to the manual, "If a decoy momentarily draws enemy attention from a real installation, it has served its purpose."<sup>186</sup> In today's modern battlefield, momentary distractions can mean the difference between survival and destruction. It also describes the necessity to couple physical simulation with electronic means such as heat, emission, odor, and radar sensors to give credibility to decoy formations and describes how movement and repositioning of assets at certain times gives the enemy the illusion they need to engage the false target. As David Charter notes, "many officers are convinced that modern technological advances rule out both operational and strategic deception. Technology has produced a wealth of highly sophisticated sensor systems. These systems are capable of detecting signatures caused

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<sup>185</sup> HQDA, FM 90-2, *Tactical Deception*, Appendix A.

<sup>186</sup> *Ibid.*, D-0.

by heat, light, electronic radiation, odor, sound, and movement, to name just a few.”<sup>187</sup>

Today’s modern sensors are advanced enough to mimic these signatures to the extent that it difficult for the enemy to distinguish between the real and the fake. The decoys rely on skill for emplacement, which comes down to training. Modern field manuals find themselves lacking in terms of physical deception means to LSCO. The gap in knowledge and training is evident as the skill is atrophied. Army units today rely much more on the technical means, electronic warfare, to conduct deception if any.

### Technical

Most manuals referencing the technical and administrative means of deception are classified and out of this thesis’s scope. However, FM 3-13.4 refers the readers to an unclassified manual FM 3-12, *Cyberspace and Electronic Warfare Operations*, dated April 2017. The major reference regarding deception in the manual mentions electromagnetic deception, which is:

the deliberate radiation, re-radiation, alteration, suppression, absorption, denial, enhancement, or reflection of electromagnetic energy in a manner intended to convey misleading information to an enemy or enemy electromagnetic-dependent weapons, thereby degrading or neutralizing the enemy’s combat capability. Types of electromagnetic deception include manipulative, simulative, and imitative.<sup>188</sup>

Before this manual, FM 90-2A, *Electronic Deception*, dated June 1989, was released as an extension to FM 90-2; however, FM 90-2A is still classified. Although the specific capabilities and equipment to conduct electromagnetic warfare at the tactical level remain classified, a trend begins to appear among all three means of deception. There seem to be

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<sup>187</sup> Charters and Tugwell, *Deception Operations*, 321.

<sup>188</sup> HQDA, FM 3-12, 1-27.

only scant mentions of training these assets. There is no mention of training to practice these methods together to ensure deception methods are effective. Modern Army doctrine could revise the now-defunct Army Regulation (AR) 525-21, *Tactical Deception (TAC-D) Policy (Including, camouflage, Countersurveillance, and Concealment)*, published June 1982 that established training expectations and roles and responsibilities to senior leaders regarding implementation of TAC-D.

Although a new AR 525-21 has been published since 2013 under a different name, “MILDEC Program,” and is marked unclassified, it is unavailable for public examination. However, there are topics in previous versions that may posture the Army to conduct TAC-D routinely if implemented. The previous regulation was implemented when the military began heavily to promote TAC-D to division level units and below, as evidenced in FM 90-2. This regulation directly ordered that TAC-D would be exercised whenever possible. It explained what commanders at different echelons will do to incorporate TAC-D as a credible solution toward the enemy and how training should be conducted. The regulation begins with the roles of the most senior leader, the Deputy Chief of Staff for Operations and Plans, which had the responsibility to “Supervise the integration of TAC–D into Army plans, operations, and unit training,” “Provide Army Staff supervision of planning, execution, and evaluation of TAC–D activities in field training exercises,” and “Insure that TAC–D is incorporated in Army doctrine, concepts, materiel development, and training.”<sup>189</sup> It is curious that these tasks also included the

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<sup>189</sup> Headquarters, Department of the Army (HQDA), Army Regulation (AR) 525-21, *Tactical Deception (TAC-D) Policy (Including, Camouflage, Countersurveillance, and Concealment)* (Washington, DC: Government Printing Office, 1982), 1.



task of developing techniques and procedures tailored to unit training, understanding that not all units fought alike.

The Commanding General for TRADOC and the Commanding General for FORSCOM were also charged with equally important tasks. TRADOC requirements included, “Direct and supervise the preparation of training literature for TAC–D equipment; direct and supervise the training of personnel in the use, operation, and maintenance of TAC–D materiel,” “Integrate TAC–D doctrine and concepts into the curriculum of TRADOC schools,” and “Include TAC–D in Army Training and Evaluation Program (ARTEPS),”<sup>190</sup> which today is called the Army Universal Task List (AUTL). FORSCOM requirements included, “Develop and maintain a capability to perform TAC–D functions to support operational plans; this will include electromagnetic cover and deception (EC&D),” “Train commanders, staff members, and communications and intelligence personnel to—Integrate TAC–D training into unit training programs, maneuvers, and exercises, as appropriate,” and “Identify operational and intelligence requirements, conduct appropriate test and evaluation activities, and procure equipment needed to reach required TAC–D posture, in consonance with other known requirements and priorities.”<sup>191</sup> Several senior leaders were also mentioned, including the CG for US Army Intelligence and Security Command (INSCOM) and Deputy Chief of Staff for Logistics (DCSLOG), to ensure synergy among the different commands and ensure that TAC-D operations supported their objectives as well. As this regulation was mandated at

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<sup>190</sup> HQDA, AR 525-21, 2.

<sup>191</sup> *Ibid.*, 3.

the time, a heavy emphasis was given to the Army's perceived gap in training, both on the planning and training side.

Regarding training, it stated:

Incorporating TAC-D into operations will be a standing objective in all major Army exercises. TAC-D will be given priority over other exercise objectives during specified portions of the exercises; this will be done to evaluate the capability of US Army combat, combat support, and combat service support elements to perform both cover and deception in a hostile threat environment.<sup>192</sup>

The regulation understood that to become proficient at a new skill, commanders would have to find routine training opportunities and evaluate it for its success. Three essential elements were directed at commanders as training guidance:

1. The unit must train for an operation within a scenario that allows the commander to elect deception or the superior tactical headquarters to direct it.
2. There must be sufficient maneuver room and training time to permit several options to be analyzed as possible deception stories.
3. There must be an opposing surveillance system available to gauge the proficiency achieved.<sup>193</sup>

This guidance included an emphasis on the intelligence branch to support the TAC-D training and evaluation criteria. At the time of this publication, the Intelligence warfighting function played a much larger role in planning, synchronizing, and evaluating TAC-D activities. Its roles included providing support to the TAC-D planners, preparing scenarios based on anticipated threats, and be the evaluators for plans, tactics, and assets. Intelligence personnel were also tasked to "Train or familiarize personnel at

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<sup>192</sup> HQDA, AR 525-21, 5.

<sup>193</sup> Ibid., 3.

all levels with TAC-D activities, capabilities, and limitations”<sup>194</sup> and to evaluate target acquisition and intelligence-gathering activities. The regulation also mandated that the intelligence cell conduct extensive training to human intelligence (HUMINT), signal intelligence (SIGINT), and imagery intelligence (IMINT) that support TAC-D operations. “These activities seek to hide the real, which is the camouflage, counter-surveillance, and concealment component of TAC-D.”<sup>195</sup> These tasks are no longer mentioned in our current doctrine, ADP 2-0, *Intelligence*, dated July 2019, and are only mentioned a few times in FM 2-0, *Intelligence*, dated July 2018 and its related ATPs. None of the references indicate a close relationship with tactical units to assist in developing effective TAC-D techniques, scenarios, or evaluations, and professional military education for Intelligence officers provide no classes discussing support to deception activities. FM 3-13.4 is the only manual that includes a checklist that contains a list of questions the Intelligence cell asks units as part of the evaluation.<sup>196</sup> In general, this regulation sought to have all Army units be trained and capable of basic TAC-D functions.

The policies for this regulation were aggressive and showed how serious the Army was to incorporate TAC-D into its available engagement options. Corps echelons and below were ordered to use TAC-D during day-to-day operations, mobilization, periods of international tension, and war. Most notably, commanders were authorized to

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<sup>194</sup> HQDA, AR 525-21, 4.

<sup>195</sup> *Ibid.*

<sup>196</sup> HQDA, FM 3-13.4, Appendix C.

“Identify operational and intelligence requirements, conduct appropriate test and evaluation activities, and procure equipment needed to reach required TAC–D posture, in consonance with other known requirements and priorities.”<sup>197</sup>

Presented were capabilities that the Army has lost over the many modernization and transformation periods since the Gulf War. Regulations and policies that were in place never manifested, and concepts like TAC-D never promulgated throughout the Army. The Army instead focused on COIN operations that required focused attention and direct action. Deception, by its nature, will always be a means to an end and never an end of itself. Not every situation requires the use of TAC-D, but if attempting to preserve combat power or affect the enemy’s decision-making process, deception is an optimal choice. However, it is only effective if practiced and understood by the Army attempting to employ it. The capabilities presented above deserve to be re-examined to better align TAC-D’s utility in a modern LSCO environment.

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<sup>197</sup> HQDA, AR 525-21, 3.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This study has examined the current gaps the Army must overcome to conduct effective tactical deception in modern LSCO using a DOTMLPF-P analysis. It has analyzed the history, psychology, and perceptions of our pacing threats (Russia and China) and ourselves to understand better how deception will play a role in future confrontations. Finally, it analyzed past doctrine to determine what capabilities, tactics, techniques, and procedures should be reexamined and updated to properly align tactical deception against a LSCO environment. With this analysis complete, a reasonable conclusion can be drawn that identifies deficiencies as the Army transitions from COIN back to LSCO. The value of tactical deception cannot be understated. Deception, when used offensively, has historically shown that it is up to eight times more effective at producing casualties and four times as likely to win battles using some degree of surprise. In the defense, it has shown to greatly reduce the number of casualties received, saving personnel and equipment.<sup>198</sup> As warfare continues to be more expensive in terms of equipment and personnel, deception will find increased value as a capability to preserve limited resources and influence enemy commanders to make precious mistakes that can be exploited to gain an advantage on the battlefield. Smaller budgets will mean that Army leaders will need to get creative with the resources available to maintain lethality and protect the force.

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<sup>198</sup> Whaley, *Stratagem Deception and Surprise in War*, 103.

### Refined Recommendations

Throughout the analysis, some recommendations were given in terms of identified gaps, while others were saved for this portion of the thesis. The overwhelming gap the Army currently faces to conduct TAC-D effectively resides in this thesis's training and leadership sections. Presently, Army leaders do not practice any form of deception due to a lack of knowledge and training on applying this tactic. Starting at our professional schooling, very few courses, except for IO officers, have classes that discuss the use of deception operations. This is also reflected in the professional schooling our NCOs receive.

With no training requirements, tactics like deception are rarely included in unit field training events and CTC rotations. The tacit and experiential knowledge to employ deception is not present in today's Army organization. Training in deception will allow for critical and creative soldiers to learn new ways to protect from enemy forces. Officer education should include more conversations and practical exercises to plan TAC-D operations, with further advanced schooling to teach MILDEC. Currently, our Intelligence Officers are underprepared to perceive deceptive techniques leading to the current process of IPB to be ripe for successful enemy deception. The MI community has lost much training in identifying when the IPB process has been exploited, leading to a degradation in our analysis processes.<sup>199</sup> As one CIA report for deception statistics stated, "The average U.S. intelligence analyst today is almost totally unprepared to cope with an enemy deception effort—and this will likely be true also of his supervisor and the

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<sup>199</sup> Latimer, *Deception in War*, 304.

policy planner.”<sup>200</sup> They do not have the tasks they used to have in the 1980s and 1990s to be committed to assist and evaluate tactical deception activities as outlined in AR 525-21 and FM 90-2, dated 1988. Improved training at the schoolhouses can have a great impact on the thinking required to prevent deception.

Senior leaders also need to be trained to understand the basic concepts and routine uses of TAC-D. Today’s tactical-level leaders at the division level may have some understanding of deception when they trained with their units as lieutenants, but they have not practiced it nor seen it employed since. This holds true for new brigade commanders and their field-grade staff officers. More than 20 years of fighting in COIN operations means that most leaders grew up in that environment and have no basis of reference to employ TAC-D. The recommendation is an introductory course for TAC-D at the senior level U.S Army War College and CGSC. This course presents more opportunities for tactical commanders to feel comfortable employing these tactics in their units.

For the first time, 2021 gave CGSC students a chance to plan for a TAC-D operation in their AOC scenario. Without proper training in the deception planning principles, it went as well as might be expected. Little to no understanding on how to apply resources to the operation and how to incorporate the deception plan into the MDMP made for a lackluster plan; however, it did have the students go through the deception planning process in doctrine and introduced these students to new ways to creatively use equipment to their advantage. An introductory class explaining TAC-D and

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<sup>200</sup> Kent, “CIA Deception Statistics,” 3.

its utility would greatly benefit field-grade officers to better understand how to utilize deception. As AR 525-21 prescribed to the CG of TRADOC, “Integrate TAC–D doctrine and concepts into the curriculum of TRADOC schools.”<sup>201</sup>

To regain the skills of field craft, a training school attended by NCOs to develop physical deception means like dummies, decoys, replication of unit formations, command post protection, and construction of fake trails would lead to critical thinking on the battlefield and reveal creative ways to use standard equipment in nonstandard ways. NCOs are then able to teach these tactics to Soldiers in their units and experience different fighting methods. This type of school can be possible. Today, Army snipers are taught advanced tactics of cover, camouflage, and concealment. It is possible to envision a camouflage school to learn how to protect equipment and structures. For example, the Army once had a school for the Corps Deception Cells from the Battlefield Deception office in Fort Huachuca, AZ, which had a program of instruction (POI) similar to the training required to align TAC-D back to LSCO.

The Army CTCs are a great source of information regarding the trends (good and bad) the Army faces when it comes to standardized training. The recommendation would have TAC-D be prioritized during certain portions of a rotation to evaluate the capability of units to perform deception operations. Since TAC-D is designed for the local commander level, these TTPs can be practiced, gaining proficiency for future sustained use. The prescriptive AR 525-21 stated that units should expect a contested environment

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<sup>201</sup> HQDA, AR 525-21, 3.



that lends to practice deception..<sup>202</sup> As the CTC Operations Group gathers the After-Action Reports (AARs) and compiles the data, units can see where they are deficient and correct at their home station accordingly. Only if deception scenarios are present during the rotations will units train for them at their field training exercises.

It is the author's belief that personnel do not need to be required to focus on deception as a focused Military Occupational Specialty. The IO proponent, as of March 2021, has worked on awarding students who attend the ADPC and the MDPC with an ASI as Deception officers. In terms of resources, time, and personnel, this cost-saving technique can facilitate getting more experienced personnel to the conventional force and "normalize" the use of deception. If the Army decides to focus on deception as a primary specialty, exploring the possibility of creating a TAC-D specialist in the Warrant Officer corps can possibly bring mastery of deception to tactical level leaders. A warrant officer serves as a technical expert that provides critical capabilities to commanders in specific fields. Their expertise and training can focus on the deception effort, centralize the planning, and bring the means together to support the operation. Creating a deception specialty for warrant officers would ensure that tactical level leaders have access to an expert dedicated for deception and would ensure stewardship of its tactics, techniques, and procedures for future conflict.

The engineer officer should also be considered as a candidate as a CMDO at the tactical level. Engineers reside in the movement and maneuver cell as planners and working primarily with the means of physical deception, understand how their effects can

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<sup>202</sup> HQDA, AR 525-21, 4.

influence the enemy decision maker based on what the commander wants to achieve. Introducing the engineers to the IRC early in their PME can ensure that they understand that these capabilities exist and that it can be practiced, at relatively low cost to equipment and manpower, to achieve outstanding results.

Ultimately, all training is a command-driven function that considers time and budget. Interest in using the TAC-D also plays a role. While not directed anymore to practice TAC-D in all major training objectives as outlined by AR 525-21, familiarity with using deception can increase its utilization by virtue of repetition. However, training and understanding are the keys to unlock TAC-D as an enduring solution to apply in a LSCO.

#### Recommendations for Further Research

The concepts of MILDEC and TAC-D have not been fully explored to examine all their potential benefits to the U.S Army in future operations. Further research to include interviews with the current Commanding Generals of the Combined Arms Center and TRADOC would reveal many insights into why the Army seems to have stagnated on the requirements to use deception as a viable method of warfare.

As a student attending the CGSC, the amount of networking done lends to a wealth of knowledge that passes by with every iteration of command selected future battalion commanders and guest speakers. Conducting a quantitative study on their perceptions, thoughts, and predictions of the use of deception would be a fascinating research topic to understand the mindset of the Army's future tactical level leaders.

Research into new camouflage designs would present interesting ways the military plans to protect its units and equipment from different environments across the

globe. The effects of emerging digital patterns against enemy perceptions would merit a closer look into the survivability of future Armies. Additionally, how useful would it be to explore the effects of space and cyber deception on enemy tactical units and how could the Army leverage these capabilities to conserve combat power.

As new doctrine emerges, TAC-D will seem to be mentioned more as a viable option for commanders to train and execute. Future research may want to analyze how incorporating TAC-D into doctrine correlates with its application in FTXs, WFXs, CTCs, and simulation centers. Are commanders using TAC-D more now that it is mentioned in more collective doctrines? Would there be training standards units can apply to determine if their deception efforts are beneficial? Is there an increase in demand for more dummy and inflatable equipment to use in practice? This research could also explore if deception should be its own MOS. Could warrant officers be a viable solution to have TAC-D endure in the Army?

One problem this thesis concluded was the risk that if TAC-D was not studied often enough, the enemy could use that lack of knowledge to their advantage and our information collection processes would be susceptible to even the simplest acts of deception. Further research into the subject of counter-deception and how the military currently conducts training for it would be interesting to study. In the realm of military intelligence, what counter-deception courses are offered to the officers to ensure conduits of information are being filtered properly for false information, negating the contamination of the MDMP process? Is counter-deception offered in their PME courses, and if so, in what echelon do these trained officers reside? This study may aim to uncover a resurgence in counter-deceptive training for the intelligence community that could

signal a need to understand how deception is used by our adversaries and effective ways to identify deceptive information at the tactical level.

Finally, most of the knowledge involving deception is espoused through the myriad of vignettes and case studies conducted for over eight decades. As we transition to Multi-Domain Operations, further research is needed into exactly how multi-domain deception would be conducted. As Conrad Crane states, “In a world of constant and conflicting news coverage, ubiquitous social media, and a myriad of surveillance technologies and platforms, the possibilities, complexity, and importance of deception operations have only increased.”<sup>203</sup> An in-depth study to reveal new TTPs regarding the use of space and cyberspace to conduct deception and persuade populations would bring a new facet to warfare and must contend with complex authorities and policies at the tactical level. How deception will shape the future battle geometry would be interesting.

### Conclusions

Until leaders generate the demand signal for the implementation of TAC-D into their formations, the Army will remain deficient in applying TAC-D to support LSCO. Whether it is top-down or bottom-up refinement, the Army community needs to generate interest in applying this warfare method. Commanders will not train on it because they do not understand it, and they perceive the risk and resource allocation too high for any benefit TAC-D could provide. If Army leadership is unwilling to be interested in this tactic, it will remain atrophied and deficient. Currently, the Army units’ METs are so

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<sup>203</sup> Conrad Cane, “The Future of Military Deception Operations,” in *Weaving the Tangled Web* (Fort Leavenworth, KS: Army University Press, 2018), 231.

numerous that units often pick and choose the tasks most relevant to accomplish the mission based on the higher command's priorities. Adding one more task as obscure as "employ tactical deception" can have the same effect as having nothing at all if interest is not present. Leaders are also averse to risk personnel or equipment to tactics that are not proven or evaluated for them. There is currently no training guidance, and the manuals are unclear regarding who can communicate the deception plan to lower units if no IO officer is available and assuming they are trained. The officers assigned as CMDOs must go to training to understand how to weave the three means of deception together.

Our training and education regarding deception remain inadequate. There is still no professional military education school that teaches deception to the conventional Army, except the new CGSC course on MILDEC, but not TAC-D. Our NCOs have lost the art of fieldcraft and are underprepared to execute the physical means of deception. There are no training and evaluation standards to practice these techniques in a field training exercise, and there is no scenario designed to practice deception at the CTCs. A lack of interest from leadership coupled with no evaluation standards leads to the Army not effectively enabling TAC-D against expected threats.

Our pacing threats are very adept at using deception. It has been rooted in their culture since the early 20th century and has continued to evolve into all facets of their lives. Applying deception, whether in peace or wartime, is second nature to them. There should be no doubt that they will continue to use deception, which comes naturally for them. To them, the ends justify the means and will not be expected to abide by any set of conditions present. The United States, on the other hand, is a culture where it values truth and credibility. Its views on deception are generally negative, which causes hesitation

among some officers to practice deceitful tactics to route the enemy. This may seem like the United States may have a disadvantage; however, curiously enough, honest people seem to deceive the best. Michael Handel best explains this paradox, “the more one has a reputation for honesty; the easier it is to lie convincingly.”<sup>204</sup> War seems to bring out the American talent for deception, but American soldiers pay a heavy price to relearn lessons mastered decades ago without proper training.

Many lessons were lost as a result of the Army’s operational focus on COIN. Numerous training and field manuals were rescinded, not updated, or condensed with other manuals. Many of the readily available tactics for Soldiers in the field are now classified secret, and the difficulty to practice these same techniques becomes a serious obstacle to overcome. Only when the Army showed a strong emphasis to practice TAC-D did Army regulation emerge to support the policy. With the emphasis of including TAC-D into every available training event and major operation, the Army was determined to have units proficient in the use of TAC-D. Perhaps another top-down emphasis will be needed to finally get commanders to make this tactic a permanent, viable, and sensible option to face future threats. It will take a concerted effort to relearn what we lost, but this time, as we head into a new era of future warfare, the ancient art of deception will help us to victory, just like it did when we first ventured out of our caves.

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<sup>204</sup> Handel, *War, Strategy, and Intelligence*, 335.

## BIBLIOGRAPHY

- 1st IO Command (Land). "1st IO Cmd Training and Analysis Branch." US Army. Accessed November 12, 2020. <https://www.1stiocmd.army.mil/Home/iotraining>.
- Allen, Thomas B. "Chapter 4: George Washington, Agent 711." In *George Washington, Spymaster How the Americans Outspied the British and Won the Revolutionary War*, 45–52. Bethesda, MD: National Geographic Children's Book, 2007.
- Anderson, Eric, and Jeffrey G. Engstrom. "China's Use of Perception Management and Strategic Deception." Paper Prepared for the U.S.-China Economic and Security Review Commission. Science Applications International Corporation, Reston, VA, revised November 2009.
- Andrews, Evan. "6 Ingenious Acts of Battlefield Deception." *History*, September 1, 2018. <https://www.history.com/news/6-ingenious-acts-of-battlefield-deception>.
- Army Training Network. "FORSCOM Training Guidance FY21." Accessed May 10, 2021. <https://atn.army.mil/hqda-commands-training-guidance/commands-training-guidance>.
- Bartles, Chuck, Ray Finch, Les Grau, and Kaitlyn Johnson. "The Russian Camouflage Regiment." *OE Overwatch* 7, no. 10 (November 2017): 20. <https://community.apan.org/wg/tradoc-g2/fmso/m/oe-watch-past-issues/213749/download>.
- Beatty, Spencer, and Matthew DiRisio. *Lessons Learned Battlefield Deception: From Alexander the Great to Norman Schwarzkopf*. Madison, AL: Mentor Enterprises, 2018.
- Beaumont, Roger. *Maskirovka: Soviet Camouflage, Concealment, and Deception*. Austin: Center for Strategic Technology, Texas Engineering Experiment Station, Texas A&M University System, 1982.
- Blumentritt, Guenther. "Deception and Errors during a War." Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth, KS, 1987.
- Caddell, Joseph. "Deception 101- Primer on Deception." Monograph, Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 2004.
- Cane, Conrad. "The Future of Military Deception Operations." In *Weaving the Tangled Web*, 231-233. Fort Leavenworth, KS: Army University Press, 2018.

- Center for Army Lessons Learned (CALL). “JMRC Trends.” PowerPoint Presentation, CALL, Fort Leavenworth, KS. Reprinted in “A344 Lessons Learned for S3s and XO.” Advance Sheet, U.S. Army Command and General Staff College, Fort Leavenworth, KS. Last modified February 17, 2021. [https://call2.army.mil/docs/ctc/docs/A344LL\\_JMRC\\_Trends.pdf](https://call2.army.mil/docs/ctc/docs/A344LL_JMRC_Trends.pdf).
- . *Combat Training Center Trends, 2019*. Fort Leavenworth, KS: CALL, 2019.
- Chairman of the Joint Chiefs of Staff (CJCSI). CJCSI 5123.01H, *Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)*. Washington, DC: Joint Staff, 2018. <https://www.jcs.mil/Portals/36/Documents/Library/Instructions/CJCSI%205123.01H.pdf?ver=2018-10-26-163922-137>.
- Charters, David, and Maurice Tugwell. *Deception Operations: Studies in the East-West Context*. McLean, VA: Brassey’s Ltd., 1990.
- Clausewitz, Carl Von. “Chapter 9 Surprise.” In *On War*, by Carl Von Clausewitz, 198-202. Princeton, NJ: Princeton University Press, 1976.
- Cole, Ronald. *Operation Just Cause, The Planning and Execution of Joint Operations In Panama February 1988- January 1990*. Washington, DC: Library of Congress, 1995. [https://www.jcs.mil/Portals/36/Documents/History/Monographs/Just\\_Cause.pdf](https://www.jcs.mil/Portals/36/Documents/History/Monographs/Just_Cause.pdf).
- Commanding General, Combined Arms Center, and Commanding General, US Army Cyber Command. “Deception & Information Warfare 3-star Portfolio Review.” PowerPoint Presentation, Combined Arms Center, Fort Leavenworth, KS, and US Army Cyber Command, Fort Belvoir, VA, 20 May 2020.
- Conquest, Robert. “Ideology and Deception.” In *Soviet Strategic Deception*, by Brian D. Dailey and Patrick J. Parker, 119-131. Lexington: Lexington Books, 1987.
- Coutin, Cecille. “Camouflage.” In *1914-1918-Online International Encyclopedia of the First World War*, edited by Ute Daniel, Peter Gatrell, Oliver Janz, Heather Jones, Jennifer Keene, Alan Kramer, and Bill Nasson, 1-3. Berlin: Freie Universitat Berlin. Last updated October 8, 2014. <https://encyclopedia.1914-1918-online.net/pdf/1914-1918-Online-camouflage-2014-10-08.pdf>.
- Creswell, John W. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oakes, CA: Sage Publications, 2007.
- Dailey, Brian, and Patrick J. Parker. *Soviet Strategic Deception*. Lexington, VA: Lexington Books, 1987.
- Daniel, Donald, and Katherine Herbig. *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1981.



- D'Aoustand, Maurice. "Hoodwinked during America's Civil War: Union Military Deception." HistoryNet, Accessed October 16, 2020. <https://www.historynet.com/hoodwinked-during-americas-civil-war-union-military-deception.htm>.
- Dettmer, William. *Systems Thinking and the Cynefin Framework*. Port Angeles, WA: Goal Systems International, 2011. Reprinted in Department of Command and Leadership, Advance Sheet, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2020.
- Dziak, John. "Soviet Deception: The Organizational and Operational Tradition." In *Soviet Strategic Deception*, by Brian D. Dailey and Patrick J. Parker, 3. Lexington: Lexington Books, 1987.
- Fibrotex. "Decoys." Accessed March 7, 2021. <https://fibrotex-tech.com/>.
- Geist, Edward, and Marjory Blumenthal. "Military Deception: AI's Killer App." *War on the Rocks*, October 23, 2019. <https://warontherocks.com/2019/10/military-deception-ais-killer-app/>.
- Gerwehr, Scott, and Russell W. Glenn. *Unweaving the Web- Deception and Adaptation in Future Urban Operations*. Santa Monica, CA: RAND Corporation, 2003.
- Glantz, David M. *Soviet Military Deception in the Second World War*. London: Frank Cass, 1989.
- Global Defence Technology. "How to hide a tank: Challenger 2 gets digital camouflage." Accessed March 2, 2021. [https://defence.nridigital.com/global\\_defence\\_technology\\_mar21/challenger\\_tank\\_digital\\_camouflage](https://defence.nridigital.com/global_defence_technology_mar21/challenger_tank_digital_camouflage).
- GovTribe. "1080 - Camouflage and Deception Equipment." Accessed October 18, 2020. <https://govtribe.com/category/psc/1080-camouflage-and-deception-equipment#details>.
- Hackett Fisher, David. *Washington's Crossing (Pivotal Moments in American History)*. New York, NY: Oxford University Press, 2004.
- Handel, Michael I. *Masters of War: Classical Strategic Thought*. London: Routledge, 2006.
- . *War, Strategy, and Intelligence*. Totowa: Frank Cass and Company Limited, 1989.
- Hartcup, Guy. *Camouflage, A History of Concealment and Deception in War*. New York, NY: Charles Scribner's Sons, 1980.
- Headquarters, Department of the Army. Army Doctrine Publication 1-01, *Doctrine Primer*. Washington, DC: Army Publishing Directorate, 2019.

- . Army Doctrine Publication 2-0, *Intelligence*. Washington, DC: Army Publishing Directorate, 2019.
- . Army Doctrine Publication 3-0, *Operations*. Washington, DC: Army Publishing Directorate, 2019.
- . Army Doctrine Reference Publication 1-03, *Army Universal Task List*. Washington, DC: Army Publishing Directorate, 2015.
- . Army Regulation 525-21, *Tactical Deception (TAC-D) Policy (Including, Camouflage, Countersurveillance, and Concealment)*. Washington, DC: Government Printing Office, 1982.
- . Army Techniques Publications 3-12.3, *Electronic Warfare Techniques*. Washington, DC: Army Publishing Directorate, 2019.
- . Army Techniques Publication 3-13.1, *The Conduct of Information Operations*. Washington, DC: Army Publishing Directorate, February 2018.
- . Army Techniques Publications 3-37.34, *Survivability Operations*. Washington, DC: Army Publishing Directorate, 2018.
- . Army Techniques Publications 5-0, *The Operations Process*. Washington, DC: Army Publishing Directorate, 2012.
- . Field Manual 2-0, *Intelligence*. Washington, DC: Army Publishing Directorate, 2018.
- . Field Manual 3-0, *Operations*. Washington, DC: Army Publishing Directorate, 2017.
- . Field Manual 3-12, *Cyberspace and Electronic Warfare Operations*. Washington, DC: Army Publishing Directorate, 2017.
- . Field Manual 3-13, *Information Operations*. Washington, DC: Army Publishing Directorate, 2016.
- . Field Manual 3-13.4, *Army Support to Military Deception*. Washington, DC: Army Publishing Directorate, 2019.
- . Field Manual 3-34, *Engineer Operations*. Washington, DC: Army Publishing Directorate, 2020.
- . Field Manual 3-53, *Military Information Support Operations*. Washington, DC: Army Publishing Directorate, 2013.

- . Field Manual 3-90-1, *Offense and Defense Volume 1*. Washington, DC: Army Publishing Directorate, n.d.
- . Field Manual 5-20, *Camouflage*. Washington, DC: Government Printing Office, 1940.
- . Field Manual 6-0, *Commander and Staff Organization and Operations*. Washington, DC: Army Publishing Directorate, 2014.
- . Field Manual 90-2, *Battlefield Deception*. Washington, DC: Government Printing Office, 1988.
- . Field Manual 90-2, *Tactical Deception*. Washington, DC: Government Printing Office, 1978.
- . Field Manual 90-2A, *Electronic Deception*. Washington, DC: Government Printing Office, 1989.
- . Field Manual 100-5, *Field Service Regulations Operations*. Washington, DC: Government Printing Office, February 1962.
- . Field Manual 100-5, *Operations*. Washington, DC: Government Printing Office, 1993.
- . Training Circular 7-100.2, *Opposing Force Tactics*. Washington, DC: Army Publishing Directorate, 2011.
- Huntington, Samuel P. *The Soldier and The State*. Cumberland, MA: Harvard University Press, 1981.
- Hurst, Jules. “Robotic Swarms in Offensive Maneuver.” *Joint Force Quarterly* 87 (4th Quarter 2017): 105-111. <https://ndupress.ndu.edu/Publications/Article/1326017/robotic-swarms-in-offensive-maneuver/>.
- Hyperstealth Biotechnology Corporation. “Quantum Stealth.” International Preliminary Report on Patentability. Patent Cooperation Treaty. Last modified February 5, 2020. [https://patentscope.wipo.int/search/docs2/pct/WO2020006621/pdf/IAgPVUS135c90qYVRVO9304RdtANcMdQQ5HIkmeuz6jfNbHWdnajFqCvonhs0VbnVwfHBF-E\\_Ohg\\_\\_W0hD63JDdKT209QdNecLOV\\_DdA\\_9CUc\\_1qZCr5SLsX0Cbua6s?docId=id00000057804630](https://patentscope.wipo.int/search/docs2/pct/WO2020006621/pdf/IAgPVUS135c90qYVRVO9304RdtANcMdQQ5HIkmeuz6jfNbHWdnajFqCvonhs0VbnVwfHBF-E_Ohg__W0hD63JDdKT209QdNecLOV_DdA_9CUc_1qZCr5SLsX0Cbua6s?docId=id00000057804630).
- i2kDefense. “Military Inflatables Gallery.” Accessed March 1, 2021. <https://i2kmilitary.com/military-inflatables-gallery/>.
- Inflatech. “Inflatable Military Decoys.” InflatTech Decoy. Accessed March 7, 2021. <http://www.inflatechdecoy.com/>.

- Jensen, Aaron. "Deception Is Key to Chinese Military Strategies." *The Diplomat*, August 08, 2020. <https://thediplomat.com/2020/08/deception-is-key-to-chinese-military-strategies/>.
- Joint Chiefs of Staff. *Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS)*. Washington, DC: Department of Defense, 2018. <https://www.acq.osd.mil/jrac/docs/2018-JCIDS.pdf>.
- Joint Chiefs of Staff. Joint Publication 3-13.4, *Military Deception*. Washington, DC: Department of Defense, 2017.
- . Joint Publication 3-16, *Multinational Operations*. Washington, DC: Department of Defense, March 2019.
- Joint Chiefs of Staff, Force Structure, Resources, and Assessments Directorate (JCS J-8). *Capabilities Based Assessment (CBA) User Guide*. Version 3. Washington, DC: Department of Defense, March 2009. <https://acqnotes.com/wp-content/uploads/2014/09/Capabilities-Based-Assessment-CBA-Users-Guide-version-3.pdf>.
- Kent, Sherman. "CIA Deception Statistics." Center for the Study of Intelligence, Central Intelligence Agency. Last modified September 18, 2020. [https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a05p\\_0001.htm](https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a05p_0001.htm).
- Kneece, Jack. *Ghost Army of World War II*. Gretna, LA: Pelican Publishing Company, 2001.
- Latimer, Jon. *Deception in War*. Woodstock, NY: The Overlook Press, 2001.
- Liddell Hart, B.H. *Strategy*. New York, NY: First Meridian Printing, 1991.
- . *The Strategy of Indirect Approach*. Russel Square, London: Faber and Faber Limited, 1967.
- Lloyd, Mark. *The Art of Military Deception*. Barnsley: Pen & Sword Books Ltd., 1997.
- Lubawa. "Dummy Equipment." Accessed March 10, 2021. <https://www.lubawa.com.pl/en/signature-management-decoys/decoy>.
- Lyons, Joshua. "Tactical Military Deception: A Perspective." *The Havok Journal*, August 26, 2020. <https://havokjournal.com/culture/military/tactical-military-deception-a-perspective/>.
- Machiavelli, Nicolo. *Discourses on Livy*. Gardnerville: University of Chicago Press, 1998. <https://thefederalistpapers.org/wp-content/uploads/2013/08/Discourses-on-Livy.pdf>.

- Maier, Morgan MAJ. "A Little Masquerade: Russia's Evolving Employment of Maskirovka." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2016.
- Martin, David. "Russian Hacking Proves Lethal After Ukrainian Military App Hijacked." *CBSNews*, December 22, 2016. <https://www.cbsnews.com/news/russian-hacking-proves-lethal-after-ukrainian-military-app-compromised/>.
- Mau, Christine A. MAJ. "Military Deception in Counterinsurgency Operations." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 2009.
- Metcalf, Mark. "Deception is the Chinese Way of War." *Proceedings* 143, no. 2 (February 2017). <https://www.usni.org/magazines/proceedings/2017/february/deception-chinese-way-war>.
- Nelson, Bradley MAJ. "Battlefield Deception: Abandoned Imperative of the 21st Century." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1998.
- O'Brien, Rory, and MAJ Michael H. Liscano. "Decisive-Action Training Environment Preps Lieutenants for Future Operations." US Army, January 14, 2014. [https://www.army.mil/article/117921/Decisive\\_action\\_training\\_environment\\_preps\\_lieutenants\\_for\\_future\\_operations/#:~:text=The%20decisive%20action%20training%20environment%2C%20or%20DATE%2C%20involves,intricacies%20of%20threats%20woven%20into%20one%20dynamic%20environment](https://www.army.mil/article/117921/Decisive_action_training_environment_preps_lieutenants_for_future_operations/#:~:text=The%20decisive%20action%20training%20environment%2C%20or%20DATE%2C%20involves,intricacies%20of%20threats%20woven%20into%20one%20dynamic%20environment).
- Paschall, Robert. "World War I: The Belfort Ruse." HistoryNet. Accessed October 17, 2020. <https://www.historynet.com/world-war-i-the-belfort-ruse.htm>.
- Rein, Christopher. *Weaving the Tangled Web- Military Deception in Large-Scale Combat Operations*. Fort Leavenworth, KS: Army University Press, 2018.
- Rose, Alexander. *Washington's Spies: The Story of America's First Spy Ring*. New York, NY: Bantam Dell, 2006.
- Rusbal. "Decoys." Accessed March 7, 2021. <http://eng.rusbal.ru/list/40/1/>.
- Shape Inflatable. "Inflatable Military Decoy." Accessed March 7, 2021. <http://www.shapeinflatable.com/inflatable-military-decoy/>.
- Southgate, Ed. "All Hot Air Russia Deploys 'Decoy Army' of Inflatable Tanks, Missiles & Fighter Jets to 'Trick the West' Amid Ukraine Tensions." *The Sun*, April 22, 2021. <https://www.thesun.co.uk/news/14730411/russia-inflatable-army/>.
- Spencer, Jack MAJ. "Deception Integration in the US Army." Master's Thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1990.

- Starry, Michael MAJ. "Deception and the Operational Level of War." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1986.
- Suciu, Peter. "Military Deception: Much More the Fog of War." ClearanceJobs, March 18, 2019. <https://news.clearancejobs.com/2019/03/18/military-deception-much-more-than-the-fog-of-war/>.
- Sun Tzu. *The Art of War*. Translated by Ralph D. Sawyer. New York: Filiquarian, 1994.
- Tagg, Lori S. "Moments in MI History: The Belfort Ruse, August-September 1918." The Free Library, July 1, 2018. <https://www.thefreelibrary.com/Moments+in+MI+History%3a+The+Belfort+Ruse%2c+August-September+1918.-a0549160111>.
- U.S. Army Command and General Staff College (CGSC). "A502 Military Deception." Accessed December 14, 2020. [https://cgsc.blackboard.com/webapps/FLVN-cgss\\_electives-BB59d68b9738f4e//detail.jsp?courseid=CGSS\\_RES\\_ELECTIVE\\_A502](https://cgsc.blackboard.com/webapps/FLVN-cgss_electives-BB59d68b9738f4e//detail.jsp?courseid=CGSS_RES_ELECTIVE_A502).
- Weimer, Michael MAJ. "Tactical Deception Capabilities in the Heavy Division-Myth versus Reality." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1987.
- Whaley, Barton. *Practise to Deceive*. Annapolis, MD: Naval Institute Press, 2016.
- . *Stratagem Deception and Surprise in War*. Norwood, MA: Artech House, 2007.
- . *Prevalence of Guile*. Washington, DC: National Intelligence Council, 2007.
- Yin, Robert K. *Case Study Research, Design and Methods*. 4th ed. Vol. 5. Thousand Oakes, CA: Sage Publications. Inc., 2009.
- Yuliang, Zhang. *In Their Own Words: Foreign Military Thought: Science of Campaigns (2006)*. Montgomery, AL: China Aerospace Studies Institute, Air University, 2006. [https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2020-12-02%20In%20Their%20Own%20Words-%20Science%20of%20Campaigns%20\(2006\).pdf?ver=hma387iK8lQcZQ1x9ktt-Q%3d%3d](https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2020-12-02%20In%20Their%20Own%20Words-%20Science%20of%20Campaigns%20(2006).pdf?ver=hma387iK8lQcZQ1x9ktt-Q%3d%3d).