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MISSION COMMAND: RETOOLING THE LEADERSHIP PARADIGM FOR HOMELAND SECURITY CRISIS RESPONSE?

by

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Mission command and the tools used to communicate a leader's intent provide an alternative approach to hierarchical leadership norms. Decentralization of mission authority and promotion of self-initiative can increase the tempo of decision making and execution. The intent of this thesis is to examine the applicability of mission command for use in managing homeland security crisis response. Several perspectives are considered. First, the origins of mission command and the efforts by a military organization to implement this ethos are reviewed. Second, parallels between both the military and the homeland security response environments are examined. Finally, implementation challenges, implementation examples using the wildland fire experience, and opportunities for implementation within the homeland security enterprise are considered.

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MISSION COMMAND: RETOOLING THE LEADERSHIP PARADIGM FOR HOMELAND SECURITY CRISIS RESPONSE?

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LIST OF ACRONYMS AND ABBREVIATIONS

AAR	after action review
ADP	U.S. Army Doctrine Publication
ADRP	U.S. Army Doctrine Reference Publication
DARPA	U.S. Defense Advanced Research Projects Agency
DHS	U.S. Department of Homeland Security
CPOF	Command Post of the Future
FIRESCOPE	Firefighting Resources of Southern California Organized for Potential Emergencies
FLA	facilitated learning analysis
HSE	homeland security enterprise
HSPD	Homeland Security Presidential Directive
IC	incident commander
ICS	Incident Command System
IAF	Israel Air Force
IDF	Israel Defense Force
IND	improvised nuclear device
MACS	Multi-Agency Coordination System
MIT	Massachusetts Institute of Technology
L-Series	Leadership Series of courses (L180, L280, L380, L480, L580)
L380	Fireline Leadership Course
L580	Leadership is Action Course
NEC2	Networked-Enabled Command and Control
NICS	Next-Generation Incident Command System
NIMS	National Incident Management System
NWCG	National Wildfire Coordinating Group
SNS	special night squads
USFS	United States Forest Service
VUCA	volatility, uncertainty, complexity and ambiguity

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I. INTRODUCTION

A. OVERVIEW

Homeland security leaders faced with managing a crisis event, such as a terrorist attack, will invariably be exposed to tremendous decision-making pressure. Typically, these leaders are working within the confines of hierarchically-configured response organizations. Crisis response is complex, requiring flexibility and the collaboration of multiple homeland security response partners in order to be effective.

Mission command and the tools used to communicate leader's intent provide an alternative approach to hierarchical leadership norms. Decentralization of mission authority and promotion of self-initiative can increase the tempo of decision making and execution. The intent of this thesis is to examine the applicability of mission command for use in managing homeland security crisis response. Several perspectives are considered. First, the origins of mission command and the efforts by a military organization to implement this ethos are reviewed. Second, parallels between both the military and the homeland security response environments are examined. Finally, implementation challenges, implementation examples using the wildland fire experience, and the opportunities for implementation within the homeland security enterprise are considered.

B. THESIS PROBLEM SPACE

Large-scale disasters can overwhelm first responders. Conflicts, man-made accidents, and natural disasters chronically shatter the peace and order of societies.[1] This thesis problem space revolves around the challenges encountered by the homeland security enterprise (HSE) in crisis response. Earthquakes, hurricanes, wildfires and acts of terrorism are crises that the HSE has responded to in recent years; some were managed well, others were managed poorly. A report from the National Research Council of the National Academies explains:

[1] Arjen Boin, Paul't Hart, Eric Stern, and Bengt Sundelius, *The Politics of Crisis Management: Public Leadership under Pressure* (Cambridge, UK: Cambridge University Press, 2005), 1.

> Hurricane Katrina became a national scandal because of the sheer scale on which… organizational pathologies manifested. However, Katrina was by no means atypical. In one form or another and at varying levels of severity, such pathologies are ever-present in the landscape of disaster.[2]

These challenges include: "failure to recognize the magnitude and seriousness of an event; delayed and insufficient responses; confusion regarding authorities and responsibilities….poor organizational, inter-organizational, and public communications; failures in inter-governmental coordination; and failures in leadership and vision."[3]

Donahue and Tuohy examine the past decade's major HSE incidents and identify several important lessons that occur repeatedly. According to Donahue and Tuohy these lessons pertain to five main areas: command, communications, planning, resource management, and public relations. Failing to address these issues may result in the loss of lives and property.[4] Common leadership approaches that work well in ordered circumstances may be too simplified in a crisis where conditions become complex.[5] The thesis supposition is that if HSE response organizations can become more decentralized and collaborative, they can respond to crisis events more effectively.

Most emergency response agencies within the HSE employ traditional paramilitary organizational models for rank, hierarchy, communication, training, and culture. While the HSE has been served well by this model in day-to-day responses, research indicates that in crisis management, shared authority, dispersed responsibility, and collaborative networking is a better model.[6] Terrorist events are usually perpetrated by a few individuals leveraging technological advancements and decentralized organization against established institutions and nation states. As Nieto-Gomez suggests,

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[2] National Research Council, *Facing Hazards and Disasters: Understanding Human Dimensions* (Washington DC: The National Academies Press, 2006), 141.

[3] Ibid., 141.

[4] Amy K. Donahue, and Robert V. Tuohy, "Lessons We Don't Learn: A Study of the Lessons of Disasters, Why We Repeat Them, and How We Can Learn Them," *Homeland Security Affairs* 2, no. 2 (2006): 6.

[5] David J. Snowden, and Mary E. Boone "A Leader's Framework for Decision Making," *Harvard Business Review* (November, 2007) 1. 1–9

[6] William L. Waugh, and Gregory Streib, "Collaboration and Leadership for Effective Emergency Management," special issue, *Public Administration Review* (December 2006): 131.

hierarchical iterative bureaucracies may be the worst kind of organization to confront unconventional or "out-of-the-process" threats.[7]

The flexibility of moving from a hierarchical organizational model to one that is more collaborative and networked may be helpful in the response to a terrorist event. Mission command is a step towards decentralizing a hierarchical command model. Its use can result in faster execution, greater flexibility and increased initiative amongst subordinate leaders. The focus of this paper is not how an organization operates in everyday routines and response, but rather how to augment an organization's effectiveness during times of uncertainty or crisis. Mintzberg points out that dynamic environments lead to organic structures; the more complex the environment, the more decentralized the organizational structure needs to be.[8]

C. RULES GOVERNING HOW PEOPLE RULE

The "rules governing how people rule"[9] in the homeland security enterprise are typical of any organization or key leader that utilizes a detailed style of command. These rules assume that the emergency response environment is predictable, orderly, and certain. Detailed command uses communications that are top-down, explicit, vertical, and linear. These characteristics promote a number of rules:

- Centralization of decision-making authority;
- Coercion to adhere to rules and policies;
- Formality and tight-rein;
- Imposed discipline;
- Obedience and compliance;
- Ability drawn from the top of the hierarchy;

[7] Rodrigo Nieto-Gomez, "The Power of the Few: A Key Strategic Challenge for the Permanently Disrupted High Tech Homeland Security Environment," *Homeland Security Affairs* 7, Article 18 (December, 2011): 13.

[8] Henry Mintzberg, *Structure in Fives: Designing Effective Organizations* (Englewood Cliffs, NJ: Prentice Hall, 1983), 137.

[9] Bruce Bueno de Mesquita, and Alastair Smith, *The Dictator's Handbook: Why Bad Behavior is Almost Always Good Politics* (New York: Public Affairs, 2011), Kindle edition, 17.

- Optimal decisions that may take longer to decide and execute[10]

These rules are the hallmarks of directing and transactional leadership styles. This thesis examines a change in these rules through decentralization of leadership. Mission command is best suited for environments that are dynamic—where firm command and control may impede work efforts. Chaos theory provides an explanatory framework for these environments where almost anything can happen. Similar to military combat environments, crisis response is an environment where, according to Ahlstrand, Mintzberg, and Lampel, "irregularity is a fundamental property…. in which 'small, chance, disturbances' can have large effects. Therefore, managers cannot rely on structures, systems, rules and procedures, but must instead be prepared to adapt continually in novel ways."[11]

Compared to detailed command, mission command is based on rules that assume that the environment, such as the crisis response environment, is chaotic and complex. Mission command uses communications that are top-down, horizontal, implicit, and interactive. These characteristics reinforce a number of rules:

- Decentralization of decision-making authority;
- Informality and loose-rein;
- Self-discipline rather than imposed discipline;
- Initiative and spontaneity;
- Greater collaboration and coordination in order to maintain synchronicity;
- Acceptable decisions made faster;
- Ability drawn from all echelons;
- Increased tempo of operations[12]

Delegating and transformational leadership styles are derived from these rules. Mission command may be better suited for networked organizations and collaboration. This will be examined further in Chapter III.

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[10] U.S. Department of the Army, *Mission Command* (Field Manual 6-0) (Washington, DC: U.S. Department of the Army, 2003), 1-15.

[11] Bruce Ahlstrand, Henry Mintzberg, and Joseph Lampel, *Strategy Safari: A Guided Tour through the Wilds of Strategic Management* (New York: The Free Press, 1998), Kindle location 3101–3103.

[12] U.S. Department of the Army, *Mission Command*, 1-15.

D. WHAT IS MISSION COMMAND?

Mission command is a military leadership model best described as a "leadership philosophy, a management methodology and a systems approach to embracing environmental volatility."[13] In order to gain insight into this philosophy and how it has been implemented, the following is a historical look at the military origins of mission command.

Helmuth von Moltke (the Elder), a Prussian-German General in the 1800s, is largely credited with the implementation of "*auftragstaktik*."[14] Mission command is based on the principles of *auftragstaktik*,[15] which is the communication of commander's intent; mission-style orders versus explicit-orders; and decentralization of authority as far down the organization as possible. In order to be effective, mission command relies on a sense of trust, mutual understanding, self-discipline, and initiative at all levels of an organization.[16] It is also dependent on organizational doctrine that is principle-based rather than rules and policy-based. Furthermore, Moltke recognized that explicit top-down orders restricted the field commanders' initiative and the rapid decision-making necessary for success in a dynamic battlefield environment. For example, the field commander usually has a better understanding of events on the ground, especially when headquarters is remotely located (however, technology is closing this gap as will be discussed in Chapter III). According to Moltke,

> Diverse are the situations under which an officer has to act on the basis of his own view of the situation. It would be wrong if he had to wait for orders at times when no orders can be given. But most productive are his actions when he acts within the framework of his senior commander's intent.[17]

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[13] Ivan Yardley, and Andre Kakabadse, "Understanding Mission Command: A Model for Developing Competitive Advantage in a Business Context," *Strategic Change* 16, no. 1-2 (2007): 69.

[14] Stephen Bungay, *The Art of Action, How Leaders Close the Gaps between Plans, Actions and Results* (Boston: Brealey Publishing, 2011), 58.

[15] Ibid., 77.

[16] U.S. Department of the Army, *Mission Command*, 2-1–2-5.

[17] Moltke quoted in Werner Widder, "Auftragstaktik and Inner Fuhring: Trademarks of German Leadership," *Military Review* 82, no. 5 (2002): 4.

Moltke believed that orders should contain only the necessary information, a statement of intent and mission, and that all other detail reduced the subordinate's freedom to act. An immediate benefit of this reframing of authority is that the leader has the time and space to think strategically, and not micromanage the mission.[18] Moltke's command style and headquarters was said to be the antithesis of Napoleon's bustling, constantly moving headquarters. According to Van Creveld, "The calmness enabled Moltke to spend the period of mobilization lying on a sofa and reading a book - which forms a strange contrast with the frenetic over-activity that so often characterized Napoleon's headquarters." [19] He was one of the most successful military field commanders of the nineteenth century, leading the Prussian army to victory over the Austrians in 1866 and the Prussian-German Army over the French in 1871.[20] Moltke's implementation of *auftragstaktik* was to set the stage for German command philosophy up to this day. German "Sturmtruppen" or Stormtrooper tactics in World War I and the Blitzkrieg tactics during World War II were influenced by mission command.

Elements of mission command have been recognized by the United States Army and Marine Corps for years and both have established mission command as official doctrine.[21] More recently, General Martin Dempsey, Chairman of the Joint Chiefs of Staff, has advocated that mission command be institutionalized in the armed services. According to Dempsey, "Understand my intent. I challenge every leader in the Joint Force to be a living example of mission command. You have my trust."[22] While the degree to which the Army has been able to implement mission command has been questioned, the six principles that are being used to educate and train Army personnel are useful in providing an analysis framework. The Army's six principles of mission command are:

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[18] Eitan Shamir, *Transforming Command: The Pursuit of Mission Command in the U.S., British and Israeli Armies* (Stanford, CA: Stanford University Press, 2011), 39.

[19] Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 115.

[20] Daniel Hughes, *Moltke on the Art of War* (New York: Ballantine Books, 1993), i.

[21] Marius S. Vassiliou, *The Evolution towards Decentralized C2* (Alexandria, VA: Institute for Defense Analysis, 2010), 10.

[22] Martin Dempsey, *Mission Command* (Fort Belvoir, VA: Defense Technical Institute Center, 2012), http://www.dtic.mil/doctrine/concepts/white_papers/cjcs_wp_missioncommand.pdf, 8.

- Build cohesive teams through mutual trust.
- Create shared understanding.
- Provide a clear commander's intent.
- Exercise disciplined initiative.
- Use mission orders.
- Accept prudent risk.[23]

These principles will be used to examine the two case studies in this paper.

E. DEFINITIONS

The terms that are used hereafter may differ from other recognized definitions. For the purposes of this thesis, the following terms are defined for the reader.

(1) Homeland Security Enterprise

Homeland security enterprise (HSE) refers to the various federal, state, and local agencies that are tasked with emergency response to all-hazards incidents. In addition to the 22 federal agencies that work under the U.S. Department of Homeland Security, the homeland security enterprise consists of 18,000 law enforcement agencies, 30,000 fire departments, and multiple public health, hospital, and other response organizations.[24] The term "response" includes actions to save lives, protect property and the environment, stabilize communities, and meet basic human needs following an incident (and aligns with the *National Response Framework* definition).[25] Response also includes the execution of emergency plans and actions to support short-term recovery.

(2) Homeland Security Crisis Response

Homeland security crisis response refers to the efforts and actions of emergency response organizations to all-hazard events that challenge the organizations in some form

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[23] U.S. Department of the Army, *Mission Command*, 2.

[24] Brian A. Reaves, "Census of State and Local Law Enforcement Agencies, 2008," *U.S. Department of Justice Bulletin* (July 2011): 2; Hylton J. G. Haynes, and Gary P. Stein, *U.S. Fire Department Profile, 2013* (Quincy, MA: National Fire Protection Association, 2014), iii.

[25] U.S. Department of Homeland Security, *National Response Framework* (Washington, DC: U.S. Department of Homeland Security, 2013), http://www fema.gov/media-library-data/20130726-1913-25045-9359/final_esf_4_firefighting_20130501.pdf, 1.

or fashion. Crisis refers to an undesirable or unexpected situation that is usually time intensive and requires urgency in response. In addition, threat and uncertainty are also key components of crisis.[26] Though a crisis is experienced at a local level, it may involve state or federal assistance due to the complexity of the incident. Moreover, a crisis may range from a fairly simple incident that has political or strategic repercussions, such as a shooting that causes civil unrest, or it may involve a much larger catastrophic incident**.** A catastrophic incident is defined as "any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, or government functions."[27]

(3) High-Risk Environments

High risk environments refers to those situations or surroundings that contain a threat of danger or potential loss to those that operate within them. Typically, the professions that operate in these environments are exposed to physical risk and can range from warfighting to firefighting or law enforcement. Additionally, high-risk environments can be characterized as regularly exposing the individuals that work in them to hazards, threats and challenges.[28]

F. SIMILARITIES IN MILITARY AND HOMELAND SECURITY CRISIS RESPONSE ENVIRONMENTS

The military and homeland security crisis response environments have much in common from a response or engagement perspective. The chaotic nature of a rapidly developing emergency incident has parallels to military encounters with enemy forces. Likewise, the movement and coordination of various resources at an emergency incident is similar to the coordination of military assets. Decision making under duress is a necessity in both homeland security crisis response and military engagement

[26] Boin et. al., *The Politics of Crisis Management*, 2.

[27] U.S. Department of Homeland Security, *National Response Framework*, 1.

[28] Douglas Paton, and John M. Violanti, *Working in High Risk Environments* (Springfield, IL: Charles C. Thomas, 2011) 7.

environments. The tempo of decision making in both of these environments is also similar. Klein comments on the similarities:

> We have studied tank platoon leaders, battle commanders engaged in operational planning…. We studied urban fireground commanders and wildland fireground commanders (with over 20 years of experience) as they conducted actual operations…. Many of the decisions we examined were made under extreme time pressure. In some domains more than 85 percent of the decisions were made in less than one minute.[29]

Fighting large forest fires (or any prolonged emergency incident) and military operations have other characteristics in common, such as massive movements of personnel and machinery, tactical aerial support, physical exhaustion and danger, or long periods of combat and stress until the "foe" is vanquished.[30]

The detonation of an improvised, suitcase-size (10-kiloton) nuclear device in an urban center may cause in excess of 45,000 deaths and severely damage urban infrastructure for a half mile in all directions. In a sobering report from the U.S. Department of Homeland Security, National Laboratory scientists estimate that the radiation fallout from such a detonation in the city of Washington, D.C., may extend for 10–20 miles depending on weather conditions and plume direction.[31] An incident management team that is assigned to the "right of boom" of such an event will be thrust into an environment filled with decision-making pressures. The U.S. Army War College defines these chaotic environments as ones of "volatility, uncertainty, complexity and ambiguity (VUCA)."[32]

One of the assumptions in a scenario involving the detonation of a nuclear device is that a significant federal response will not arrive at the scene for 24 hours and the full

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[29] Gary Klein, "Strategies of Decision Making," *Military Review* 69, no. 5 (May 1989): 57.

[30] Carl C. Wilson, "Fatal and Near Fatal Forest Fires: The Common Denominators," *The International Fire Chief* 43 (1977): 9.

[31] Bob R. Buddemeir et al., *National Capital Region Key Response Planning Factors for the Aftermath of Nuclear Terrorism*, November 2011, accessed January 2, 2015, http://www.fas.org/irp/agency/dhs/fema/ncr.pdf

[32] John S. Richard, *The Learning Army, Approaching the 21st Century as a Learning Organization* (Carlisle Barracks, PA: U.S. Army War College, 1997), 1.

response may take up to 72 hours.[33] Another consideration is that the command and control infrastructure of the jurisdictional agencies may be disabled or impaired. Additionally, command and control may need to be provided by jurisdictions outside the affected areas.[34] Furthermore, coordination of disparate response agencies adds to the complexity, especially in large urban regions with myriad jurisdictional boundaries. Mission command supports responders in their attempt to navigate this complexity by pre-negotiated decision-making authority through the understanding of the leader's intent.

Psychological stress is another factor prevalent in both military and the homeland security crisis response environments. Military and emergency responder populations have experienced higher rates of post-traumatic stress disorder in the aftermath of deployments to Iraq and Afghanistan and the response to the World Trade Center Disaster, respectively.[35] Exposure to repeated events of carnage and trauma has an effect on behavioral health. Evidence of higher rates of depression, self-medication through drugs and alcohol, and increased suicide rates are being recognized in both of these communities.[36] Despite the exposure to mayhem, leaders of organizations in these environments are held to an even higher standard with respect to controlling emotions and displaying a sense of calm. In addition, they must show resilience under stress or risk losing the confidence of their subordinates. New York Fire Department Battalion Chief

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[33] National Security Staff Interagency Policy Coordination Subcommittee for Preparedness and Response to Radiological and Nuclear Threats, *Planning Guidance for Response to a Nuclear Detonation*, 2nd ed. (Washington, DC: National Security Staff Interagency Policy Coordination Subcommittee for Preparedness and Response to Radiological and Nuclear Threats, 2010), accessed February 20, 2015, http://www.epa.gov/radiation/docs/er/planning-guidance-for-response-to-nuclear-detonation-2-edition-final.pdf, 11.

[34] David Pasquale, and Richard Hansen, "Implications of an Improvised Nuclear Device, Detonation on Command and Control for Surrounding Regions at the Local, State and Federal Levels" (paper presented at the Institute of Medicine's Forum, Washington, DC, January 2013).

[35] Amy Berninger et al., "Longitudinal Study of Probable Post-Traumatic Stress Disorder in Firefighters Exposed to the World Trade Center Disaster," *American Journal of Industrial Medicine* 53 (2010): 1177; William P. Nash, and Patricia J. Watson, "Review of VA/DOD Clinical Practice Guideline on Management of Acute Stress and Interventions to Prevent Posttraumatic Stress Disorder," *Journal of Rehabilitation Research and Development* 49, no. 5 (2012): 638.

[36] Nash, and Watson, "Review of VA/DOD Clinical Practice Guideline," 638; Janet A. Wilmoth, "Trouble in the Mind," *National Fire Protection Association Journal* 43, no. 3 (June 2014).

John Salka describes the demeanor of chief officers at the World Trade Center on September 11, 2001:

> Even as civilians were descending from the upper floors with horrible burns and bodies were slamming into the plaza outside, these leaders were very calm and measured as they discussed information, contingencies, and strategy. They knew that every firefighter who passed by the command post on the way to one of the tower stairwells would be looking to them for strength. Their calm decisive manner gave those men and women the confidence to push their fears away and focus on their mission.[37]

Both military and homeland security environments have also been influenced by the advances in technology and the increased electronic connectivity enjoyed by society as a whole. Military conflict and emergency events are broadcast more rapidly and to a wider audience due to the Internet and electronic social applications. Greater public, media, and political scrutiny adds complexity for those that are already operating in a chaotic setting. Moreover, information overload can be the result of sifting through a deluge of social media reports in order to gain situational awareness.[38] Not only that, but the need to make sense of greater amounts of information and intelligence has created a complex world for incident managers and military leaders alike.[39]

G. COMPLEX AND NON-LINEAR ENVIRONMENTS

Storr postulates, "The relevance of mission command to the twenty-first century can be considered from several directions. First, it is a sensible response to an environment, which is seen as increasingly complex."[40] Linear environments are those that can be described as stable and predictable, and non-linear and complex environments

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[37] John Salka, *First In, Last Out: Leadership Lessons from the New York Fire Department* (New York: Penguin Group, 2005), 61.

[38] Starr R. Hiltz, and Linda Plotnick, "Dealing with Information Overload When Using Social Media for Emergency Management: Emerging Solutions," *Proceedings of the 10th International Information Systems for Crisis Response and Management Conference*, Baden-Baden, Germany, May 2013, 824.

[39] Thom Shanker, and Matt Richtel, "In New Military, Data Overload Can Be Deadly," *New York Times*, January 16, 2011, accessed November 18, 2013, http://www.nytimes.com/2011/01/17/technology/17brain.html?pagewanted=all&_r=0; JinKyu Lee et al., "Group Value and Intention to Use: A Study of Multi- Agency Disaster Management Information Systems for Public Safety" *Decision Support Systems* 50 (2011): 404, DOI:10.1016/j.dss.2010.10.002.

[40] Jim Storr, "A Command Philosophy for the Information Age: The Continuing Relevance of Mission Command," *Defence Studies* 3, no. 3 (2003): 125.

are those that do not follow simple rules or expectations. According to Beyerchen in *Clausewitz, Nonlinearity, and the Unpredictability of War*, nonlinear systems may display erratic behavior. For example, he describes a small change in a system causes a disproportionately large output or a large change in a system causing a disproportionately small output.[41]

Comfort and Kapucu have examined the problem of inter-organizational coordination at the World Trade Center Attack on September 11, 2001. Their research describes the difference between routine and extreme operating environments encountered by public response agencies, which, as already explained, can be quite stressful. This comparison illustrates the difference between linear and non-linear systems in theory and the difference between organized hierarchy and complex adaptive systems in practice.[42] Comfort and Kapucu determine, "Under cumulative stress, hierarchical organizations tend to break down and personnel are hindered by a lack of information, constraints on innovation and an inability to shift resources and action to meet new demands quickly."[43] Complex adaptive systems are self-organizing and have the ability to "reallocate resources and action to meet the changing demand of the environment."[44] Mission command promotes faster and more effective learning cycles and therefore lends itself to greater levels of adaption in a complex environment.[45]

In *Coping with Bounds; Speculations on Nonlinearity in Military Affairs*, the author refers to military historian Martin van Creveld and his identification of requirements for an organization to improve performance in a nonlinear or complex environment. These requirements include:

> (a) the need for decision thresholds to be fixed as far down the hierarchy as possible, and for freedom of action at the bottom of the military

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[41] Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security* 17, no. 3 (winter 1992–1993): 59–90.

[42] Louise K. Comfort, and Naim Kapucu "Inter-Organizational Coordination in Extreme Events: The World Trade Center Attacks, September 11, 2001," *Natural Hazards* 39 (2006): 310, DOI:10.1017/s11069-006-0030-x

[43] Ibid., 312.

[44] Ibid., 314.

[45] Australian Army, *Army's Future Land Operating Concept* (Canberra: Australian Army, 2009), 36.

> structure, (b) the need for an organization that will make such low-decision thresholds possible by providing self-contained units at a fairly low level, (c) the need for a regular reporting and information-transmission system working from both the top down and from the bottom up.[46]

These requirements for a complex environment align with the principles of mission command.

Comfort and Kapucu reinforce the synchronization necessary during extreme events. Their findings indicate, "Achieving coordinated action among a disparate group of actors (response agencies) depends fundamentally on their access to timely, valid information and their capacity for information search, exchange, absorption and adaption." [47] Storr further suggests that mission command offers a remedy to synchronization challenges in the networked world:

> Self-synchronization (of diverse response elements) involves the broadening and deepening of such a developed form of mission command throughout every level and across every functional area of a combined, joint force. The paradox, therefore, is that while many will fret that the information age spells the end of mission command, it actually creates conditions where such a command philosophy is the essential bedrock for success.[48]

Though directed at the military environment, Storr's observations may as well be addressing the homeland security crisis response environment and warrant further investigation. This thesis will examine the use of mission command by organizations in a military and homeland security-like setting. The next section provides an outline of the scope of this thesis.

H. THESIS OUTLINE

Chapter II will consist of a literature review. This review will focus on military mission command, implementation of mission command principles by the two

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[46] Tom Czerwinski, *Coping with the Bounds: Speculations on Nonlinearity in Military Affairs* (Washington, DC: Institute for National Strategic Studies, 1998), 73.

[47] Comfort, and Kapucu, "Inter-Organizational Coordination," 310.

[48] Storr, "A Command Philosophy" 128.

organizations highlighted in the case studies, and potential application in the homeland security crisis response environment. Review of literature will be conducted in the following areas: mission command and its origins, military implementation, challenges to implementation, decision making in military and homeland security crisis response environments, homeland security implementation, and areas of research that remain unknown or unexplored.

In Chapter III, mission command will be examined from an issue-specific point of view. Psychological, technological, and organizational system perspectives will be considered in order to clarify conflicts or alignments with mission command philosophy. These perspectives are not addressed in the case studies and, therefore, will be considered individually.

1. Two Case Studies

In Chapter IV and V, a qualitative approach using case study methodology will be employed to examine two organizations that have utilized mission command precepts: the Israel Defense Forces (IDF) and the United States Forest Service (USFS). Both of these organizations operate in high-risk environments as a part of their work missions; while crisis response is a potential, it is only required on an occasional basis. The IDF and USFS both utilize the principles of mission command but rarely refer to the concept as such, choosing terms such as decentralization, empowerment, intent, and trust instead. Both organizations have embraced the concept of mission command due to organizational needs: speed, flexibility, and limited resources. In the case of the IDF, defense of the state of Israel and the immediacy of threats dictate organizational doctrine. The need for leadership and situational awareness in order to prevent fatalities is a prime motivator on the part of the USFS. Both organizations operate in environments that have been traditionally hierarchical where rank, unity of command, and deference to authority are commonplace.

The two case studies differ in that the organizations operate in different settings—the IDF in a military context and the USFS in a natural hazard context. Both have adversaries but the IDF must operate against a human foe that is intent on defeating it,

while the USFS must operate against a natural foe (fire) that has no motives and can be very unpredictable. The two organizations differ in the amount of time they have been using the principles of mission command; the IDF has been using it since inception in 1948 and the USFS only since 2003. They both have had varying degrees of success. Finally, the two organizations differ in culture. For example, participation in the IDF is a requirement of all citizens and therefore much embedded in Israeli life. On the other hand, firefighting in the USFS is an occupational choice undertaken by only a few of the U.S. citizenry.

The two case studies will be examined by assessing the following questions:

1) What was the leadership philosophy prior to the implementation of mission command principles?
2) What was the reason for the organizational change?
3) How did the organization go about moving to mission command?
4) What were the challenges and costs?
5) What were the benefits?
6) What conclusions can be drawn regarding implementation of mission command within these organizations?

In addition, a comparison of each organization will be conducted utilizing the Army framework of the six principles of mission command. A feature of the case studies is the recognition of institutional stories or lore as a component of organizational narrative.[49]

2. Other Thesis Elements

In Chapter VI, the findings from the case studies will be summarized in order to identify the benefits and challenges of mission command implementation. In addition, patterns, internal and external influences, and causality will be examined. By using a military case study, where mission command has been used historically, and a wildland firefighting case study, which has relevance as a homeland security response organization, it is hoped that reasonable conclusions can be drawn for organizations that operate within the homeland security environment.

[49] Yiannis Gabriel, "Turning Facts into Stories and Stories into Facts: A Hermeneutic Exploration of Organizational Folklore," *Human Relations* 44, no. 8 (1991): 857.

In Chapter VII, recommendations, a plan for implementation, and a conclusion will be presented. A recommendation of whether or not mission command is useful to an organization in the HSE will also be provided as policy implications would impact organizational culture, training, discipline, and operational procedures. Remaining questions and issues might involve measurement of performance in utilizing mission command, impacts of network-centered technology on mission command, and increased organizational liability associated with lower decision-making authority. A plan or set of recommendations will provide practical steps that can be taken by an HSE organization to better prepare for crisis response. A conclusion will then summarize the key findings and recommendations.

3. Summary

In this chapter, the thesis problem space was defined as the challenges encountered by the homeland security enterprise (HSE) in crisis response. The thesis supposition is that if HSE response organizations can become more decentralized and collaborative, they can respond to crisis events more effectively.

The "rules governing how people rule" or the established norms of the HSE were examined and the proposal of an alternate leadership methodology, mission command, was offered. The origins of mission command, the relationship of mission command to *auftragstaktik*, and the successful implementation by the Prussian military in the 1800s was reviewed. In addition, definitions were provided for phrases that appear repeatedly in the thesis. Furthermore the reasons why military mission command may have applicability in the homeland security crisis response environment were discussed, and the similarities between these two environments was detailed. Finally, the outline for the thesis was noted by reviewing each chapter and the focus of research in general.

II. LITERATURE REVIEW

This literature review was conducted with a focus on military mission command and its potential application in the homeland security crisis response environment. An inductive line of inquiry was utilized as a framework for the review. Specifically, if mission command has had credible success in a military environment and decision making in both the military and homeland security crisis response environments share similar attributes, then mission command may have usefulness during homeland security crisis response. Vandergriff points out that the best way to implement mission command is to examine how others have done it through case studies.[50] Therefore, case studies of two organizations that have implemented principles of mission command were chosen to refine the literature review. Finally, three questions were devised: 1) What is mission command and has it been successfully utilized? 2) What are the challenges to implementation of mission command? 3) Could mission command be useful in homeland security crisis response?

With this approach, research of applicable literature was conducted using resources such as the Naval Postgraduate School Dudley Knox Library. The documents reviewed focused on leadership, mission command, Israel Defense Forces, United States Department of Agriculture, Forest Service, Prussian military history, homeland security crisis response, commander's intent, and *auftragstaktik.*

A. LITERATURE ON MISSION COMMAND

The literature on mission command is extensive and yet there are variations in how mission command is described. For example, definitions of mission command range from the organizational (e.g., a system, model, doctrine, or technique) to the sociological

[50] Donald Vandergriff, "Misinterpretation and Confusion: What is Mission Command and Can the U.S. Army Make it Work?" *The Land Warfare Paper Series*, February 2013, Association of the United States Army, accessed February 21, 2015, http://www.ausa.org/publications/ilw/ilw_pubs/landwarfarepapers/Pages/default.aspx, 11.

(e.g., a philosophy, lifestyle, or culture).[51] Bungay maintains that mission command is based on the principles of *auftragstaktik*, a German military term that loosely translates as task or mission-focused execution as compared to *befehlstaktik* or execution of direct orders.[52] Nelson's delineation of *auftragstaktik* captures the nuance, namely that:

> …*auftragstaktik* was an extraordinarily broad concept, holistically embracing aspects of what today would be called a theory of the nature of war, character and leadership traits, tactics, command and control, senior-subordinate relationships, and training and education. In addition these aspects were organically consistent, mutually reinforcing, and inseparably interwoven.[53]

Mission command is the English interpretation of the term *auftragstaktik*, the translation of which might explain some of the variations in description and application by non-Germanic militaries.

Six principles have been chosen by the U.S. Army to describe mission command in current doctrinal publications. Each of these principles will be used as a framework for further evaluation of the organizations in the case studies. These six principles are: 1) build cohesive teams through mutual trust; 2) create shared understanding; 3) provide a clear commander's intent; 4) exercise disciplined initiative; 5) use mission orders; and 6) accept prudent risk.[54] These principles could be viewed as a series of steps that build on one another (although the fourth and fifth steps could be switched). As an example with the third principle, "provide a clear commander's intent," Shattuck and Woods examined how remote supervisors (leaders or commanders) impart their presence by communicating their intent.[55] Their research examined the communication of intent in

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[51] Vandergriff, "Misinterpretation and Confusion," 11; Shamir, *Transforming Command*, 3; Jochen Wittmann, *Auftragstaktik, Just a Command Technique or the Core Pillar of Mastering the Military Operational Art* (Göttingen, Germany: Miles Verlag, 2012), 15; Bungay, *The Art of Action*, 58.

[52] Stephen Bungay, "The Road to Mission Command: The Genesis of a Command Philosophy," *The British Army Review* 137 (summer 2005): 26.

[53] John T. Nelson, II, "Auftragstaktik: A Case for Decentralized Battle," *Parameters* 17, no. 3 (1987): 27.

[54] U.S. Department of the Army, *Mission Command*.

[55] Lawrence Shattuck, and David Woods, "Communication of Intent in Military Command and Control Systems," in *The Human in Command: Exploring the Modern Military Experience*, ed. Carol McCann and Ross Pigeau, 279–292 (New York: Kluwer Academic/Plenum Publishers, 2000).

military command and control systems by simulating commander orders and gaging subordinate actions when event anomalies occurred. Results of their simulation indicated that even though there are specified methods to communicate intent within the military, subordinate leaders were able to match their commander's intent only 34 percent of the time.[56] Explanations for the results are discussed in terms of a path versus state framework, flexibility versus synchronicity, language ambiguity, and leader communication as a means of imparting presence.

Stewart argues that commander's intent can be contrasted as either problem bounding or problem solving.[57] Problem bounding directives, a quality of mission command, are less detailed by a factor of three to one than problem solving directives which are issued by commanders in a more hierarchical, top-down organization.[58] Shamir, Stevens and Smith, and Storr all provide comparisons of mission command with more authoritative or hierarchical styles of command.[59] These authors are advocates for mission command; however, Shamir and Storr both express concern that there are organizational obstacles that must be overcome in order for mission command to be effective.

The U.S. Navy embraces "command by negation," a style of leadership that shares most of the attributes of mission command, namely decentralization and initiative at the lowest levels of the organization. Command by negation was born out of the difficulty that naval vessels had in communicating during battles at sea or when traveling around the world. On-scene commanders are expected to take all available action to complete a mission until "reined in" by a senior commander.[60] On an individual leader

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[56] Ibid.

[57] Keith Stewart, "Mission Command: Problem Bounding or Problem Solving?" *Canadian Military Journal* 9, no. 4 (2009): 50–59.

[58] Ibid.

[59] Eitan Shamir, "The Long and Winding Road: The US Army Managerial Approach to Command and the Adoption of Mission Command (Auftragstaktik)," *Journal of Strategic Studies* 33, no. 5 (October 2010): 645–672; Patrick Stevens, and Mark Smith, *A Proposed Framework for Managing Catastrophic Incidents* (Franktown, CO: Mission-Centered Solutions, 2011), 17; Storr, "A Command Philosophy for the Information Age," 128.

[60] Larry Legree, "Will Judgement Be a Casualty of Network-Centric Warfare?" *U.S. Naval Institute Proceedings* 139, no. 10 (October 2004): 54–57.

level, Marquet describes a type of mission command philosophy, technique he calls leader-leader and that was utilized to transform a poorly performing crew assigned to a nuclear submarine into the most improved ship in the Pacific Fleet.[61] Through discussion and practice, he created an environment where the need to give orders was minimized and subordinates prefaced every action with statements such as "I intend to . . ., I plan on . . ., I will . . ., and We will . . ."[62] The impact of this change in protocol was to shift passive followers into "thinking obedience" through empowering thought and language; a prime objective of mission command.

B. LITERATURE ON MILITARY IMPLEMENTATION

Prussian military efforts to implement *auftragstaktik* and in particular, the success of General Helmuth von Moltke (as described in Chapter I) in institutionalizing its precepts are documented in a number of resources.[63] Multiple references provide an understanding of the underlying reasons the Prussian military moved towards a more decentralized command structure based on the work of Scharnhorst, Clausewitz, and others.[64] Their influence after the defeat of the Prussian military by French forces in 1806 changed the perception of warfare in the nineteenth century by the acknowledgement of the complexity of conflict and the need for nimbleness.

Contributions to the literature by the Israel Defense Forces with regard as to how to implement mission command include articles on history, policy, benefits, and limitations. For example, Pressfield and Grossgold examine IDF operations and command ethos based on experiences from the Six Day War in 1967.[65] Moreover, they

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[61] L. David Marquet, *Turn the Ship Around! A True Story of Turning Followers into Leaders* (New York: Penguin Group, 2012).

[62] Marquet, *Turn the Ship Around*, 83.

[63] Bungay, *The Art of Action*, 58.

[64] Widder, "Auftragstaktik and Inner Fuhring," 4; Hughes, *Moltke on the Art of War*; Gordon Craig *The Battle of Koniggratz* (Philadelphia, PA: J.B. Lippincott Company, 1964); Otto Friedrich, *Blood and Iron: From Bismark to Hitler, The Von Moltke Family's Impact on German History* (New York, Harper Collins, 1995); Arden Bucholz, *Moltke and the German Wars 1864–1871* (New York, Palgrave, 2001).

[65] Paul S. Grossgold, *The 1967 Arab Israeli War: An Operational Study of the Sinai Campaign* (Newport, RI: Naval War College, 1994), 11; Steven Pressfield, *The Lion's Gate: On the Front Lines of the Six Day War* (New York: Penguin Group, 2014), 227.

both describe the culture of military life in the IDF and the need for rapid deployment against a foe that could invade from multiple directions. In addition, Anglim and Eiton-Meyer examine the origins of mission command and how the IDF command policy evolved.[66] They both focus on the history of the Special Night Squadrons led by British officer Orde Wingate under the governance of British Palestine. The tactics used by these squadrons later influenced the decentralized command ethos of the IDF.

Furthermore, Shattuck and Marcus discuss the limitations of IDF's decentralized operations in regards to synchronicity and coordination.[67] Both of these issues can be problematic when operating under a less controlled command structure. Shattuck points out the coordination problems that General Dayan experienced in the Sinai Campaign of 1956 by granting too much independence to subordinates, while Marcus cites the informal culture of the IDF as a double-edged sword that can cause important historical lessons to be ignored. Jones reviews the benefits of IDF's networked strategy against insurgencies during asymmetric operations.[68] His observations validate the success of a decentralized command approach against opponents who operate under informal command and rules of engagement. The literature regarding the IDF's experience with the principles of mission command will be examined further in the case study presented in Chapter IV.

C. LITERATURE ON CHALLENGES TO IMPLEMENTATION

For all that mission command offers, there is literature that points out a number of challenges to full implementation. For example, Wittman, Muth, and Shamir question the ability of militaries to successfully implement mission command, advocating that it is

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[66] Simon Anglim, "Orde Wingate and the Special Night Squadrons: A Feasible Policy for Counter-terrorism?" *Contemporary Security Policy* 28, no 1 (2007): 34; Aaron Eiton Meyer, "The Zionism of Orde Wingate: A Complex Origin," accessed August 12, 2014, http://www.covenant.idc.ac.il/en/vol3/issue1/The_Zionism_of_Orde html

[67] Lawrence G. Shattuck, "Communicating Intent and Imparting Presence," *Military Review* 90, no. 2 (2000), 68; Raphael D. Marcus, "Military Innovation and Tactical Adaptation in the Israel-Hizballah Conflict: The Institutionalization of Lesson-Learning in the IDF," *The Journal of Strategic Studies* (2014): 22. DOI 10.1080/01402390.2014.923767

[68] Seth G. Jones, "Fighting Networked Terrorist Groups: Lessons from Israel," *Studies in Conflict and Terrorism* 30 (2007): 296.

more than just a command technique.[69] In particular, Muth and Shamir both express doubt as to whether the U.S. military can fully implement mission command due to cultural norms such as the notion that officer seniority ensures superior decision-making capabilities and the promotional system discouraging taking risk, creativity, and innovation.

Other challenges may preclude organizations from successful implementation of mission command such as: partial adoption of principles and hybrid implementation, organizational intransigence, promotion of network-centric technology platforms without addressing micromanagement, and cultural differences. Trust, cohesion, and tolerance are more esoteric qualities that are crucial to mission command, yet are organizationally difficult to promote or measure.

Storr and Stewart both illustrate further obstacles to implementation to mission command including: unproven validity to peace time operations, increased risk and legal liability, and increased costs due to additional training for junior officers and personnel.[70] Benson and Fontenot claim that due to misinterpretations of mission command within the U.S. Army, a "cult of command" has surfaced and that cohesive thinking or groupthink has manifested. Rather than producing an environment where open discourse and critical feedback is encouraged, the Army's adoption of mission command has led to a dark side, where commander centric ideas and cohesion of command staff has produced "groupthink." Benson and Fontenot propose that a solution is not to abandon the philosophy of mission command but to ensure that commanders do not act cavalierly under the guise of initiative.[71] Silva discusses the importance of trust between superior and subordinate calling it the "cornerstone of mission-oriented command."[72] Trust that the leader and organization support one's actions is necessary for the subordinate who is

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[69] Wittmann, *Auftragstakt*; Jorg Muth, *Command Culture: Officer Education in the U.S. Army and the German Armed Forces* (Denton, TX: University of North Texas Press, 2011); Shamir, *Transforming Command*, 202.

[70] Storr, "A Command Philosophy for the Information Age," 125.

[71] Gregory Fontenot, and Kevin Benson, "The Conundrum of Mission Command," *Army Journal* 63, no. 6 (June 2013): 28–35.

[72] John L. Silva, "Auftragstaktik: Its Origin and Development," *Infantry Magazine* 79, no. 5 (1989): 6–9.

expected to act in the face of uncertainty. Trust that the subordinate will exercise judgment and creativity within the bounds of the leader's intent is necessary for the superior. Micromanagement, groupthink and liability concerns are elements that will negate the mutual trust identified as a principle of mission command.

D. LITERATURE ON DECISION-MAKING IN MILITARY AND CRISIS RESPONSE ENVIRONMENTS

The literature regarding the complexity of military operational environments is extensive. Two authors, Van Creveld and Czerwinski provide insight on the nature of command in war and helpful descriptions of complexity theory.[73] Van Creveld concludes that in military conflict there is a need for decision parameters to be fixed as far down the organizational hierarchy as possible, the need for lower level leaders to have the resources available in order to make those decisions, and the need for top-down and bottom-up information transmission.[74] While these two sources may be a bit dated, nonetheless their observations remain relevant and indeed seem to align with more recent literature regarding decentralized command and control and "edge organizing."[75] Mintzberg provides support of increased decentralization of an organization as the operating environment becomes more complex.[76]

Klein posits how experienced leaders working under time constraints make decisions in emergency response settings.[77] On behalf of the U.S. Army, Klein, Calderwood, and Clinton-Cirocco interviewed 26 experienced fire ground officers about decisions made under conditions of extreme time pressure and where the consequences of the decisions could affect lives and property.[78] Their conclusion was that under duress, decision making is a recognition-primed process rather than a process of comparing

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[73] Czerwinski, *Coping with the Bounds*, 73.

[74] van Creveld, *Command in War*, 270.

[75] Vassiliou, *The Evolution towards Decentralized C2*, 3; Ad L.W. Vogelaar, "Leadership from the Edge: A Matter of Balance," *Journal of Leadership & Organizational Studies* 13, no. 3 (2007): 27–42.

[76] Mintzberg, *Structure in Fives*, 138.

[77] Klein, "Strategies of Decision Making," 57.

[78] Gary A. Klein, Roberta Calderwood, and Anne Clinton-Cirocco, *Rapid Decision Making on the Fire Ground*, technical report 796 (Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1988), 1.

options. Experienced decision makers were not looking for a best option but rather one that works, a process that Klein calls "satisficing."[79] Other shared characteristics between the military and crisis response environments were discussed in Chapter I. The inductive line of reasoning for this thesis is based on the premise that these environments share decision-making constraints.

Communicating a decision or sharing understanding can be difficult in the military and crisis response environments. Lee et al. maintain that getting the relevant information to the right person at the right time during a crisis is a challenge.[80] As Klein noted and Lee et al. reinforce, these operating environments are complex. According to Lee et al., "Response to disasters, whether natural (e.g., floods, earthquakes) or human induced (e.g., terrorist attacks) is a complex process that involves severe time pressure, high uncertainty, and many stakeholders, which results in unpredictable information needs."[81] Boin et al. provide relevant insights regarding crisis management and identify five critical tasks that must be addressed by leaders. These tasks include sense-making, decision making, meaning making, terminating (the crisis), and learning. In addition, helpful references to decentralization of organizations, high-reliability and critical decision making are reviewed.[82] Other non-military references, such as those by Sinek, Waterman, and Brafman and Beckstrom, shed light on the advantages and disadvantages of decentralized organizations.[83] These authors are focused on the business genre of organizational effectiveness in changing environments. Sinek explores organizational motivation as it pertains to the leader's communication of intent.[84] The other authors

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[79] Klein, Calderwood, and Clinton-Cirocco, "Rapid Decision Making," 19.

[80] Lee et al, "Group Value and Intention to Use," 404.

[81] Ibid.

[82] Boin et. al., *The Politics of Crisis Management*, 10.

[83] Simon Sinek, *Why Start With Why: How Great Leaders Inspire Everyone to Take Action* (London: The Penguin Group, 2009); Robert H. Waterman, *Adhocracy* (New York: W.W. Norton and Company, 1990); Ori Brafman, Rod A. Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (New York: The Penguin Group, 2006).

[84] Sinek, *Why Start with Why*.

examine organizational flexibility and the ability to pivot in order to meet new demands.[85]

In *The Starfish and the Spider*, Brafman and Beckstrom discuss the impact of a world connected by the Internet and the new rules of the game. These rules include: chaos reigns in this new paradigm, but opportunities are the result; people have a fundamental desire to share and contribute to their community; and the organizational imperative to flatten or be flattened.[86] The chaos theme is reiterated by Peterson, who sees similarities in the fog and friction experienced by decision makers in both the emergency response and military environments.[87] His research also concerns the applicability of technology as a means of enhancing awareness and decision making. Complex environments, decision making, and networking are themes that are applicable to the homeland security environment and will be revisited later in this thesis.

E. LITERATURE ON HOMELAND SECURITY IMPLEMENTATION

As mentioned, there is a dearth of literature concerning the usefulness of mission command and critical decision making during homeland security crisis response. In contrast, the literature abounds regarding the limits and deficiencies of homeland security crisis response. For example, Boin and McConnell conclude that during homeland security crisis management, first responders must be trained to "act independently and effectively in dire circumstances."[88] They note that "top-down" organizational response may be appropriate only in the acute phases of a crisis when expediency encourages a "centralization reflex" or the shifting of authority upwards. As the crisis becomes more complex, "top down" control becomes less effective. In addition, Boin and McConnell offer several strategies for promoting resilience, including training responders to know when plans need to be implemented and when plans are rendered useless and therefore

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[85] Waterman, *Adhocracy*; Brafman and Beckstrom, *The Starfish and the Spider*.

[86] Brafman, and Beckstrom, *The Starfish and the Spider*.

[87] Michael Peterson, "From the Battlefield to the Homeland: Building the Case for Network-Centric Response" (master's thesis, Naval Post Graduate School, 2007), 96.

[88] Arjen Boin, and Allan McConnell, "Preparing for Critical Infrastructure Breakdowns: The Limits of Crisis Management and the Need for Resilience," *Journal of Contingencies and Crisis Management* 15, no. 1 (March 2007): 55.

discarded.[89] Comfort and Kapucu examine a similar theme regarding the complexity of inter-organizational coordination in response to extreme events.[90] They conclude that "auto-adaption," or a form of mutual adjustment and learning process among organization elements or organizations in a system, will improve response to an extreme event such as the World Trade Center terrorist attacks.

Lagadec proposes that homeland security crisis managers are being pushed into unknown territory due to "megashocks," or events that are unexpected and have great impact, those such as Hurricane Katrina, the World Trade Center attacks, and Hurricane Sandy. These events can cause systemic meltdowns and confrontations with the unknown, which crisis responders struggle to overcome. Lagadec advocates a rethinking of how crises are managed in order to better prepare for future events. To that end, he describes an operational tool kit, or framework, that provides crisis responders with a series of imperatives, which are: anticipating, detecting, reacting, inventing, and mobilizing.[91] Waugh and Streib take a somewhat different approach and examine whether command and control systems are appropriate for dealing with catastrophic disasters.[92] They suggest that a collaborative process may be more appropriate for managing emergencies rather than a traditional command and control approach. Furthermore, they note the paradox that "…emergency response requires meticulous organization and planning, but on the other hand, it is spontaneous."[93]

The literature on the implications of an improvised nuclear device (IND) detonation in an urban area does not offer much reassurance regarding response orderliness and efficiency. A couple of sources, Pasquale and Hansen and the 2009 *Planning Guidance for Response to a Nuclear Detonation*, estimate the casualty figures from an improvised nuclear device detonated in an urban setting to be in the tens of

[89] Boin, and McConnell, "Preparing for Critical Infrastructure Breakdowns," 55.

[90] Comfort, and Kapucu "Inter-Organizational Coordination," 312.

[91] Patrick Lagadec, *Navigating the Unknown: A Practical Lifeline for Decision Makers in the Dark* (Bordeaux: Editions Preventique, 2013), 2.

[92] Waugh, and Streib, "Collaboration and Leadership," 131, 132.

[93] Ibid., 132.

thousands and that local emergency response capabilities would be severely impaired.[94] The literature regarding this scenario will serve to illustrate a national homeland security concern and will be discussed further in this thesis.

Peterson, mentioned previously, suggests a technological solution to response inadequacies using the net-centric (or network-centric) concept that the military has embraced and applying it to the homeland response environment. He defines network centricity as systems or systems of systems that connect sensors, decision makers, and responders. By implementing a network-centric capability in the homeland security response realm, information sharing, the ability to self-synchronize, the speed of command, decision making, and, ultimately, response effectiveness will be enhanced.[95] These are all objectives that the implementation of mission command is intended to achieve, albeit from a non-technical standpoint. However, Vandergriff warns that network-centric technology combined with mission command does not imply that the harder steps of organizational change in the areas of culture, training, education, and personnel systems can be ignored.[96] His comments are directed at the military (the U.S. Army in particular) and provide an alternate perspective to organizational implementation of mission command.

The wildland fire community provides both management and resource capabilities to homeland security all-risk incidents, such as earthquakes, hurricanes, and search and rescues. While not a member of the U.S. Department of Homeland Security organization on paper, the federal wildland fire service is a part in practice. The National Wildfire Coordinating Group book *Leading in the Wildland Fire Service* expresses the fundamental leadership concepts of the wildland fire service and the U.S. Department of Agriculture, Forest Service (USFS) in particular.[97] Mission command concepts such as

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[94] Pasquale, and Hansen, "Implications of an Improvised Nuclear Device;" National Security Staff, *Planning Guidance for Response to a Nuclear Detonation*, 10.

[95] Peterson, "From the Battlefield to the Homeland," 151.

[96] Vandergriff, "Misinterpretation and Confusion" 4.

[97] National Wildfire Coordinating Group, *Leading in the Wildland Fire Service* (Boise, ID: National Wildfire Coordinating Group, 2007), accessed February 21, 2015, http://www.fireleadership.gov/documents/LeadingWFS_Pub.pdf

leader's intent, trust, initiative, and bias for action are explored through description and real-life vignettes. How the USFS came to adopt these military concepts will be explored in Chapter V of this thesis.

The *Leading in the Wildland Fire Service* document serves as the basis for a series of six leadership courses that are a component of the Federal Wildland Fire Leadership Development Program. This program is the only known adaption of mission command principles by an organization in the homeland security enterprise. Other urban fire departments, such as the city of San Diego Fire Department, have utilized this program for an all-hazards setting.

In the case of the USFS, the writings of Norman Maclean and John Maclean have served to document several fatal wildfire episodes and to provide a measure of insight as to the reasons these events occurred.[98] These stories are one person's view of an episode, but by most accounts are free of organizational bias and are well researched. In addition, the wildland firefighter community has embraced the Macleans as de-facto historians, their narratives provide a sometimes more nuanced view than that of official reports.

F. AREAS THAT REMAIN UNKNOWN OR UNEXPLORED

Further review of the literature on mission command and its usefulness during a crisis revealed two research gaps. The lack of literature in these areas will be addressed in this thesis. One of the gaps was the absence of any historical examples describing the success or failure of mission command implementation in homeland security crisis response. An exception is Vogelaar and Kramer's examination of mission command in Dutch peace support missions.[99] According to them, "The study was based on a secondary analysis of interviews with soldiers of different ranks (from private to lieutenant colonel) that were deployed in peace support operations in Bosnia-Herzegovina."[100] Their analysis of these peacekeeping operations, a role that is not

[98] Norman Maclean, *Young Men and Fire* (Chicago: University of Chicago Press, 1972)

[99] Ad L.W. Vogelaar, and Eric-Hans Kramer, "Mission Command in Dutch Peace Support Missions," *Armed Forces and Society* 30 (2004): 409–430.

[100] Ibid., 413.

normal for the Dutch military, examined the extent to which mission command principles were implemented in a non-conflict environment. In addition, the authors note that peace support operations require "thinking commanders" rather than "rule-following commanders" which in turn requires delegation of responsibility and authority. Furthermore, they conclude that the Dutch military encountered difficulties in implementation of mission command owing to hierarchical military norms and the tendency for leaders to centralize control in conditions of uncertainty and high political scrutiny.[101] This tendency to micromanage is a theme that will be explored further later.

As previously stated, the USFS has taken steps towards implementation of mission command principles and significant literature is available regarding their reasons for implementation, but there is little on performance.[102] Leadership failure on fires where multiple personnel were overrun and perished is a driving force in the development of a leadership program by the USFS, and the literature in this regard consists of investigative reports and journal articles. This insight should prove useful in understanding why organizations are motivated to change and to identify the obstacles to mission command implementation. The lack of literature regarding improved leadership performance will be discussed further as well.

The second research gap is the lack of literature addressing how to measure the effectiveness of mission command. There are a few sources that discuss similar topics. For example, Peterson offers five measures of effectiveness for a network-centric response in homeland security emergency incidents, which may be helpful as a measurement tool. These effectiveness measures are information sharing, situational awareness levels, ability to self-synchronize, speed of command and decision-making, and overall response mission effectiveness.[103] The training cost associated with implementing mission command is another measure of effectiveness that could be

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[101] Ibid., 426.

[102] TriData Corporation, *Wildland Firefighter Safety Awareness Study: Phase I Identifying the Organizational Culture, Leadership, Human Factors, and Other Issues Impacting Firefighter Safety* (Arlington, VA: TriData Corporation, 1996), https://www nifc.gov/safety/safety_documents/phase1.pdf, 128.

[103] Peterson, "From the Battlefield to the Homeland," 152.

employed; however, research on training cost is lacking. Stewart alludes to the significant investment in time and resources associated with establishing a culture of mission command. This investment is required in order to train personnel to "… the high standards required to operate within such a paradigm."[104]

G. SUMMARY

The objective of the literature review was to describe the breadth, usefulness, and validity of sources in regards to three questions: 1) What is mission command and has it been successfully utilized? 2) What are the challenges to implementation of mission command? 3) Could mission command be useful during homeland security crisis response? The literature addressing questions one and two is extensive. Historical and anecdotal references abound regarding command philosophy and mission command; however, there is little empirical research to support these findings.[105] Complexity and organizational theory literature support the concepts of mission command and the military experience is reasonably well documented. A renaissance of mission command implementation is occurring within the U.S. military and the supporting body of literature is growing.[106] Literature regarding the challenges the Israel Defense Forces and other militaries have with regard to implementation of mission command provides helpful insight and objectivity.

However, the literature is sparse concerning the third question regarding the usefulness of mission command in homeland security crisis management. While, there is some literature regarding the efforts by the USFS and the federal wildland firefighting community towards leadership development using the principles of mission command, the literature on performance results is lacking. Despite this lack of research, an inductive line of reasoning may provide a reasonable conclusion. The argument is this: if a style of leadership known as mission command has had credible success in a military

[104] Stewart, "Mission Command: Problem Bounding or Problem Solving?" 52.

[105] Ibid., 51.

[106] Dempsey, *Mission Command*, 8; Douglas Pryer, "Growing Leaders Who Practice Mission Command and Win the Peace," *Military Review* 93, no. 6 (2013): 31–41; Demetrios Ghikas, "Taking Ownership of Mission Command," *Military Review* 93, no. 6 (2013): 23–30.

environment and decision making in both the military and crisis management share similar attributes, then mission command may have usefulness during homeland security crisis response. Certainly, there are opportunities for further research in this regard and in the measurement of the effectiveness of mission command. This thesis will contribute to that research.

The next chapter will examine mission command from an issue specific point of view. The frameworks of psychological, network centricity and incident command system will be considered in order to clarify conflicts or alignments with mission command philosophy. These perspectives are not addressed in the forthcoming case studies and, therefore, will be considered individually.

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III. MISSION COMMAND AND ISSUE SPECIFIC PERSPECTIVES

A. INTRODUCTION

Psychological, technological, and organizational frameworks are crucial in understanding how any leadership dynamic works. In this chapter, mission command will be examined through the lens of these three frameworks. In the psychological framework, the impacts of mission command principles are gauged from an environmental, leader, and subordinate context. For example, how do followers react to the empowering nature of mission command? The technology framework will examine the push by the military and the homeland security enterprise toward network-enabled command and control (another term for "net-centric" discussed in Chapter II). In the organizational framework, an assessment of mission command in terms of the Incident Command System will be conducted. Each of these perspectives clarifies both the challenges and benefits that arise when mission command principles are practiced. These perspectives are not presented in the case studies that are to follow in Chapters IV and V and therefore will be scrutinized independently. The conclusions of this chapter will be incorporated in the analysis portion (Chapter VI) of this thesis.

B. MISSION COMMAND AND PSYCHOLOGY

Military and crisis response environments cause similar psychological impacts on individuals that must operate within them. As was discussed in Chapter I, these environments are parallel in nature due to the type of conditions encountered therein. These environments can be unpredictable, filled with volatility, uncertainty, complexity, and ambiguity (VUCA). Also mentioned in Chapter One I was the elevated incidence of post-traumatic stress disorder among members of both the military and emergency response communities. This section is a consideration of psychological influences on individuals required to operate in a high-risk work environment within the framework of mission command principles. Perspectives from an environmental, leadership, and subordinate viewpoints will be addressed.

1. The Psychological Impacts Caused by the Environment

Response to infrequent crisis events compels organizations to operate in a mode that is abnormal and thereby stressful and physically demanding on those who respond. Consider the example of the improvised nuclear-device detonation within an urban city discussed in Chapter I. Jurisdictional emergency response forces would face a situation unlike any that they have faced before and they may have only theoretical concepts and untested operating procedures from which to draw during the event. The responders who are able to react may be unable to communicate with higher command, dispatch centers, or surrounding resources due to the effects of the blast wave or flash radiation. In addition, radiation contamination poses an invisible threat to the health and well-being of those who respond. Millions of people not initially affected by the detonation would attempt to evacuate the region.[107] In addition, panic would be an issue as would responder concern for their own families. Response support systems and organizational norms may be irrelevant or inadequate.

Even events that are not so catastrophic such as a Mumbai-style terrorist attack or the Boston Marathon Bombing will test a response organization. Bigley and Roberts suggest:

> …one of the most enduring ideas in organizational theory is that bureaucracies—characterized by structural features such as standardization, specialization, formalization, and hierarchy—enable the steady, efficient functioning organizations require to compete successfully under stable operating conditions, but they also severely limit the flexibility organizations need to cope effectively with complex, ambiguous, and unstable task environments.[108]

The stakes are high in crisis response, and indecision or inadequate action by responders cause continued threats to life and property. In short, the crisis response environment, much like the military one, forces individuals and organizations to operate

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[107] Charles Meade, and Roger C. Molander, *Considering the Effects of a Catastrophic Terrorist Attack* (Santa Monica, CA: RAND, 2006), 5.

[108] Adler, Goldonftas, and Levine as quoted in Gregory A. Bigley, and Karlene H. Roberts, "The Incident Command System: High Reliability Organizing for Complex and Volatile Task Environments" *Academy of Management Journal* 44, no.6 (December 2001): 1281.

in an abnormal mode and one that is psychologically stressful and potentially overwhelming.

The need to communicate and cooperate with other agencies in a crisis places added pressures on response organizations. As discussed in Chapter I, most emergency response agencies within the HSE are based on paramilitary organizational models that are effective for day-to-day emergencies but may not be as effective when faced with extreme events. The devastating nature of crisis events requires widespread response from multiple agencies. In the aftermath of the World Trade Center terrorist attacks in 2001, there were 456 organizations involved in the response operations.[109] Research indicates that shared authority, dispersed responsibility, and collaborative networking are a better models for effective management under these conditions.[110] Operational circumstances dictate that hierarchically-organized response agencies would be compelled to function in an emergent multi-organizational network.

Pfeifer points out that hierarchical norms may be difficult to overcome, which causes "stovepipe situational awareness" where information travels within a single response agency and is withheld from others because of organizational bias. This organizational bias was seen in both the New York Police and Fire Departments at the response to the World Trade Center Towers after the terrorist attacks of September 11, 2001;[111] however, both agencies have made progress in this regard through training in the Incident Command System.

2. The Psychology of Mission Command from the Perspective of the Leader

Those tasked with leadership responsibilities during crisis response face tremendous decision-making pressure and can be overwhelmed in the process. The potential for harmful consequences as a result of wrong decisions adds significant

[109] Comfort, and Kapuca, "Inter-organizational Coordination in Extreme Events," 318.

[110] Waugh, and Streib, "Collaboration and Leadership," 131.

[111] Joseph W. Pfeifer, "Understanding How Organizational Bias Influenced First Responders at the World Trade Center," in *Psychology of Terrorism*, ed. Bruce Bongar et al., 207–215 (New York: Oxford University Press, 2007).

burden. Civilian suffering and subordinate danger can be the result of an error in judgment by a leader. The tempo of crisis events dictates that decisions must be made quickly, and they may be based on partial information. Kapucu points out that in the early stages of a complex crisis environment: "….the main reason for stress is the lack of information and knowledge."[112]

Time constraints are a factor also. Klein studied the decisions made by fire service leaders at fire incidents and found that most decisions were made in less than a minute due to the time pressure and "…critical decisions were frequently measured in seconds."[113] Shifting some of this burden of decision making through the use of mission command principles may serve to ameliorate the pressures experienced by an on-scene commander. Yardley and Kakabadse posit further: "Mission command is inherently a risk-taking management methodology which empowers individuals to analyze directives, question their relevance as the situation unfolds and to make executive decisions when required."[114] This initiative and empowerment works to decentralize the decision-making pressure and thus assist the beleaguered, and often times remotely located, command structure.

A key component of mission command is trust. Leaders must trust subordinates to act within the intent that has been communicated. This means that the leaders will need to frame direction with intent, namely: the task, purpose, and end state of the operation must be communicated—not how an operation is to be accomplished. Leaders must ensure that subordinates are trained and prepared to "lead-up" in the absence of direction. Disciplined innovation and initiative by subordinates must be supported and encouraged. Mistakes made in the process of earnest attempts to meet intent should not be ridiculed and penalized; rather, they should treated as learning opportunities for better operation in the future.

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[112] Naim Kapucu, *The Network Governance in Response to Acts of Terrorism* (New York: Routledge, 2012), 26.

[113] Klein, Calderwood, and Clinton-Cirocco, "Rapid Decision Making," 1.

[114] Yardley, and Kakabadse, "Understanding Mission Command," 74.

This may require leaders to re-evaluate their perception of themselves and their role in relation to followers. Traditional views of leaders in an authoritative and dominant role and followers as passive and compliant must be reassessed for trust to be engendered.[115] Hollander further describes this change in relationship, "An alternative view, more in keeping with a participative ethos, sees the leader-follower relationship within a mutual identification motif" where the relationship is marked by influence from the subordinate as well as the leader.[116]

a. Micromanagement

Micromanagement works against the trust and delegation needed for mission command to be successful in an organization. According to Serrat, delegation of authority can be facilitated or hindered by the organizational structure

> …where people have broad purviews, for instance, in flatter, egalitarian organizations, delegation is the norm; hierarchical organizations, on the other hand, can signal the nature and strength of boundaries and favor the emergence of silos, the habitat micromanagers thrive in.[117]

In high-pressure environments, increased performance monitoring may distract from the tasks and lead to failures.[118] In addition, micromanagers themselves may suffer from psychological pathologies or simply be unaware of their habits. Drexler explains, "Many helicopter bosses feel the need to hover in order to monitor efficiency, or to keep things on track, especially if an employee has erred in the past." He points out that this tendency for micromanaging is more often driven by the bosses' own insecurities rather than the employee's work performance.[119]

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[115] Edwin Hollander, "Leadership, Followership, Self and Others," *Leadership Quarterly* 3, no.1 (1992): 47.

[116] Ibid.

[117] Olivier Serrat, *The Travails of Micromanagement* (Washington, DC, Asian Development Bank, 2010), 3.

[118] Marci S. DeCaro et al., "Choking under Pressure: Multiple Routes to Skill Failure," *Journal of Experimental Psychology: General* 140, no. 3 (August 2011): 391.

[119] Peggy Drexler, "Managing Up: When Your Boss is an Obsessive Micromanager," *Forbes Magazine* (June 2013): 1, http://www.forbes.com/sites/peggydrexler/2013/06/13/managing-up-when-your-boss-is-an-obsessive-micromanager/

Toxic leadership also destroys the trust required to ensure that the mission command ethos functions properly. Walter Ulmer notes that toxic leaders, as loosely defined by the faculty and students of the U.S. Army War College, are those that:

> are focused on visible short-term mission accomplishment … provide superiors with impressive, articulate presentations and enthusiastic responses to missions… [but] are unconcerned about, or oblivious to, staff or troop morale and/or climate … [and] are seen by the majority of subordinates as arrogant, self-serving, inflexible, and petty.[120]

Eight to 10 percent of all U.S. Army colonels and general officers are deemed toxic leaders according to surveys from the Army War College conducted over a 15-year period.[121] Furthermore, Ulmer posits that a mission command culture could be strangled by this percentage of toxic senior leaders in the force. He offers that one remedy to the issue is the greater use of command climate surveys by subordinates to identify toxic leaders.[122] While the number of toxic leaders in the homeland security enterprise is not known, no organization is immune.

b. Stress Effects

The effects of increased stress on work performance can be positive or negative, depending on the individual. According to Kowalski-Trakofler, Vaught, and Scharf, "For some individuals, heightened stress elevates their performance. Others are vulnerable to the negative impacts of stress, which results in diminished performance."[123] In addition, factors typical of the high-risk work environment may heighten the stress level of a leader, including sleep deprivation, long work hours and physical extremes (such as exertion, heat, cold, weather, standing, or simply operating in a non-office setting).

Another consideration regarding intent-based direction is the impact of stress on communication. Dietrich and Silberstein posit that when individuals engaged with

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[120] Walter F. Ulmer, "Toxic Leadership: What Are We Talking About?" *Army Magazine* 62, no. 6 (June 2012): 48.

[121] Ibid., 52.

[122] Ibid., 50.

[123] Kathleen Kowalski-Trakofler, Charles Vaught, and Ted Scharf, "Judgment and Decision Making under Stress: An Overview for Emergency Managers," *International Journal of Emergency Management* 1, no. 3 (2003): 281.

difficult problems in a complex cognitive environment or psychomotorical activity, verbal communication tends to diminish.[124] An analysis of airplane cockpit crews described by Dietrich and Silberstein indicates that communication becomes very short and rudimentary under time pressure and danger. An accelerated rate of speech can manifest in addition to the clipped communication. Dietrich and Silberstein provide an anecdotal example of the communicative behavior of an air traffic controller, who comments that under time-pressure: "I talk faster, a lot faster—I talk so fast that they have to slow me down because they don't understand me anymore."[125]

Stress can affect group performance as well, leading to a decrease in social behavior, such as assisting others, according to Driskell, Salas and Jolinston. In a study described by Driskell, Salas and Jolinston individuals became focused inwardly and were less likely to help or assist others when exposed to loud ambient noise. Individual attention tends to become more restrictive or narrowed under stress, and similar effects were found in groups or teams.[126] Sexton and Helmreich propose that language is a coping mechanism because it helps lessen and manage the causes and effects of stress. They also note that better performing cockpit crews were found to communicate more overall and crew performance was more closely related to the quality of crew communication than the technical abilities of pilots or heightened physiological awareness. Furthermore, Sexton and Helmreich also observe, "It was the ability of crews to communicate that kept their errors from snowballing into undesirable outcomes."[127]

c. Camaraderie

Camaraderie (or comradery) is an integral component of leadership and essential for the mutual trust that mission command requires. Leaders who truly care about the

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[124] Dagmar Silberstein, and Rainer Dietrich, "Cockpit Communication under High Cognitive Workload," in *Communications in High Risk Environment*, ed. Rainer Dietrich, and Tilman von Meltzer (Hamburg: Helmut Buske Verlag, 2003), 9.

[125] Ibid.

[126] James E. Driskell, Eduardo Salas, and Joan Jolinston, "Does Stress Lead to a Loss of Team Perspective?" *Journal of Performance in Extreme Environments* 5, 1 (2000): 70.

[127] J. Bryan Sexton, and Robert L. Helmreich, "Analyzing Cockpit Communications: The Links between Language, Performance, Error, and Workload," *Journal of Performance in Extreme Environments* 5, 1 (2000): 63.

growth and development of those who serve underneath them place subordinate needs and comforts before their own (e.g., officers eat last), and they share the hardships and sacrifice alongside of their followers, which sets the tone for fellowship. This sense of community can be likened to a familial relationship where a parental figure loves their children. Indeed, many close-knit organizations can be compared to a family where the ties that bind are stronger than organizational ones. In the case study of Chapter VI, the camaraderie found in the Israel Defense Force is characterized by leaders acting as an older brother or sister toward a subordinate. This relationship manifests as a caring, interest, and a belief or trust in the ability of others. Major C. A. Bach captures this notion in his farewell instructions given to the student-officers at the Second Training Camp at Fort Sheridan in 1917:

> …paternalism is essential to leadership,… I do not now refer to that form of paternalism which robs men of initiative, self-reliance, and self-respect. I refer to the paternalism that manifests itself in a watchful care for the comfort and welfare of those in your charge.[128]

Kirkland and Jackson describe the social isolation that military leaders often experience especially when decisions must be made that require fairness and impartiality or placing subordinates in harm's way. As they explain, camaraderie is a factor that can mitigate this isolation and small military units are psychologically just like families. Strong bonds are created by a shared work experience that involves a separation from family and home, physical danger and hardship, and reliance on each other for survival.[129] Pozner and Kouzes define this camaraderie in another sense: the

> ...best kept secret of successful leaders is love: staying in love with leading; with the people who do the work; with what their organizations produce; and with those who honor the organization by using its products

[128] Shipstead, "Leadership: Address by Maj. C. A. Bach, Giving Farewell Instructions to the Graduating Student Officers of the Second Training Camp at Fort Sheridan, Wyoming, in 1917," November 27, 1942, accessed January 13, 2015, http://www.au.af.mil/au/awc/awcgate/au-24/bach.pdf

[129] Faris R. Kirkland, and Moss A Jackson, "Psychiatric Support for Commanders," in *Military Psychiatry: Preparing in Peace for War*, ed. Franklin D. Jones (Washington, DC: Walter Reed Army Medical Center Borden Institute, 2000), 180.

> and services. Leadership is not an affair of the head. Leadership is an affair of the heart.[130]

Townsend and Gebhardt acknowledge that effective leadership must embrace emotional elements such as love (which causes many people to fidget). They also quote Major C. A. Bach, who remarks that by practicing caring leadership: "you are breathing life into what would be otherwise a mere machine. You are creating a soul in your organization that will make the mass respond to you as though it were one man. And that is esprit."[131] This esprit de corps is an indicator of organizational morale and motivation. Sharpe and Creviston posit that of all the influences on inter-organizational trust, esprit de corps has the most influence. They note, "The establishment of organizational trust is critical to the successful implementation of mission command."[132]

To reiterate, mission command is dependent on mutual trust, and this trust is best fostered through camaraderie. Leaders who demonstrate caring, compassion, and belief in the abilities of others create a sense of security among a group. This trust enables the initiative and prudent risk-taking that a mission command ethos is intended to encourage.

3. The Psychology of Mission Command from the Perspective of a Subordinate

Subordinates must be willing and prepared to accept responsibility in leading-up in their chain of command if a mission command model is to be successful. Junior personnel not only need to have high awareness of tactics, techniques, and procedures within their given specialty, but they need to think "one or two levels up" in order to take the initiative as the opportunity arises.[133]

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[130] James M. Kouzes, and Barry Z. Posner, *The Leadership Challenge, How to Make Extraordinary Things Happen in Organizations*, 5th ed. (San Francisco: Jossey-Bass, 2012), 345.

[131] Patrick L. Townsend, and Joan Gebhardt, *Five Star Leadership: The Art and Strategy of Creating Leaders at Every Level* (New York: John Wiley & Sons, 1997), 111.

[132] James D. Sharpe Jr., and Thomas E. Creviston, "Understanding Mission Command," *Army Sustainment* 45, no. 4 (July–September 2013): 12.

[133] Keith Stewart, "The Evolution of Command Approach" (paper presented at the 15th International Command and Control Research and Technology Symposium, June 2010). Santa Monica, CA, http://dodccrp.org/events/15th_iccrts_2010/papers/192.pdf

Subordinate self-leadership has been seen as a primary mechanism for facilitating empowerment; however, self-leadership may not be appropriate for all followers.[134] Organizational culture, inexperience, concern about litigation or failure, and peer pressure may be reasons why certain subordinates are not willing or able to assume greater responsibility under a decentralized organizational model. As much as the leaders' trust of subordinates is a key component of mission command, subordinate trust in the leader and the organization is equally important.

Kirkland describes a German officer's perception of the relationship between officer and subordinate in the context of mission command: "The psychological consequence of *auftragstaktik* (mission command) for both junior and senior German military officers was a sense of security."[135] According to Kirkland, the result was was that the leader and subordinate got to know how each other thought and to anticipate how each other thought if necessary.[136] Similarly, the leader "imparting presence" to a subordinate is a concept described by Shattuck and which is critical in the communication of intent.[137]

Nelson further describes the benefits of this superior-subordinate relationship as experienced in the German military: "Though empowering and trusting subordinates always entailed risk for the superior, the supportive climate and candor of *auftragstaktik* assured German commanders that they would know accurately the condition of their subordinate units."[138] This knowledge would also guide commanders as to how best to develop the ability of each subordinate. Nelson continues: "Though responsible for everything their subordinates did or failed to do, commanders were secure knowing they could trust their own superiors to practice *auftragstaktik* and support them."[139]

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[134] Jeffery Houghton, and Steven Yoho, "Toward a Contingency Model of Leadership and Psychological Empowerment: When Should Self-Leadership Be Encouraged?" *Journal of Leadership and Organizational Studies* 11, no. 4 (summer 2005): 65.

[135] F. W. von Mellenthin as quoted in Faris R. Kirkland, "Self-Care, Psychological Integrity, and Auftragstaktik," November, 1996, http://isme.tamu.edu/JSCOPE97/Kirkland97 htm

[136] Ibid.

[137] Shattuck, "Communicating Intent and Imparting Presence," 77.

[138] John T. Nelson II as quoted in Kirkland, "Self-Care, Psychological Integrity, and Auftragstaktik."

[139] Ibid.

This trusting environment is described by Shalley and Gilson, who note that subordinate creativity takes time to develop. They point out that subordinates who are risk-adverse will tend to want stay with routine norms rather than commit errors. Encouragement to take risk is the key to creativity, according to Shalley and Gibson.[140]

Zhang and Bartol posit that subordinate creativity is influenced by "empowering leadership' and linked to three mechanisms: psychological empowerment, creative process engagement, and intrinsic motivation."[141] They explain:

> empowering leadership as the process of implementing conditions that enable sharing power with an employee by delineating the significance of the employee's job, providing greater decision-making autonomy, expressing confidence in the employee's capabilities, and removing hindrances to performance.[142]

Houghton and Yoho distinguish between the cognitive state of psychological empowerment and a process of self-leadership. Their description of how this process is enabled (with reference to Manz and Sims) includes leaders setting the example and encouraging follower self-leadership through several methods. These methods include: "…self-leadership strategies, personal responsibility, individual initiative, self-confidence, self-problem solving and psychological ownership of work tasks and duties."[143]

4. Mission Command and Psychology Summary

The psychological influences of mission command are useful to understand if this military leadership model is to be applied to environments such as homeland security crisis response. The military and crisis response environments share many attributes, including decision making under complex conditions. Those tasked with leading during

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[140] Christina Shalley, and Lucy L. Gilson "What Leaders Need to Know: A Review of Social and Contextual Factors that can Foster or Hinder Creativity," *The Leadership Quarterly* 15, no. 1 (2004): 36.

[141] Xiaomeng Zhang, and Kathryn Bartol, "Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation and Creative Process Engagement" *Academy of Management Journal* 53, no. 1 (2010): 107.

[142] Ibid., 109.

[143] Houghton, and Yoho, "Toward a Contingency Model," 70; Charles C. Manz, and Henry P. Sims, *The New Superleadership: Leading Others to Lead Themselves* (San Francisco: Berrett-Koehler, 2001).

crisis response face tremendous decision-making pressure, which can be overwhelming and contributes to psychological stress. The perspectives from the leader, subordinate, and environment were examined; trust is the primary ingredient in creating an empowering climate in which mission command will be successful. Challenges to trust such as micromanagement, toxic leadership, risk aversion and culture must be overcome. A mission command ethos offers much in enhancing organizational effectiveness through greater trust, cohesion, innovation, and nimbleness. From a psychological standpoint, mission command principles support an empowered organizational work force.

C. MISSION COMMAND AND NETWORKED-ENABLED COMMAND AND CONTROL

"The ubiquitous nature of data and technology, which transforms every soldier and pilot into a node in a network-centric environment, is irreparably changing existing leadership models,"[144] according to Rosenburg.[145] What are the implications of network-enabled command and control programs on a mission command style of organizational leadership? In this section, networked-enabled command and control (NEC2) will be examined from a military and homeland security response perspective. Additionally, two applications of NEC2 will be reviewed and the implications of such capabilities will be reviewed from the lens of mission command principles.

Speaking trumpets were a tool used by nineteenth century fire commanders to give direction over the din of the fireground and to provide cadence to firefighters working the hand-pump engines. Today, speaking trumpets, mostly referred to as "bugles," are only used by the fire service as collar or hat pieces to indicate rank.[146] Modern day incident commanders utilize radio, telephone, Internet, and other technologies to coordinate actions and convey intent. Emergency response agencies have long benefited from the technological advancements made by the military. Handi-talki portable radios, geographic positioning systems, and the command and general staff

[144] Barry Rosenburg, "Technology and Leadership," *Armed Forces Journal* (July 2007), accessed March 15, 2014, http://www.armedforcesjournal.com/technology-and-leadership/

[145] Ibid.

[146] Michael Ward, *Fire Officer: Principles and Practice* (Burlington, MA: Jones and Bartlett Learning, 2014), 9.

concept of the Incident Command System are just some of the advancements that have been borne of the battlefield and are now applied to the emergency response field.

1. Current Technical Capabilities

Recent advancements in technology promise to aid leaders in these work environments by enhancing decision-making, communication and accountability. An overarching concept, NEC2, and two applications (Command Post of the Future and Next Generation Incident Command System) will be examined next. The term "network" can infer a number of capabilities, including physical components (e.g., radios, terminals, and routers) and databases (where information is manipulated and shared). The following assessment is focuses on two other capabilities that networks provide: the cognitive, which includes sense-making, situational awareness, and decision-making tools; and the sociological, which includes organizational, leadership, and synchronization attributes.[147] Furthermore, the implications of NEC2 on mission command are discussed with emphasis on two disadvantages: micromanagement and information overload.

2. Network-Enabled Command and Control

NEC2 is a Department of Defense concept (akin to the term "net-centric" discussed in Chapter II) designed to provide leaders with greater network access to information and to share solutions. NEC2 includes systems that provide a common operating picture and is intended to "…be leader-centric and networked-enabled to encourage initiative and decision-making at the lowest appropriate level."[148]

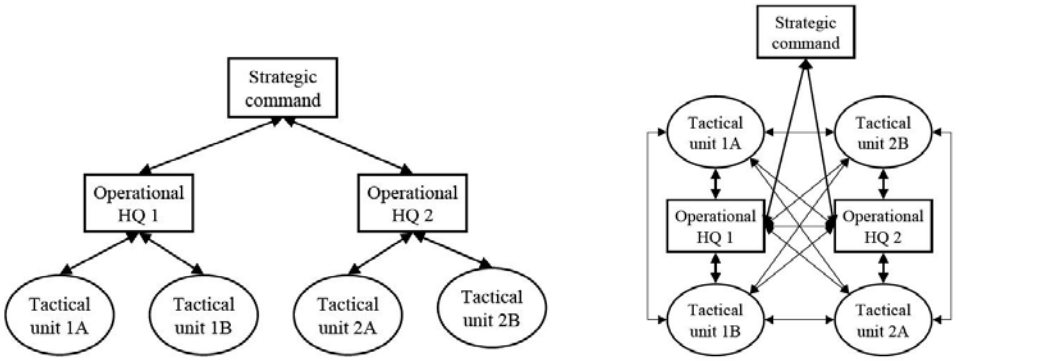
As illustrated in Figure 1, heterarchical or networked organizations as compared to hierarchical organizations organizations are less stratified. NEC2 creates this network capability and provides greater connectivity between nodes in an organization as compared to a more traditional hierarchical organizational structure. According to the

[147] Timothy M. Bonds et al., "Army Network-Enabled Operations" (Santa Monica, CA: RAND, 2012), 24.

[148] U.S Department of Defense, Office of the Assistant Secretary of Defense for Networks and Information Integrations, *Command and Control Implementation Plan, Version 1.0* (Washington, DC: Office of the Assistant Secretary of Defense for Networks and Information Integrations, 2009), 5.

U.S. Department of Defense, the advantages of NEC2 from a command and control perspective include the following:

> 1) Self-synchronization, or doing what needs to be done without traditional orders; 2) Improved understanding of higher commander's intent; 3) Improved understanding of the operational situation at all levels of command; 4) Increased ability to access the collective knowledge of all coalition forces (or unified response agencies) to reduce the 'fog and friction' commonly referred to in descriptions of fighting.[149]



Hierarchical **Heterarchical or Networked (NEC2)**

Figure 1. Hierarchical and Heterarchical Organizational Structures[150]

There are multiple Department of Defense programs related to operational network centricity, and there will be more to come in the future as technology advances. All the U.S. military branches employ network-centric technology applications and improvements are on-going.[151] As mentioned previously, there are many military technology applications that become adapted and available to the emergency response community. A closer look at a military application called the Command Post of the Future is next.

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[149] Clay Wilson, *Network Centric Operations: Background and Oversight Issues for Congress* (Washington, DC: Congressional Research Service, 2007), 3.

[150] Bjørn T. Bakken et al., *The Pros and Cons of Network Centric Organization: An Empirical Investigation*, paper presented at the 11th International Command and Control Research and Technology Symposium, Cambridge, UK, September 2006, http://dodccrp.org/events/11th_ICCRTS/html/papers/140.pdf, 5.

[151] Wilson, "Network Centric Operations," 32.

a. Command Post of the Future

One example of the military NEC2 concept is the Command Post of the Future (CPOF). CPOF is an information sharing system that has been developed by General Dynamics for use by the U.S. Army.[152] The visual-analytic.eu website describes the system as, "Visual-analytic methods allow decision-makers to combine their expertise and background knowledge with the enormous storage and processing capacities of today's computers to gain insight into complex problems."[153]

CPOF utilizes collaborative software and has been operationally utilized by the military in Iraq and Afghanistan. The intent of the technology is to provide commanders with the capability to gain situational awareness of the battlefield; collaborate with superiors, peers, and subordinates using near-live data; and communicate commander's intent. According to the U.S. Army: "It [CPOF] allows commanders and their staff the ability to achieve enhanced operational effectiveness by enabling broad human collaboration." [154] CPOF was originally conceived by the U.S. Defense Advanced Research Projects Agency (DARPA), and it has since spawned developments by the U.S. Navy and the armed forces of Great Britain, Australia, and Sweden. A conceptual drawing of ROLF 2010, Sweden's version of the CPOF, is shown in Figure 2.[155]

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[152] General Dynamics, C4 Systems, "Command Post of the Future (CPOF)," accessed February 4, 2014, http://www.gdc4s.com/commandpostofthefuture(cpof)

[153] Visual Analytics, "What is Visual Analytics?," accessed February 4, 2014, http://www.visual-analytics.eu/faq/

[154] U.S. Army, Program Executive Office Command Control Communications, "Tactical Mission Command," accessed January 12, 2015, http://peoc3t.army mil/mc/tmc.php

[155] Brent Brehmer, "ROLF 2010: A Swedish Command Post of the Future," in *Decision Making in Complex Environments*, ed. Malcom Cook, Jan Noyes, and Yvonne Masakowski (Burlington, MA: Ashgate Publishing Company, 2007), 131.

Figure 2. Conceptual Image of Swedish Armed Force's Command Post of the Future[156]

The centerpiece of the CPOF is the shared, three-dimensional "electronic sandtable," depicted in the center of Figure 2, the concept of which has yet to be realized. As suggested in the rendering, the electronic sandtable provides a holographic terrain or urban landscape showing resource positioning and the ability to visualize various courses of action. In essence, the sandtable is a real-time view of the events in the field of action. The visualization of adversary movement and interactive capability would assist leaders in decision making and communication of direction. An interactive electronic sandtable is not yet fully developed for the military; however, announcements regarding DARPA's work on urban photonic sandtable displays indicate that the technology is advancing.[157]

Public domain images of current CPOF utilization by the military shows individuals working off on computer monitors or flat screens. The U.S. Army is looking to move to the next generation of CPOF with Command Post Web, a web version of

[156] Ibid, 131.

[157] Dolly Rairigh Glass, "Seemingly 'Sci-Fi' Technology Becoming Reality," Team Orlando, Joint Training Integration and Evaluation Center, accessed January 12, 2015, http://www.teamorlando.org/seemingly-sci-fi-technology-becoming-reality/

CPOF that provides similar capabilities to users with access to the Army's tactical network. This will allow users to access a greater variety and size of mapping data and mapservers.[158] The Army's efforts towards network-enabled command and control through the CPOF demonstrate the focus of military technology. The next application, the Next-Generation Incident Command System, is illustrative of efforts in the homeland security response community.

b. Next-Generation Incident Command System

A CPOF-style application for the emergency response environment is becoming a reality. The Next-Generation Incident Command System (NICS) was developed by the Massachusetts Institute of Technology (MIT) Lincoln Laboratories in conjunction with the California Department of Forestry and Fire Protection. NICS, a Department of Homeland Security Science and Technology Directorate funded research project, is a web-based command and control system that enables collaboration among various response agencies, non-governmental organizations, and different levels of government. NICS facilitates real-time situational awareness for widely dispersed responders on all-risk emergency incidents and planned events. Additionally, NICS has preparedness, planning, response, and recovery applications.[159] The features of NICS are displayed in a demonstration video, accessible through an MIT website, and shows the ability of an incident commander to make map-based annotations and assignments on a portable tablet or mobile data computer, which is then accessible to others electronically.[160]

3. Disadvantages and Pitfalls

Despite all that networked-enabled command and control systems offer, there are concerns raised by skeptics regarding the implications of enhanced connectivity on

[158] Nancy Jones-Bonbrest, "Detailed Geospatial Map Data provides Soldiers with Greater Technology, in Less Time," *Army Times*, March 27, 2013, accessed February 4, 2014, http://www.army mil/article/97324/

[159] Paul Breimeyer, "Next Generation Incident Command System" [tech notes], Lincoln Laboratory, Massachusetts Institute of Technology, 2011, accessed February 4, 2014, http://www.ll mit.edu/publications/technotes/TechNote_NICS.pdf

[160] U.S. Department of Homeland Security and Massachusetts Institute of Technology Lincoln Laboratory, "Next Generation Incident Command System," 2011, accessed March 14, 2014, https://public nics.ll.mit.edu/nicshelp/videolibrary.php

leadership from a socio-technical aspect. These concerns generally fall into the category of information overload and the temptation to micromanage. These will be discussed in greater detail later. Furthermore, it should be acknowledged that there are other disadvantages such as reliability, vulnerability, and cost, which are not reviewed in this work.

a. Information Overload

As was discussed in Chapter I, the need to make sense of greater amounts of information and intelligence has created a complex world for incident managers and military leaders alike.[161] Klein, Moon, and Hoffman stipulate that there is a limit to the amount of information that enables sensemaking, after which, degradation of performance is possible.[162] Networked-enabled command and control systems with decision support capabilities should have features that will assist in filtering out some of the "noise." An electronic sandtable, as portrayed in the ROLF 2010 depiction in Figure 2, may cause a decision maker information overload; however, it seems logical that any effective technology would have the ability to mute certain features to avoid this issue.

Shattuck and Miller provide further insight into this filtering process using a dynamic model of situated cognition.[163] Their model suggests that technological systems, human perception, and cognition processes act to filter or focus on environmental data. In addition, their model also suggests that the data flows through several processing phases (e.g., detection, localization, perception, comprehension) and lenses (e.g., individual traits, guidelines, and experience) through which data is shaped before it becomes a projection of the decision maker. This model illustrates the potential for critical

[161] Shanker, and Richtel, "In New Military, Data Overload Can Be Deadly;" Lee et al., "Group Value and Intention to Use," 404.

[162] According to Klein, Moon, and Hoffman, "Sensemaking is a motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively." Gary Klein, Brian Moon, and Robert R. Hoffman, "Making Sense of Sensemaking 1: Alternative Perspectives," *IEEE Intelligent Systems* 21, no. 4 (July/August 2006): 71, 72.

[163] Lawrence G. Shattuck, and Nita Lewis Miller, "Extending Naturalistic Decision Making to Complex Organizations: A Dynamic Model of Situated Cognition," *Organization Studies* 27, no.7 (2006): 4.

information to be missed or wrongly categorized when data is processed or filtered, which can prove disastrous for a decision maker.[164]

In addition, technology will be a potential distraction for leaders that are not disciplined in regards to information needs or are unfamiliar with system capabilities. McLennan et al. address the need for information processing competencies as a requirement for effective incident command decision making and recommend "developing effective means of preventing working memory capacity being exceeded in spite of the high mental workloads likely to be associated with emergency incident command operations."[165] One way to do this is to actively filter out the unimportant bits of information and retain the important ones. Moreover, McLennan et al. postulate that effective incident commanders do this by asking for specific information, delaying receipt of less important information, and cutting off subordinates with peripheral information or requests, wrote things down, and drew sketches. In contrast, less effective incident commanders were overwhelmed with information.[166]

b. Micromanagement

The ability of leaders to have information and influence down to the lowest levels of an organization raises the concern of micromanagement. An example of the potential for micromanagement comes from the raid on Osama Bin Laden's hide-out in Abottabad, Pakistan in 2011, also known as "Operation Neptune Spear." An iconic image showed the President of the United States and his cabinet watching the video feed and chat-line of the raid in the White House basement.[167] Although only a live feed of the military raid, the technology is such that leaders halfway around the world can and have provided direction to forces in-theater. This could easily lead to a situation where the distant leader micromanages, much to the detriment of the subordinates actually on scene. As

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[164] Ibid., 4.

[165] Jim McLennan et al., "Human Information Processing Aspects of Effective Emergency Incident Management Decision Making," in *Decision Making in Complex Environments*, ed. Malcom Cook, Jan Noyes, and Yvonne Masakowski (Burlington, MA: Ashgate Publishing Company, 2007), 149.

[166] Ibid., 145.

[167] Mark Bowden, "The Hunt For 'Geronimo'" *Vanity Fair*, November 2012, accessed March 14, 2014, http://www.vanityfair.com/politics/2012/11/inside-osama-bin-laden-assassination-plot

McLennan et al. caution, "proposed new Command and Control information/ communication systems should be viewed skeptically if they seem likely to simply present a commander with more information and allow him or her to be more readily interrogated and micro-managed by superiors."[168]

Technology is such that a commander has the ability to control events on a battlefield (or emergency incident) right down to the individual on the ground or pilot in the cockpit. "There is a real danger of the 5,000-mile long screwdriver that lets a commander stick his hand in where it doesn't belong," said Dan Kuehl, a retired Air Force lieutenant colonel who is director of the Information Strategies Concentration Program at the National Defense University. Kuehl continues: "The technology allows that possibility. Technology exists for the president in a bunker in the White House to watch a screen in an airplane and tell the pilot, 'No, no don't hit that—hit this instead.' Do you want that type of micromanagement? I think not."[169] The issue then becomes a human question rather than a technological one since there is such a fine line between leaders interjecting themselves into a tactical operation (the antithesis of mission command) versus holding back and allowing the subordinates to make their own decisions.[170]

With the rise of each new technology, the geographic distance between tactical units and commanders can be increased. This decentralization through technology is supposed to encourage initiative and speed of action. Yet, as Gray states, these very same technologies also push a trend "towards centralization of command, and thus towards micromanagement"[171]

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[168] McLennan et al., "Human Information Processing Aspects," 149.

[169] Rosenburg, "Technology and Leadership."

[170] Ibid., 2.

[171] Chris Gray as quoted in Peter W. Singer, "Tactical Generals: Leaders, Technology, and the Perils of Battlefield Micromanagement," *Air & Space Power Journal* 23, no. 2 (June 2009): 79.

4. Mission Command and Networked-Enabled Command and Control Summary

The implications of NEC2 on mission command leadership are greater situational awareness, faster decision making at lower levels, and increased flexibility and initiative. The military and the emergency response environment share similar attributes, and it is useful to examine the NEC2 advancements being made by the military. In addition to the advantages of NEC2, there are other socio-technical impacts on leadership that should be considered. Two of these impacts are information overload and micromanagement; both of which are issues more closely related to human factors than technology. English, Gimblett, and Coombs express caution, stating, "There is certain risk in placing too much reliance on network-centric concepts without addressing the human requirements that should drive any change."[172]

NEC2 technology should be seen from a mission command framework as a neutral tool. Positive benefits may outweigh the bad, but leadership is the key. Training and education of leaders and the use of these technologies must address the potential for information overload and micromanagement. Ultimately, net-centric technologies can either enhance effective leadership or enable bad.

D. MISSION COMMAND AND THE INCIDENT COMMAND SYSTEM

Mission command and the homeland security organizational framework known as the Incident Command System are examined in this section in order to assess compatibility. In addition, characteristics of the Incident Command System and the reasons why it was developed are considered. Organizational structure is discussed in terms of both mission command and the Incident Command System with the need for increased collaboration at crisis events as an underlying theme. Finally, the challenges and benefits of operating within these two frameworks are reviewed.

[172] Allan English, Richard Gimblett, and Howard Coombs, *Networked Operations and Transformation* (Montreal: McGill-Queen's University Press, 2007), 143.

1. Incident Command System Characteristics

The Incident Command System (ICS) is one component of the National Incident Management System (NIMS). As of 2004, all response organizations in the United States are expected to utilize ICS to structure their inter-organizational efforts for all responses—regardless of the incident's cause, size, or complexity.[173] The ICS is based on several principles, including a modular organizational structure, a manageable span of control, and a hierarchical "chain of command."[174] The incident commander (IC) is the first position to be assigned under ICS and often as a result of a self-declaration of the first supervisor to arrive on the scene of an incident. The IC is responsible for the establishment and expansion of the organization, depending on the requirements of the situation. The DHS document *National Incident Management System* states, "As incident complexity increases, the organization expands from the top down as functional responsibilities are delegated."[175]

An argument can be made that while the ICS organization is identified by the incident commander in a "top down" fashion, the functional needs drive organizational implementation in a "ground-up" process. This flexibility and scalability are hallmarks of ICS and why a look at the origins of ICS is helpful.

2. Incident Command System Origins

The 1970 wildfire siege in California had a devastating impact. During a two-week period, more than 770 wildfires raged, 576,000 acres were burned, 722 homes were destroyed, and 16 lives lost.[176] The response to this conflagration was massive and involved multiple federal, state and local fire agencies, law enforcement, animal control, and emergency medical providers. On September 28, 1970, midway through the 13-day fire siege, the massive deployment of personnel was said to be 19,500 personnel from

[173] Jessica Jenson, and William L. Waugh, "The United States' Experience with the Incident Command System," *Journal of Contingencies and Crisis Management* 22, no. 1 (March 2014): 6.

[174] U.S. Department of Homeland Security, *National Incident Management System* (Washington, DC: U.S. Department of Homeland Security, 2008), 47, 49.

[175] Ibid., 47.

[176] Clinton B. Phillips, *California Aflame: September 22–October 4, 1970* (Sacramento, CA, California Division of Forestry, 1971), 5.

500 separate departments and agencies.[177] The complexity of coordinating such a response became apparent, and communication difficulties caused confusion. As a result, a group of representatives from the federal, state, and local firefighting agencies was formed, the Firefighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE). The intent of FIRESCOPE was to address the deficiencies that included: lack of a common organization, poor on-scene and interagency communications, and inadequate resource management. The two major components to come out of the FIRESCOPE efforts were the Incident Command System (ICS) and the Multi Agency Coordination System (MACS).[178] These systems are the antidote to the problems of managing such a large response.

3. Hierarchical to Heterarchical

How would the hierarchical format of the ICS impact mission command? While ICS may be hierarchical in nature, its genesis and design were intended to transcend organizational hierarchies. The principles of mission command were intended to provide a framework for when traditional hierarchies became ineffective. Thus, the ICS and mission command are similarly aligned and not incongruent. It should be noted that currently mission command is not acknowledged within the ICS position training courses.

Unified command, common objectives, common terminology, and a singular planning process are all attributes of ICS that move a response effort more towards the heterarchical (or networked) rather than the hierarchical mode. Moynihan notes, "the traditional model for public services assumed that a single organization would deliver services in a particular functional area."[179] However, this model is changing because of the scope of crisis events and the need to coordinate diverse response organizations from different levels of government.

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[177] Ibid., 24.

[178] FIRESCOPE, "Some Highlights of the Evolution of the Incident Command System As Developed by FIRESCOPE," March 26, 2003, accessed January 13, 2015, http://www firescope.org/firescope-history/Some%20Highlights%20of%20the%20Evolution%20of%20the%20ICS.pdf

[179] Donald P. Moynihan, *Leveraging Collaborative Networks in Infrequent Emergency Situations* (Washington, DC: IBM Center for the Business of Government, 2005), 6.

As experienced in the various California fire sieges or in other all-hazard responses, such as the 2001 World Trade Center terrorist attack, emergency services are provided by multiple organizations acting in collaboration rather than by a single organization. Goldsmith and Eggers conclude that these networks are the new shape of the public sector, and public employee roles are shifting those of doers to those of facilitators and collaborators.[180] Agranoff's description of this new shape is helpful: "Networks are a non-hierarchical approach to management, reliant on horizontal relationships, information, expertise, and trust to direct a self-organizing process."[181] In the crisis response realm, these new organizational shapes are ad hoc in nature. They are formed for a specific purpose, ever-changing in size to meet the needs of an incident or situation, and temporary. This adhocracy, or a "form of organization that cuts across normal bureaucratic lines to capture opportunities, solve problems and get results," is described by Waterman and is why the ICS was designed.[182] Furthermore, Moynihan states, "…the ICS model brings clarity to the questions of structure and authority by imposing hierarchy on a network."[183]

Mission command does not diminish the need for hierarchy. Supervisors still control the actions of subordinates, albeit from a different approach.[184] In addition, the ICS model does not address the manner in which direction is given, nor does it stipulate either authoritative or intent-based formats. Mission command would enhance the effectiveness of an organization using the ICS model. Although the ICS would have no impact on an organization using mission command principles, risk-taking is a challenge that needs addressing and is discussed in the next section.

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[180] Stephen Goldsmith, and William D. Eggers, *Governing by Network* (Washington DC: Brookings Institute, 2004), 7

[181] Robert Agranoff as quoted by Moynihan, *Leveraging Collaborative Networks*, 7.

[182] Waterman, *Adhocracy*, 1.

[183] Ibid., 26.

[184] John T. Nelson, *Where to Go from Here? Considerations for the Formal Adoption of Auftragstaktik by the U.S. Army* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1986), 10.

4. Implementation Challenges and Benefits

A challenge that arises when considering a mission command ethos within the ICS organization paradigm is the issue of risk management. The treatment of risk within the ICS is controlled through the communication of written and verbal directives, staffing of safety officer positions, and continual focus on safety issues by command and general staff during the operational planning cycle. In addition, the safety officers are authorized to stop any hazardous operation or tactic on behalf of the incident commander. Furthermore, crew leaders are admonished during briefs to adhere to safety principles and they in turn provide safety information when briefing their subordinates and peers.

This attention to safety pervades the ICS process and can be traced to a "zero-tolerance" mentality by the emergency response community toward harm of personnel. While the risk management process was devised to better address personnel safety in an inherently dangerous environment, the zero-tolerance thinking still exists and may preclude prudent risk-taking. The experience of the United States Forest Service in this regard and its efforts to build a learning culture will be discussed in the case study of Chapter V. This aversion to personnel harm in a high-risk environment may hinder the innovation and creativity upon which mission command is based.

While the ICS model can operate using authoritative direction or intent-based direction, mission command can bring greater flexibility and effectiveness to the ICS. Mission command can be practiced by leaders at all levels of the ICS organizational including command staff, general staff, supervisors, unit leaders, and crew bosses. Leaders' intent and mission style orders can be discussed at the section or unit level while giving direction, at operational briefings and at planning meetings, and documented in the ICS 202 or "Incident Objectives" as a part of the incident action plan. Shared understanding and mutual trust can be created between leaders and subordinates, and it ideally should be built between organizations and stakeholders. This can be accomplished through cooperator and community meetings that work well to provide information and receive feedback from the community impacted by the incident. This serves to generate an overall shared situational awareness that is necessary for mission command to be effective.

5. Mission Command and the Incident Command System Summary

The ICS is an organizational tool that is prevalent throughout the homeland security enterprise. Its use may not be fully implemented by certain jurisdictions and disciplines on a day-to-day basis, but it is commonly used on incidents that are widespread and involve multiple operational periods. The principles of mission command are compatible with those of ICS: flexibility and increased collaboration across agency boundaries. Challenges to implementation of mission command with ICS might arise out of a conservative approach to harm of personnel in an inherently dangerous work environment, such as homeland security crisis response. Risk management is the current approach of the federal wildland firefighting enterprise that may encourage the innovation and creativity, which is primal to mission command. Increased flexibility and effectiveness can be the result of applying mission command principles, and there are a number of opportunities within the ICS operational cycle for leaders to communicate intent and foster leadership amongst subordinates.

E. MISSION COMMAND AND ISSUE SPECIFIC PERSPECTIVES SUMMARY

In this chapter, mission command was examined from psychological, technological, and organizational perspectives. A review of each of these frameworks reveal that there are certain challenges and benefits that become evident when mission command principles are entertained. High-risk environments are psychologically stressful, and trust between subordinate and leader is the biggest challenge regarding the effectiveness of mission command. An empowered, innovative, and effective workforce is the benefit of a mission command ethos. Technology and the trend toward network-enabled command and control systems are providing leaders with enhanced awareness and greater decision-making tools. These capabilities should only enhance the effectiveness of mission command through greater situational awareness, faster decision making, and greater access to information at the lowest echelons of an organization. Greater technological connectedness can be a temptation to micromanage, which is to the antithesis of mission command. From an organizational standpoint, mission command is compatible with the ICS, albeit challenges such as risk taking may need to be addressed;

however, by and large, the psychological, technical, and organizational challenges can be overcome and the benefits of mission command achieved using these frameworks.

A contextual framework to further examine mission command will be provided through case studies. The next two chapters examine a pair of organizations, Israel Defense Forces (Chapter IV) and United States Forest Service (Chapter V), both of which have utilized mission command principles; however, they both have different reasons for their leadership ethos and differing results in implementation. A retrospective case study of each of these organizations will be conducted using the six principles of mission command espoused by the U.S. Army (described in Chapter I).

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IV. IDF AND MISSION COMMAND

A. INTRODUCTION

The Israel Defense Forces (IDF) are "one of the Middle East region's most battle-ready armies, a force that has fought in four major engagements since 2006 and has experience in securing a few of the most problematic borders on earth."[185] These recent engagements against insurgencies are the Second Lebanon War in 2006, the Gaza War in 2008–2009, Operation Pillar of Defense in 2012, and the 2014 Israeli-Gaza Conflict. Prior to 2006, the IDF fought in a number of engagements against standing armies such as that of Egypt. These conflicts include the 1948 Arab-Israeli War, the 1956 Suez War, the 1967 Six Day War, the 1973 Yom Kippur War, and the 1982 First Lebanon War. The IDF has been mobilized in every decade since the inception of the state of Israel and often two or three times in a decade.

With multiple conflicts both internally and externally to draw from, the Israeli military experience provides examples of both success and failure in meeting organizational objectives. Israeli security requirements are unique based on the location, size, and proximity of its landmass to surrounding Arab territories and countries. The contentious border locations and physical security requirements are additional factors to the challenges facing the IDF.

In this chapter, the IDF experience is examined in terms of leadership ethos, commander's intent, communication, and initiative. The implementation of mission command principles by the IDF is illustrated through examples from Palestine when it was under British governance, the 1967 Six Day War, and the 2002 Operation Defensive Shield in the West Bank. The challenges of mission command in a military context are discussed with several examples. In addition, asymmetric warfare is reviewed because military operations are increasingly focused on decentralized insurgencies rather than

[185] Armin Rosen, Jeremy Bender, and Amanda Macias, "The Most Powerful Militaries in the Middle East," *Business Insider*, October 27, 2014, accessed January 24, 2014, http://www.businessinsider.com/most-powerful-militaries-in-the-middle-east-2014-8?op=1#ixzz3LF7lcU42

conventional conflicts. Also, the IDF's approach to organizational doctrine and the need for flexibility in a changing environment is discussed. How mission command is utilized by the IDF is explored using the U.S. Army's six principles as a framework. Finally, a comparison is made between the IDF military environment and the U.S. homeland security response environment.

B. ISRAEL DEFENSE FORCES

The military prowess of the IDF between 1948 and 1973 was formidable, inviting comparisons to the German military and blitzkrieg warfare during World War II.[186] Rapid mobilization and deployment of conventional ground and air forces against threatening forces resulted in swift victories for the State of Israel. Tensions between Israel and Arab neighbors have been the primary cause of the wars and uprisings. The nature of these conflicts, the relatively small size of Israel, and the shared borders with the West Bank, Gaza Strip, Egypt, Jordan, Syria, and Lebanon create a security condition that is unique in the world.[187] The IDF has both national and international protection responsibilities. Morag notes, "In Israel, the military plays a very wide-ranging role in homeland security. This varies from counterterrorism operations in the West Bank and Gaza Strip to organizing and overseeing national preparedness and response efforts."[188] These responsibilities and the constant threat environment are strong influences in IDF doctrine and leadership ethos.

The principles of mission command are utilized by the IDF to encourage speed, flexibility, and initiative amongst subordinate leaders. Van Creveld notes these qualities as

> … individual daring *(heaza)*, maintenance of aim *(dvekut bamatara)*, improvisation *(iltur)* and resourcefulness *(tushia)*, all of which still remain

186 Shamir, *Transforming Command*, 82.

187 Pressfield notes, "The State of Israel is the size of New Jersey." Pressfield, *The Lions Gate*, 4.

188 Nadav Morag, *Comparative Homeland Security: Global Lessons* (Hoboken, NJ: John Wiley & Sons, 2011), 212.

> the key elements of the fighting doctrine that the IDF systematically inculcates into, and demands of, troops and commanders at every level.[189]

The doctrine of the IDF is to determine the outcome of war rapidly and decisively and to take the fight to the enemy's territory as quickly as possible.[190] This case study will examine the mission command philosophy of the Israel Defense Forces with an eye for potential application in the United States' homeland security enterprise.

C. DEVELOPMENT OF MISSION COMMAND IN BRITISH PALESTINE BEFORE WWII

The IDF was officially established in 1948, shortly after the founding of the State of Israel. The IDF incorporated pre-state Jewish paramilitary organizations, including the Haganah, Palmach, Irgun, and Lehi.[191] These organizations provided protection to Jewish settlements, which were subject to increasing Arab attacks in northern Palestine while under the governance of British Palestine. In 1938, a British officer named Captain Ord Wingate was assigned to establish the Special Night Squads (SNS), a counterterrorism force made up of British soldiers and Jewish Settlement Police (*Notrim*).[192]

Eventually, the SNS was heavily populated by members of Haganah, who saw the new force as an opportunity for military training. Anglim notes that two future military and political leaders of Israel—Moshe Dayan and Yigal Allon—were members of Haganah and participated on SNS missions.[193] The SNS operated semi-independently in small teams using stealth methods, such as ambushes, to disrupt insurgent operations. Anglim describes Wingate's methods:

> With small sub-units, operating semi-independently in hostile areas by night, over rigid control from the center may prove counterproductive. Consequently, Wingate applied what might, anachronistically, be identified as "mission command," (or displays of initiative)… Another

189 van Creveld, *Command in War*, 115.

190 Israeli Defense Forces, "Doctrine," accessed August 12, 2014 http://www.idf.il/1497-en/Dover.aspx

191 Israeli Defense Forces, "History of IDF," accessed August 12, 2014, http://www.idf.il/1503-en/Dover.aspx

192 Ibid.

193 Anglim, "Orde Wingate and the Special Night Squadrons," 34.

> aspect of "mission command" is emphasis upon personal leadership and tactical awareness. These are difficult to quantify, but it is notable that a number of SNS officers and squadsmen were to rise to senior rank in the British and Israeli Armies, both forces placing a high premium on these qualities.[194]

Wingate practiced mission command by ensuring that the intent of operations was well understood by his subordinates. Gal notes that Wingate would plan in detail and ensure that the intent was understood by all. Wingate would then give "full delegation of authority to subordinate commanders, always allowing improvisation in accordance with the changing conditions of battle" according to Gal.[195]

In addition, Wingate gave mission-type orders, where general instructions were given (typically, short operational orders) but the method of execution was left up to the subordinate leaders. .[196] Wingate also held a prophetic vision, of which he would remind others prior to mission deployments. According to Atkins, he would inspire his squads with the reminder that: "'You are the first soldiers of the Jewish army,' … and he would (then) declaim to them passages from the Bible describing the country they would pass through and prophesying their victory."[197]

Though successful in quieting attacks by Arab gangs in northern Palestine, Wingate and his methods were not without controversy. For example, Boot writes that in the British Army he was looked upon as a "cantankerous wild man," who risked the British reputation of fighting fairly and was seen as putting the interests of Jews before his own country.[198] Wingate's sanity was the subject of debate by some officers.[199] Even so, Wingate went on to guide other unconventional forces in Ethiopia and Burma

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[194] Ibid.

[195] Reuven Gal, *A Portrait of the Israeli Soldier* (Westport, CT: Greenwood Press, 1986), 5.

[196] John Atkins, *A Model for Modern Nonlinear Noncontiguous Operations: The War in Burma, 1943 to 1945* (Fort Leavenworth, KA: United States Army Command and General Staff College, 2003), 18.

[197] Michael B. Oren, "Orde Wingate: Friend under Fire," *Azure Online*, no. 10, Winter 5761 (2001), accessed January 30, 2015, http://azure.org.il/include/print.php?id=279

[198] Max Boot, "What Wingate Wrought," *The Weekly Standard* 18, no. 16 (December 31, 2012), accessed January 29, 2015 http://www.weeklystandard.com/articles/what-wingate-wrought_690836.html?page=3

[199] Ibid., 4.

during World War II. He was later promoted to major general and awarded three Distinguished Service Orders for outstanding command "under fire."

Wingate's reputation among the Israelis is distinct. Eiton-Meyer explains, "Wingate had a profound impact on the molding of Israeli military doctrine. Defense, when fighting a numerically superior enemy, meant offense, and offense meant fighting deep inside enemy territory where the opposition was most vulnerable."[200] An excerpt from a course on the Haydid Learning Center website states:

> The State of Israel owed no small thanks to the man universally known as "*Hayedid*"—the Friend. Indeed, the Jewish people could have asked for no better friend than Orde Wingate, who appeared and disappeared like a whirlwind in the lives of the Palestinian Jews, but forever left his mark on the people he loved and on the development of the state he so longed to see.[201]

These efforts demonstrate the considerable influence an individual can have on an organization through the use of mission command principles. Trust, the bedrock of mission command, must be built and maintained. Additionally, vision and intent must be communicated in order to allow effective operations under adverse conditions. While the methods of the SNS under Orde Wingate might be controversial, the use of a mission command ethos for intent, flexibility, and trust provides an example for leaders within the homeland security enterprise. Independence of action by first responders may be necessary during a crisis response, such as an active shooter or earthquake. This independence of action is better guided through knowledge and understanding of the leader's intent.

D. MISSION COMMAND AND THE IDF

The IDF has consistently embraced a mission command philosophy where rapid decision making, innovation by forces on the ground, and independence of action within the limits of leader's intent are the result. Speed and flexibility are primary aims due to the nature

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[200] Eiton-Meyer, "The Zionism of Orde Wingate: A Complex Origin."

[201] Doran Geller, "Orde Wingate and the Development of the Special Night Squads," Haydid Learning Center, July 2012, accessed January 26, 2015, http://www.haydid.org/wingate.htm Course lecture, Pioneers of Israel, World Zionist Organization.

and proximity of enemy threats. Van Creveld highlights this ethos as explained by IDF General Rabin in 1960: "'commanders and headquarters (of armored forces) must be able to gather intelligence, process it, prepare orders, and issue them *while on the move*.'"[202] Hesitation or waiting for further orders is not tolerated within the IDF and may be harmful in battle. Instead, according to Van Creveld, commanders must operate with general information and in coordination with others. In the absence of orders from superiors, Van Creveld notes: "An armored commander should be so trained as to make him as little dependent on his superior as possible in deciding how to act."[203]

1. 1967 Six Day War

The 1967 Six Day War is illustrative of the IDF command philosophy and a situation in which Israel went into action against a larger and better equipped foe. When Egypt mobilized into the Sinai Peninsula with the intention of destroying Israel, the IDF was deployed. Egypt's military strength prior to the conflict consisted of seven divisions totaling almost 100,000 troops, 1000 tanks, and accompanying artillery.[204] Facing the Egyptians were 45,000 Israeli troops and 450 tanks formed into three divisions (*ugdhas*), which were named for their commanders: Tal, Yoffe and Sharon.[205] All three of these divisions reported to Brigadier General Yeshayahu Gavish, they but often operated autonomously.[206] Grossgold describes the IDF ethos from the perspective of a subordinate leader who operated under its principles where "Adherance to mission is one of *Zahal's* (Israeli military) bedrock principles."[207] Furthermore, he describes this mindset from the perspective of Captain Aharon, an IDF tank company commander: "Aharon had lost touch with higher authority during the hard fight down the length of the

[202] van Creveld, *Command in War*, 198.

[203] Ibid.

[204] Ibid.

[205] "Six Day War/Egyptian Front," Six Day War, accessed September 14, 2014, http://www.sixdaywar.org/content/southernfront.asp

[206] Grossgold, "The 1967 Arab Israeli War," 11.

[207] Ibid., 5.

Rafah North position, but, like all Israeli sub-unit commanders, he had been fully briefed on his brigade's intermediate and long range objectives."[208]

Pressfield quotes the perspective of Danny Matt, an IDF paratrooper brigade commander: "A combat commander under Ariel Sharon is granted broad independence of action. Sharon tells you what to do but not how to do it."[209] A third perspective comes from Yael Dayan (the daughter of Moshe Dayan), a second lieutenant in the IDF assigned as a correspondent with *Ugdha* Sharon, according to Pressfield:

> Sharon's eyes light with a smile that I have seen no one resist. Of course the Israeli soldier will make up his own mind, and do whatever he wants. This is as it should be. The reason we will thrash the Egyptians is because they can't do the same. They can't improvise.[210]

General Moshe Dayan further contrasts the differences in command philosophy; "the Egyptians are 'schematic in their operation' and their command headquarters are in the rear, while we 'are used to acting with great flexibility and less military routine.'"[211]

The Sinai Campaign of the 1967 Six Day War was finished in two days (see Figure 3). With a massive air strike that caught many Egyptian jets still parked at airbases, the Israeli military focus turned to the ground campaign, which effectively destroyed two Egyptian divisions and crippled the others. Jacobs writes that during this campaign, the Israelis "…launched a three pronged assault at Egyptian strongholds in the northern and central Sinai. Contrary to Egyptian expectations that the Israelis would strike deep and bypass fortifications, the Israelis attacked headlong"[212] Jacobs points out that this move caught the Egyptians by surprise and forced their retreat through the Mitla Pass where advance elements of the IDF were waiting. This action was the Egyptians

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[208] Ibid.

[209] Pressfield, *The Lion's Gate*, 227.

[210] Ibid., 63.

[211] Dan Horowitz, "Flexible Responsiveness and Military Strategy: The Case of the Israeli Army," *Policy Sciences* 1, no 1 (1970): 191.

[212] David M. Jacobs, "Great Warrior: Moshe Dayan," Air Command and Staff College Air University, 1984, accessed August 16, 2014, http://www.dtic mil/dtic/tr/fulltext/u2/a145280.pdf, 16.

undoing, according to Jacobs, who notes that as a result, "the Israelis destroyed or captured more than eight hundred tanks in the Sinai."[213]

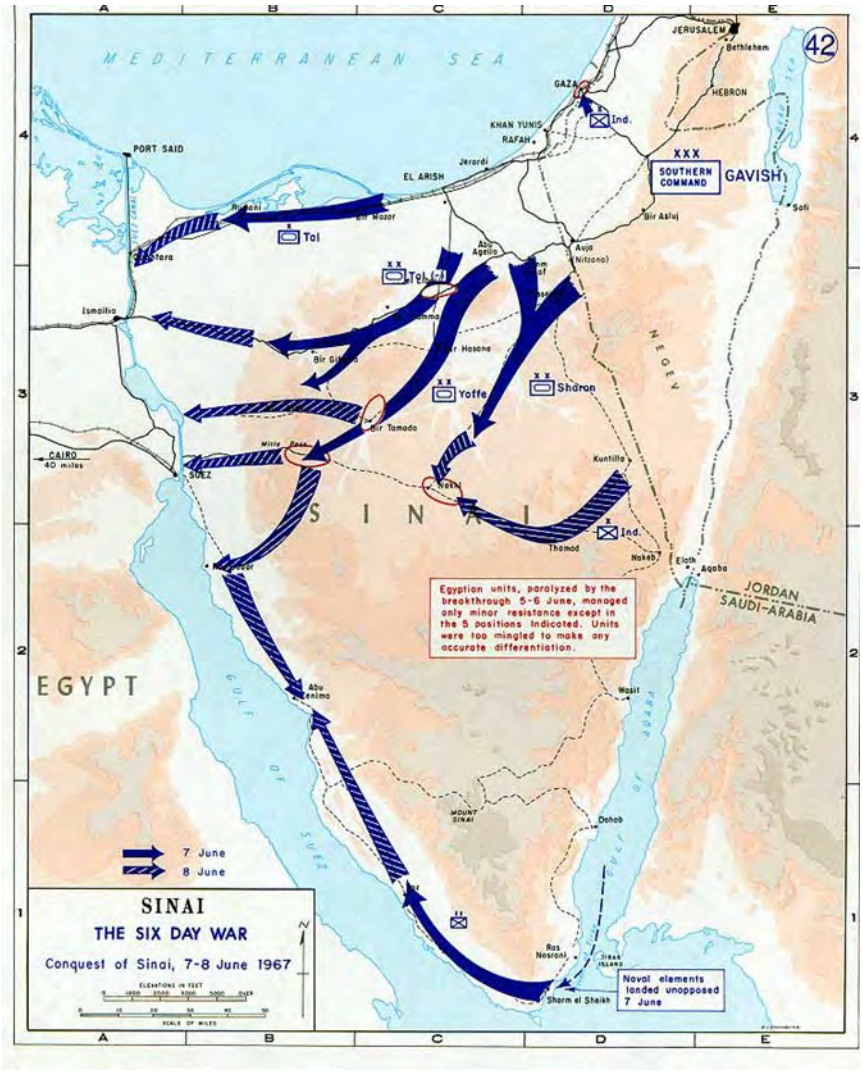

Figure 3. Conquest of Sinai, June 7–8, 1967[214]

The speed and flexibility of the IDF was the result of a philosophy based on the principles of mission command. While Egyptian forces were tightly controlled through layers of organizational hierarchy (even adding layers in the days prior to the Six Days

[213] Ibid.

[214] "Six Day War, Conquest of Sinai," U.S. Military Academy, Department of History, accessed on March 7, 2015, http://www.westpoint.edu/history/SiteAssets/SitePages/Arab%20Israel/arab%20israeli%20map%2042.jpg

War), the IDF forces were more nimble, operating with "independence of action" and minimal direction as an expectation.[215] Similarities are seen in the emergency response environment where formal hierarchies and tightly controlled plans may become irrelevant in a crisis.

Grant and De Waard examined the communication patterns of the 9/11 terrorist attacks and offer ways that hierarchical organizations can become more networked and agile, which are characteristics that have been used successfully by the IDF when formal plans are no longer valid. They mention the work of Majchrzak, Jarvenpaa, and Hollingshead, who studied the response failures during Hurricane Katrina and had this to say: "Despite the existence of … formal plans, extensive training, and bureaucratic structures, when the authority structure breaks down, as occurred during Katrina, so do the formal plans."[216] Majchrzak, Jarvenpaa, and Hollingshead note that the performance of the U.S. Coast Guard (USCG) was a bright spot during Katrina. The USCG was able to operate effectively despite the breakdown in authority due to the ability of "operational commanders to act relatively autonomously…(which was) seen as the main reason for their success in the field.[217] Organizations like the Coast Guard, which operates in a seafaring environment, tend to have doctrine that supports more independent operations.

E. THE IDF COMMAND PHILOSOPHY

The IDF "was never too keen on developing military theory or publishing written doctrine." [218] In the historical examples cited, the IDF command philosophy is decentralized and is reflective of organizations with weak central doctrines. Marcus notes that the manifestations of this type of philosophy are the emphasis on:

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[215] George W. Gawrych, *Key to the Sinai: The Battles for Abu Ageila in the 1956 and 1967 Arab-Israeli Wars* (research survey no. 7) (Fort Leavenworth, KA: U.S. Army Command and General Staff College), 76.

[216] Tim Grant, and Erik de Waard, "Reconciling Hierarchical and Edge Organizations: 9/11 Revisited" (paper presented at the 19th International Command and Control Technology Symposium, Alexandria, VA, June 2014), accessed January 30, 2015, http://dodccrp.org/events/19th_iccrts_2014/post_conference/papers/114.pdf

[217] Ibid.

[218] Shamir, *Transforming Command*, 82.

> "bottom-up" and "horizontal" innovation (rather than "top down" directives)... many informal networks between officers to communicate; a lack of 'ownership' of ideas; commanders who have training in the need to flexibly respond to battlefield surprise; and a non-punitive, collaborative learning culture.[219]

Shamir reinforces these views as he explains, "Bottom-up innovation is most likely in a qualitatively-superior military like the IDF, with its versatile, flexible organizational structure, and informal hierarchies that promote mission command principles. Decentralized command-and-control also promotes officer initiative, autonomy, and risk-taking."[220]

The use of mission command principles by the IDF from 1948–1973 and the de-emphasis on formalized doctrine help explain the flexibility and agility that became its trademark. Alberts writes about the value of flexible doctrine to an organization in a world that is becoming network centric and transformational. He explains: "Doctrine should be viewed as fluid and helpful, not static and restrictive…..Historically, doctrine has been a distillation of best practice and lessons learned, which over time were clearly documented to form the basis for the initiation of new recruits."[221] Alberts observes that the one constant that organizations can count on in the future is incessant change and "…the entire notion of doctrine needs to be changed from one of publishing "the way" it should be done to a dynamic process of learning and sharing best practice."[222]

Foundational doctrine frames the organizational vision and intent that governs the rules and policies (or lack of) that follow. As Smith posits, "Rules tell you what to do, so your judgment skills atrophy."[223] The essence of mission command is "thinking obedience" such that the collective creativity of the organization is released. Organizational doctrine and the search to define it is a theme that will be revisited in the

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[219] Marcus, "Military Innovation: Lesson Learning in the IDF," 24.

[220] Shamir as quoted in Marcus, "Military Innovation: Lesson Learning in the IDF," 24.

[221] David S. Alberts, *Information Age Transformation: Getting to a 21st Century Military* (Washington, DC: U.S. Department of Defense Command and Control Research Program Publishing, 2002) 121, 122.

[222] Ibid.

[223] Mark Smith, "The First Pulaski Conference: How We Did It" (synopsis paper from the USDA Forest Service First Pulaski Conference, Alta, Utah, 2005), 5.

next chapter. The IDF experience in this regard provides an example for U.S. homeland security organizations and is a reminder of the role that doctrine plays in organizational operation.

F. THE IDF THROUGH THE FRAMEWORK OF MISSION COMMAND PRINCIPLES

Six principles of mission command from the U.S. Army will be used to assess the IDF. These principles were introduced in Chapter I and consist of the following: 1) build cohesive teams through mutual trust; 2) create shared understanding; 4) exercise disciplined initiative; 5) use mission orders; 6) accept prudent risk.[224] They are the basis on which the U.S Army has chosen to introduce the concepts of mission command and to guide their commanders and staffs in the exercise of this philosophy. As a measure of how an organization implements such a philosophy, these principles provide a common framework in which to evaluate the case studies in this chapter and the next.

1. Build Cohesive Teams through Mutual Trust

The unique position of the IDF in Israeli society encourages cohesion and mutual trust. All Israeli adults must serve in the military, which has a prominent role in the State of Israel. Those who have completed their required service are expected to serve in the reserves (*miluim*) until age 45. Reservists are expected to train with their units 20–30 days each year. The concepts of mission command and "just culture" influence cohesiveness and trust.[225] Catignani mentions how camaraderie is perceived in the IDF culture and that one of the most important values is the: "…concept of *achavatt lochameem* (combatant's brotherhood) which fulfills the IDF's tenet of

[224] U.S. Department of the Army, *Mission Command*, 2.

[225] James Reason describes a "just culture" as an atmosphere of trust within an organization in which people are encouraged or rewarded to provide essential safety information but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior. James Reason, "A Roadmap to a Just Culture: Enhancing the Safety Environment" Global Aviation Information Network, September 2004, accessed January 24, 2015 at: http://flightsafety.org/files/just_culture.pdf, 4.

comradeship…Such trust is developed through shared experiences of mutual support found in a characteristic family unit."[226]

Additionally, Kaplan points out the cohesion that service in the IDF creates:

> The IDF cuts across ethnic *(edah)*, religious and socio-economic boundaries. Israelis from all walks of life meet in the army, and are forced to find a way to live together. Thus, the army is a major source of lasting friendships and contacts, many of which are renewed periodically during reserve service.[227]

Leadership by example also encourages trust and team building. For example, the Israel Air Force (IAF) operating ethos requires earnest self-assessment after flight operations in order to learn. Lieutenant Giora Romm was an IAF fighter pilot during the Six Day War in which he was credited with downing five enemy aircraft. He describes this candid debriefing process where each squadron met in the briefing room to reflect on the day's operations. Squadron commanders would start off critically assessing their own performance before other pilots; candor was encouraged. According to Romm, "If you had screwed up, you admitted it, and took your medicine. Ego meant nothing. Improvement was everything."[228] Humility shown by a leader can encourage trust-building and helps build the team.

2. Create Shared Understanding

Human interaction through collaboration and dialogue enhances shared understanding, minimizes misunderstandings, and determines operational progress. The IDF culture encourages a tutorial relationship between commanders and subordinates. Deference to authority is less formal than, for example in a U.S. Marine Corps unit, which is very rigid and formal. Hostility or abusive communication in order to motivate is not tolerated even in the more specialized units, such as the paratroopers. Fairness and

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[226] Sergio Catignani, "Motivating Soldiers: The Example of the Israeli Defense Forces," *Parameters* 34, no. 3 (autumn 2004): 111.

[227] Jonathan Kaplan, "The Role of the Military in Israel," The Jewish Agency For Israel, accessed January 22, 2015, http://jafi.org/JewishAgency/English/Jewish+Education/Compelling+Content/Eye+on+Israel/Society/9%29The+Role+of+the+Military+in+Israel.htm

[228] Pressfield, *The Lion's Gate*, 15.

compassion are in evidence even during the training regimes for new soldiers. Kaplan describes the informal relationship between leader and the led: "Only the highest officers are referred to as 'commander' and everyone else is literally on a first name basis, as in other sectors of Israeli society."[229] Though orders are not questioned when the situation demands rapid action, Kaplan notes: "Most orders are given as directions, and disagreement and discussion of such directions are not uncommon. Soldiers in command are expected to be able to explain their orders. Once given however, orders are followed."[230]

While the military training can be grueling and demanding, Israeli commanders are seen as big brothers (or sisters). This reframing of hierarchical authority creates a more open atmosphere where trust and information sharing is valued.[231] In this atmosphere, commanders gain valuable insight as to the morale and needs of their subordinates while also sharing their own vision and intent. Interaction between IDF units is less adversarial as a result of this collaboration and dialogue. Marcus discusses the greater understanding and lesson sharing that occurs between units as a result of the IDF's intimate nature.[232]

3. Provide a Clear Commander's Intent

Commander's intent is a key feature of mission command and IDF leaders convey their intent by keeping directive orders simple and strategic. Common understanding and expectations have been developed between military personnel due to multiple conflicts and engagements over the years and the familiarity has bred from facing adversity together. Mission command depends on trust and the culture in which the organization exists. Marcus captures the IDF culture and how creativity is encouraged: "The non-punitive mentality of challenging assumptions in the IDF, heavily influenced by Jewish

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[229] Kaplan, "The Role of the Military in Israel," 1.

[230] Ibid.

[231] Adam Harmon, *Lonely Soldier: The Memoir of an American in the Israeli Army* (New York: Presidio Press, 2006), 21.

[232] Marcus, "Military Innovation: Lesson Learning in the IDF," 24.

cultural attributes of questioning and debate, encourages creative thinking and helps further processes of bottom-up innovation."[233]

Commander's intent serves to provide guidance to subordinates even after the conditions of the environment have changed. General Talik (Tal) commanded the IDF armored corps during the 1967 Six Day War. As described in Pressfield's *The Lion's Gate*, a subordinate of Talik and an IDF 7th Armored Brigade operations officer, Yosi Ben Hanan, describes General Tal's message to his division officers on the eve of the war regarding the operational plans. Tal, according to Ben Hannan, is satisfied that the plans are well known by all but warns that once the battle begins everything will change and the plans "…will be out the window. Nothing, Tal says, will happen according to those plans. The lines of assault will change; the direction of enemy's movements will change…This is way things work in war."[234] Ben Hannan reiterates General Talik's intent: "One thing must take place as in the plans: the principle upon which these plans were made. Every man will attack. Every unit will push forward as fast as it can….Keep moving toward El Arish."[235]

4. Exercise Disciplined Initiative

Initiative is encouraged in the IDF, especially in the absence of orders or when conditions have changed. Gobry describes this culture:

> The autonomy that the IDF gives to its soldiers is famously enormous. Up and down the chain of command, soldiers are told what to do, not how. Initiative is rewarded. During the Six-Day War, for its invasion of Sinai, the IDF had drawn up no battle plans after taking the crucial gateway city of El Arish, less than halfway down the main road through Sinai and base of the 7th Egyptian Armored Division. Given the scale and speed of their success, IDF units pushed past all the way to the Suez Canal–this was not done on orders of anyone, but simply by the initiative of local commanders who, having kept their earlier objectives, kept advancing.

[233] Ibid., 24.

[234] Pressfield, *The Lion's Gate*, 180.

[235] Ibid.

> They did not sit down and wait for word from central command. From the platoon up to the brigade level, this is the famous IDF culture.[236]

In order to encourage subordinate initiative, an understanding between leader and followers must develop. Initiative will flourish if the command structure is supportive and subordinates feel like they have the backing of their leaders. This support is communicated through interactions, experience and the expression of leader expectations and values. Israeli military leader Moshe Dayan was supportive of his subordinates even in the face of setbacks. Pressfield comments on this:

> Nothing elicited Dayan's respect more than valor under fire, or inspired his love more than sacrifice for a comrade in arms. He could forgive anything from a fighter who seized the initiative in the face of danger. He protected Sharon after Mitla. He loved Meir Har-Zion and Katcha Cahaner. His passion was not limited to commanders of brigades and divisions. He cared as much for the lieutenants and sergeants and private soldiers.[237]

Confidence in subordinates is also crucial in the encouragement of initiative. Subordinates must know that they will not face discipline or embarrassment if mistakes are made in the process of acting within the leader's intent. If subordinates feel that their leadership has their best interests at heart, they will tend to want to reciprocate that trust. Pressfield describes Moshe Dayan's expectation that subordinates act with initiative by quoting him: "I would not be assigning you this task if I did not have complete confidence that you can do a better job than I can."[238]

5. Use Mission Orders

Mission orders are directives that emphasize to subordinates the results to be attained, not how they are to be achieved. The directives should be formulated to provide subordinates the maximum freedom of action in determining how best to accomplish the

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[236] Pascal E. Gobry, "Seven 7 Steps the US Military Should Take to Be More Like the IDF," *Forbes Magazine*, August, 2014, accessed January 22, 2015, http://www.forbes.com/sites/pascalemmanuelgobry/2014/08/25/7-steps-the-us-military-should-take-to-be-more-like-the-idf/

[237] As Israeli paratroopers, Sharon, Har-Zion, and Cahaner were involved in controversial reprisal operations. Pressfield, *The Lion's Gate*, 98.

[238] Ibid., 98.

mission. Directives are made with the assumption that in a dynamic environment, conditions will change and explicit orders lose validity. Centralized authority also requires consent and communication and thus a loss of time and information. The more centralized and hierarchical the organization, the longer decisions tend to lag behind the events on the ground. Additionally, during decisive battlefield moments, communication channels get jammed and messages are lost. Not only are messages jammed or lost, but the headquarters component of the organization may simply become overwhelmed by too many messages or requests. In the meantime, resources conditioned for explicit direction hold fast and opportunities are missed. Mission orders allow flexibility of action but do not negate the need for vertical and horizontal communication.[239]

Directives under mission command also rely on a certain culture of understanding, as demonstrated by the IDF. German World War II General von Mellenthin explains that mission command depends on shared experiences, doctrine, and training. He describes this cohesiveness between commander and subordinate during war: "The better they know each other, the shorter and less detailed the orders can be. To follow a commander or an order requires that it is also thought through on the level from which the order was given."[240] Subordinates should anticipate how their commander would react in a given situation. This results in coordinated improvisation since all of the subordinates are drawing inferences from the same senior leader.

6. Accept Prudent Risk

Since military environments are often characterized as uncertain, volatile, complex, and ambiguous (and deadly), consideration of risk becomes an important factor in decision making. Keithly and Ferris state that risk taking is derived from initiative. They advocate that the difference with risk taking in *auftragstaktik* or mission command

[239] Horowitz, "Flexible Responsiveness and Military Strategy," 198.

[240] William DePuy, *Generals Balck and von Mellenthin on Tactics: Implications for NATO Military Doctrine* (Munich: Bundeswehr University, 2004), 90; William Depuy, "Generals Balck and von Mellenthin on Tactics: Implications for NATO Military Doctrine," paper presented at Conference on Tactical Warfare, Maclean VA, May 1980, accessed on March 7, 2015, http://usacac.army.mil/cac2/CSI/docs/Gorman/05_Joint_1979_85/03_J5_1980_81/03_80_BalkMellenthin_OnTactics_May.pdf

is the importance of making an independent decision when conditions dictate. In addition, they note that a risk adverse organizational attitude will prevent initiative. According to Keithly and Ferris, even decisions that are wrong but made in the earnest attempt to meet the commander's intent are acceptable under mission command. They advocate, "The aggregation of successes on the part of commanders exercising battlespace initiative, so it is reasoned, will overcome the occasional setbacks."[241]

Initiative does not mean reckless actions. General Mordechai Gur (noted by Van Creveld) identifies three principles that must balance in order for the IDF's command system to work and which shape the leadership ethos. These principles are: "1) a clear definition of the objectives to be attained; 2) thorough planning; and 3) a proper order of priorities. This third condition implies the recognition that, whatever one's priorities are, some things are going to suffer neglect." Gur advises that innovation must be balanced with teamwork and discipline.[242]

Gur further describes this balance, "Innovation during execution itself; discipline and improvisation- these are the three basic elements that make-up the IDF's command system, even if the latter two sometimes contradict each other."[243] Van Creveld notes that the balance between planning, discipline, and improvisation may change from one military to the next.[244] Furthermore, this balance may change within the same force depending on the situation and need.

G. COMPARISON OF MILITARY AND HOMELAND SECURITY ENVIRONMENTS

In Chapter I, the similarities between the military and homeland security response environments were noted. High-risk work conditions, critical decision making, stress, and danger were some of the common attributes. Additionally, time constraints and the need

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[241] David M. Keithly, and Stephen P. Ferris "*Auftragstaktik*, or Directive Control, in Joint and Combined Operations," *Parameters* 39, no. 3 (autumn 1999): 126.

[242] General Mordechai Gur in 1978 as quoted by van Creveld, *Command in War,* 195.

[243] Ibid.

[244] Ibid.

for flexibility were two others. A study of the IDF illustrates these attributes but what are the differences between these environments?

Obviously, there are decision-making differences between the military and homeland security response environments. As compared to firefighting, for example, the enemy adversary in a battle has intentions and organization. A military leader must anticipate the response of a human foe, which is more complex as compared to a fire officer dealing with a natural disaster.[245] Yet, law enforcement must anticipate a criminal mindset. Human-caused crisis events such as the 9/11 World Trade Center Attacks or the Boston marathon bombings will challenge the entire homeland security enterprise in a manner that is similar to engaging an enemy combatant. Enemy subterfuge is factor that a military leader must consider. In the same fashion, human-caused homeland security events may involve deception, secondary devices, or additional hazards to first responders, all of which compounds the complexity.

Based on the IDF's military mission and organizational make up, certain facets of its experience with mission command would not be applicable to the homeland security enterprise in the United States. The IDF is a fairly homogeneous entity with mandatory service required of all citizens and a reserve duty obligation required until age 45. Moreover, it is also one of the most battle-tested militaries in the world.[246] Finally, the IDF is a highly visible component of Israeli life and culture.

In comparison, the U.S. Department of Homeland Security (DHS) is divided into 22 separate agencies with widely varying missions. The majority of emergency responders in the U.S operate at the local or state levels—independent of DHS. For example, there are 30,000 fire departments and 18,000 law enforcement agencies in the

[245] Berndt Brehmer, "Dynamic Decision Making in Command and Control," in *The Human in Command*, ed. Carol McCann, and Ross Pigeau (New York, Kluwer Academic/Plenum Publishers, 2000), 242.

[246] Israel Ministry of Foreign Affairs, "The State: Israel Defense Forces (IDF)," March 2009, accessed September 15, 2014, http://www mfa.gov.il/mfa/aboutisrael/state/pages/the%20state-%20israel%20defense%20forces%20-idf-.aspx

U.S.[247] From the DHS perspective, it would be difficult to generate a mission command ethos across such a wide spectrum of agencies, levels of government, and legal mandates. The ability of a single organization like the IDF to implement change notwithstanding, other challenges to the implementation of mission command principles are discussed in the next section.

H. MISSION COMMAND CHALLENGES FROM THE IDF EXPERIENCE

The implementation of mission command by the IDF is not without challenges. Several of these challenges are described further in order to give insight for a homeland security organization that is considering the implementation of these principles.

1. Synchronization

Synchronization refers to the coordination of resources through shared awareness, communication, and planning in regard to time, space, and understanding. Van Bezooijen, Essens, and Vogelaar discuss synchronization as used in the military environment as the process of: "…coordinating, or orchestrating units on the battlefield." This process creates a synergy that "…is what distinguishes synchronization from mere coordination."[248]

In addition, they examine the concept of self-synchronization as it relates to complex environments and how it relates to network centricity; two themes discussed in previous chapters. Through interviews of experienced military personnel, Van Bezooijen, Essens, and Vogelaar find that that commander's intent is the one factor that influences self-synchronization, according to all of the interviewees.[249]

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[247] U.S. Department of Justice, "Local Police/Bureau of Justice Statistics," accessed September 15, 2014; http://www.bjs.gov/index.cfm?ty=tp&tid=71; U.S. Fire Administration, "Fire Departments Registered/National Fire Department Census Quick Facts," accessed September 15, 2014, http://apps.usfa.fema.gov/census/summary.cfm#a

[248] Bart J. A. van Bezooijen, Peter J. M. D. Essens, Ad L. W. Vogelaar, "Military Self-synchronization: An Exploration of the Concept" (paper presented at the 11th International Command and Control Technology Symposium, Cambridge, UK, September 2006), accessed January 30, 2015, http://www.dodccrp.org/events/11th_ICCRTS/html/papers/065.pdf

[249] Ibid.

The IDF experience shows that mission command and the increased latitude given to subordinates to innovate should not come at the cost of synchronization. As Shattuck explains, problems will arise if subordinate efforts are not synchronized:

> During Israel's 1956 Sinai Campaign General Moshe Dayan stated: "To the commander of an Israeli unit, I can point on a map to the Suez Canal and say: There's your target and this is your axis of advance. Don't signal me during the fighting for more men, arms, or vehicles. All that we could allocate you've already got, and there isn't anymore. Keep signaling your advances. You must reach the Suez in 48 hours..."[250]

Lateral communication between subordinates is crucial especially when innovation is necessary due to a change in conditions or a plan that is no longer valid. From a commander perspective, Dayan's degree of control influence over his subordinates became negligible because of the changing conditions. Some brigades stood by while others engaged in battle.[251]

Shattuck observes, "In retrospect, Dayan realized his mistake. He wrote that the heavy emphasis on improvisation and flexibility and the absence of a strong controlling hand meant that 'our capacity for misadventure [was] limitless.'"[252] The greater the flexibility given to subordinates, the greater the need for them to coordinate with their peers. Shattuck concludes, "When senior commanders provide their subordinates with flexibility at the expense of synchronization, battlefield activities are coordinated only by coincidence."[253]

2. Mission to Detailed Command

Certain events need closer leader oversight and coordination depending on complexity, timing, subordinate experience and trust. As Von Lossow (1977) points out,

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[250] Shattuck, "Communicating Intent and Imparting Presence," 68.

[251] Ibid.

[252] Ibid.

[253] Ibid.

[253] Ibid

[253] Ibid.

[253] Ibid.

"'Order-type tactics' are not antithetical to *auftragstaktik* but can complement a mission-style command philosophy."[254] During the 1967 Six Day War, the Egyptian fortified positions at Abu Agheila was a key objective, as it had been in the 1956 campaign. This required General Ariel Sharon to design a plan that was more prescriptive in nature. Luttwak and Horowitz elaborate:

> Sharon's division [at Abu Ageila]. . . fought a meticulously planned set-piece battle whose delicate combination of fire and movement would have delighted any staff officer addicted to sand tables and war games. Sharon combined heliborne paratroopers, foot infantry, tank battalions and concentrated artillery fire in a concentric attack totally unlike anything the Israeli Army had ever done before. The conduct of the battle was rigidly centralized, unplanned movements were ruled out, and there was very little scope for command initiative except at the very top.[255]

Initiative and flexibility under mission command should not be at the expense of synchronization and, where necessary, detailed planning. Marcus observes that the IDF's: "informal organizational culture and action-oriented ethos acted as a double-edged sword, often resulting in tactical audacity and operational ingenuity, while also occasionally resulting in nonconformity with protocols, lax discipline in training, and short-term thinking."[256]

3. Preparedness

After the Yom Kipper War of 1973, the IDF found itself in action against the Palestinian Liberation Organization and others in southern Lebanon. After the First Lebanese War, the IDF was increasingly drawn into low-intensity conflicts. It was during this time that the quality of officer education declined. According to Shamir: "…the Lebanon War marked a departure from that practice (decentralization)… Commanders on the scene were often visited by senior officers who tended to make decisions on the

[254] Walter von Lossow, "Mission-type versus Order-type Tactics," *Military Review* 57, no. 6 (June 1977): 89.

[255] Edward N. Luttwak, and Daniel Horowitz, *The Israeli Army: 1948–1973* (London: Allen Lane, 1975), 290.

[256] Marcus, "Military Innovation: Lesson Learning in the IDF," 22.

spot."[257] The 1982–2000 South Lebanon Conflict ended up with the withdrawal of Israeli forces.[258]

The effectiveness of mission command is dependent on the preparedness and training of subordinates to lead. Preparing subordinates to assume greater responsibility in their efforts to act within their leader's intent, exercise disciplined initiative, and accept prudent risk requires training and financial investment. Stewart remarks that decentralization of authority requires extensive training and education of subordinate personnel. Subordinate personnel not only need to be technically competent within their assigned responsibility, but they need to think "one or two levels up" in preparation to take the initiative as the opportunity arises. Stewart notes, "They need the ability to diagnose situations, and to formulate, implement, and monitor the plans they devise for dealing with those situations within commander's intent."[259] The U.S. Army Doctrine Reference Publication (ADRP-6) comments regarding mission command, "Commanders at all levels need education, rigorous training, and experience to apply these principles effectively."[260]

4. Blame and Litigation

According to Storr, a further threat to mission command is litigation and the blame culture.[261] Concern that mistakes made by soldiers or first responders in the "heat of battle," even if made in good faith and intent, will erode the trust needed for subordinates to practice initiative. This risk adversity and zero defects mentality are even more pronounced in civilian endeavors where the tolerance for injury and harm is less than in the military realm. This concern will be discussed in the USFS case history in the next chapter, but the IDF is not immune from this challenge.

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[257] Shamir, *Transforming Command*, 93.

[258] Ariel Cohen, "Knowing the Enemy," Hoover Institute, October 2007, accessed August 17, 2014, http://www.hoover.org/research/knowing-enemy

[259] Stewart, "The Evolution of Command Approach."

[260] U.S. Department of the Army, *Mission Command*, 1-4.

[261] Storr, "A Command Philosophy," 125.

In the low-intensity conflicts that the IDF has faced in the West Bank, Gaza, and along the Lebanese border, the rules of engagement have been modified due to political and media scrutiny. General Krulak's article entitled "The Strategic Corporal: Leadership in the Three Block War" describes the enormous responsibilities and pressures which are placed on young military leaders in conflicts of the twenty-first century.[262] In discussing the First Lebanon War from 1982–1993, Shamir suggests a number of reasons why the IDF moved away from mission command principles. World-wide attention and scrutiny caused a centralization of authority. "Fear of prosecution for carrying out ambiguous orders led to risk aversion, the *rosh katan* (shirking of responsibility) syndrome. Often soldiers and junior commanders failed to perform missions of questionable legality."[263] Storr (2003) mentions the corrosive effect of litigation on leaders and that this potential will cause leaders to be highly conservative, to plan in great detail, and to allow subordinates little freedom of action.[264]

5. Asymmetric Warfare

The IDF's capability for conventional warfare has been proven. The question arises of whether the IDF and a mission command ethos is appropriate for unconventional or asymmetric warfare. In 2002, the Second Intifada was initiated by Palestinian extremists conducting suicide attacks, including the attack in Netanya on March 27 that killed 30 at the Park Hotel. In response, Israel launched Operation Defensive Shield, which targeted Palestinian controlled cities in the West Bank, including the town of Nablus on April 5–8, 2002. The decentralized network of the insurgents in Nablus was met by IDF in a similar manner. Shamir explains, "'swarming' techniques, denoting a multidirectional and highly synchronized deployment of many small groups against a single objective relying on mission command"[265] were conducted

[262] Charles C. Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine* 83, no. 1 (January 1999), accessed August 18, 2014, http://www.au.af mil/au/awc/awcgate/usmc/strategic_corporal.htm

[263] Shamir, *Transforming Command*, 94.

[264] Storr, "A Command Philosophy," 125.

[265] Shamir, *Transforming Command*, 134.

by IDF forces. The battle culminated in the old town casbah, where after suffering many killed and captured, the Palestinian insurgents surrendered.

Jones examined Operation Defensive Shield in an article entitled; "Fighting Networked Terrorist Groups: Lessons from Israel." He concluded that defeating networked organizations would require networked strategies.[266] As discussed in Chapter III, network centric technology is compatible with (or can enhance) mission command principles if the tendency for micromanagement can be controlled. Training, assessments and correction measures can identify and curb this tendency. Flexibility is another key to combating guerilla tactics as Jones describes:

> Israeli military doctrine has also incorporated a significant amount of flexibility and adaptability. In situations where there's a major discrepancy between IDF doctrine and what a commander sees during an operation, the commander generally has the flexibility to disregard doctrine. This allows IDF brigades to become 'learning organizations' that are capable of adapting in the middle of combat operations. Flexible doctrine is critical because Palestinian groups have been able to innovate on the battlefield… In short, IDF training has prepared commanders and soldiers for both major combat and counterinsurgency operations, and IDF doctrine has been flexible enough to allow for learning on the battlefield.[267]

I. IDF AND MISSION COMMAND SUMMARY

The IDF experience provides an inside look at the benefits and challenges of mission command principles. The IDF command philosophy was illustrated through examples from British Palestine, the 1967 Six Day War, and the 2002 Operation Defensive Shield. The challenges to implementation of mission command were discussed with attention given to synchronization, flexibility in moving towards a more directive command mode, blame and litigation, and preparedness. Asymmetric warfare was also reviewed since military operations are increasingly directed at decentralized insurgencies and not at conventional combat. The simplicity of IDF doctrine and the need for flexible doctrine that embraces learning and sharing in the face of change was discussed. Finally, a comparison between the military and crisis management environments was reviewed.

[266] Jones, "Fighting Networked Terrorist Groups," 281.

[267] Ibid., 296.

While there are some differences, there are many common attributes between these two environments. If mission command is to be applied by an organization in the homeland security response enterprise, the lessons of the IDF can provide insight. These lessons and the application of mission command by an emergency response organization will be discussed further in the analysis portion of Chapter VI.

The case study in the next chapter will examine one of the federal wildland firefighting agencies: the United States Forest Service (USFS). Like the IDF, the USFS is tasked with operating in a high-risk environment as a part of its work mission. As noted in Chapter I, the two organizations differ in the amount of time they have been using the principles of mission command and the results they have experienced. The reason why the USFS has shifted towards the principles of mission command will be addressed as well as the challenges and benefits. The Army framework, consisting of the six principles of mission command, will be used to examine how these principles are applied by the USFS. Finally, any conclusions that can be drawn regarding implementation of mission command within the USFS organization will be made.

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V. USFS AND MISSION COMMAND

A. INTRODUCTION

The United States Forest Service (USFS) under the U.S. Department of Agriculture is the largest of the federal wildland firefighting agencies with a permanent and seasonal force of 10,050 firefighters.[268] This force manages wildfires on the national forests and other federal government lands throughout the United States, but mostly in the fire-prone western states and Alaska. Smokejumpers and "hot-shot" crews are two of the elite organizational resources that deploy to fires from bases throughout the nation.

The work is grueling and dangerous; it is oftentimes in steep terrain, using hand tools, chainsaws, and bulldozers to cut control lines that separate fire from fuel. Yet, the allure and challenge fosters dedication to the profession as the following quote from the Wildland Firefighting Foundation indicates:

> These firefighters are highly trained men and women, younger and older who love being in the outdoors, working in the natural environment and sleeping under stars often obscured by smoke… they have the feel of the Old West about them, the rawness, the problem-solving, the flexibility, the enjoyment of facing problems that may not have clear-cut solutions on fires that are not predictable. They enjoy the excitement created by the flames, the sense of purpose and helping, but know they're dealing with Nature, capricious at best, and a killer at worst.[269]

Operating in this high-risk and complex environment can be deadly. For example, 34 wildland firefighters were killed in 2014,[270] and entrapment by fire is the leading cause of multiple fatalities on incidents.[271] These fatality fires are seminal events in the wildland firefighting community. Unlike the military experience where organizational

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268 U.S. Department of Agriculture, Forest Service, "The U.S. Forest Service: An Overview," 2008, accessed January 31, 2015, http://www fs.fed.us/documents/USFS_An_Overview_0106MJS.pdf, 9

269 Wildland Firefighter Foundation, "Wildland Firefighters and Their Families," accessed February 1, 2015 https://wffoundation.org/

270 Alan Neuhauser, "As Wildfires Worsen, Calls for Change in Tactics," *U.S. News and World Report*, November 5, 2014, accessed February 1, 2015, http://www.usnews.com/news/articles/2014/11/05/as-wildfires-worsen-calls-for-change-in-tactics

271 National Interagency Fire Center, accessed February 1, 2015, http://www.nifc.gov/safety/safety_documents/Fatalities-by-Year.pdf

improvement is driven by the need to win wars, progress in the wildland firefighting community is driven by the battles lost—fatality fires.

In this chapter, the USFS experience is examined through the framework of mission command principles. Three fatality wildfires: the Mann Gulch, the South Canyon, and the Thirtymile, will be discussed in regards to leadership and the efforts to learn lessons from them. Patterns, internal and external influences, and causality will be scrutinized as in the previous chapter. In addition, the efforts by the USFS to implement leadership training and define doctrine will be explored. USFS organizational culture and other challenges to the implementation of mission command will be reviewed. The USFS under the Department of Agriculture is not a member of the homeland security enterprise on paper but is often deployed to assist in all-hazard events through the National Response Framework and the Emergency Support Function #4 for firefighting.[272] The USFS experience and example will provide insight regarding the implementation of mission command principles by a homeland security response organization.

B. MANN GULCH FIRE OF 1949

Foreman Wag Dodge was in charge on the fateful day in 1949 when 13 smokejumpers under his supervision were overrun by fire. The events of the Mann Gulch Fire are captured in Norman Maclean's book, *Young Men and Fire* in which the ad-hoc nature and Dodge's unfamiliarity with the crew is described. None of the crew had worked on a previous fire under Dodge's supervision. "Dodge has a characteristic in him," Walter Rumsey, one of three survivors, told the Board of Inquiry. "It was hard to tell what he is thinking."[273] Useem notes, "Wagner Dodge was a boss of few words, a person who neither expected much information from his people nor gave much in return."[274]

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[272] U.S. Department of Homeland Security, *National Response Framework*.

[273] Maclean, *Young Men and Fire*, 64.

[274] Michael Useem, *The Leadership Moment: Nine True Stories of Triumph and Disaster and Their Lessons for Us All* (New York: Three Rivers Press, 1998), 55.

The smoke jumper crew had deployed by parachuting out of an aircraft and hiking down Mann Gulch towards the river to where the fire was burning on the south side of the drainage. About a half mile down the canyon, Dodge noticed that the fire had crossed the gulch below their position and was burning their way, and he ordered the crew to turn around and run, but the fire spread quickly on the grassy incline. The fire caught 13 of the smokejumpers almost at the point where the crew landed via parachute. Rumsey and Robert Sallee managed to escape through a rocky crevice at the top of the ridge. Dodge escaped death by lighting a small fire and then lying down in the ashes of the widening safe area in order to let the main fire pass over.[275]

The crew leader's unusual tactic must have seemed strange to the others because none of the crew members joined Dodge or attempted a similar action. They kept moving in an attempt to outrace the advancing flames. In the subsequent inquiry, Sallee commented on Dodges actions: "We thought he must have gone nuts."[276] Useem offers further explanation:

> Without revealing his thinking when it could be shared, Dodge denied his crew members, especially those not familiar with him, an opportunity to appreciate the quality of his mind. They had no way of knowing, except by reputation, whether his decisions were rational or impulsive, calculated or impetuous. Later, when the quality of his mind did display itself in a brilliant invention—the escape fire—his thinking was still too much of a cipher to those whose trust he urgently required.[277]

Based on the Army's principles of mission command, several components were missing in the events surrounding the Mann Gulch fire. Two of these principles, building cohesive teams through mutual trust and creating shared understanding, could have averted the tragedy had they been practiced. Further examination of USFS implementation of the principles of mission command will follow in this chapter.

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275 Maclean, *Young Men and Fire*, 75.

276 Useem, *The Leadership Moment*, 56.

277 Ibid., 56.

C. SOUTH CANYON FIRE OF 1994

A lack of leadership was a factor in the deaths of 14 firefighters who were overrun when the South Canyon wildfire blew-up on July 6, 1994.[278] An ad-hoc group of 13 federal firefighters made up of smokejumpers and hot-shot crew members were constructing fire line downhill in the area of head-high vegetation known as Gambel Oak. Some firefighters were confused about who was making the decisions on strategy and tactics. [279] Furthermore, most had not been briefed and none were aware of an approaching cold front.[280] Putnam describes the situation:

> All the ingredients were in place for a catastrophe: Three local crews (BLM, USFS, Helitack), the Prineville crew split into two groups, (smoke) jumpers from five different bases led by two somewhat randomly selected "Jumpers-in-Charge" were thrown together and asked to perform as a team under increasingly unstable conditions. Neither leadership roles nor a cohesive organizational structure stabilized before the blowup.[281]

Suddenly, the winds shifted sending a wall of fire 100 feet high in the direction of the descending group. The 13 attempted to retreat back up the path they had hewn towards the safety of the ridge. One made it to the top of the ridge and over to the other side, surviving the wave of fire. The other 12 lost the race and were overrun by the flames and perished on the side of the ridge.[282]

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278 The South Canyon Fire was the designated name of the incident. Storm King Mountain is a prominent landmark in the vicinity and the subsequent news reports after the tragedy adopted the name. A blow-up is defined as "a sudden increase in fire intensity or rate of spread strong enough to prevent direct control or to upset control plans. Blow-ups are often accompanied by violent convection and may have other characteristics of a fire storm." "Fire Terminology," accessed February 1, 2015, http://www.fs.fed.us/nwacfire/home/terminology.html

279 South Canyon Interagency Investigation Team, *Report of the South Canyon Fire Accident Investigation Team* (Glenwood Springs, CO: Accident Investigation Team, 1994), accessed March 9, 2015, http://www.iaff.org/hs/lodd_manual/LODD%20Reports/South%20Canyon,%20CO%20-%2014%20LODDs.pdf, 28.

280 Ibid., 26.

281 Ted Putnam, "The Collapse of Decisionmaking and Organizational Structure on Storm King Mountain," in *Findings from the Wildland Firefighters Human Factors Workshop* (Missoula, MT: Missoula Technology and Development Center, U.S. Forest Service, 1995), accessed March 9, 2015, https://www.iaff.org/hs/LODD_Manual/Resources/USFS%20Findings%20from%20the%20Wildland%20Firefighters%20Human%20Factors%20Workshop.pdf, 56.

282 In addition to the 12, two helicopter (helitack) crew personnel perished as a result of the blowup, but at another location on the fire. John N. Maclean, *Fire on the Mountain* (New York: William Morrow and Company, 1992), 138.

Clear authority, leader's intent, and shared understanding were missing in the events leading up to this tragedy. Similarly to the Mann Gulch example, if the principles of mission command had been practiced at the South Canyon fire, the fatalities may have been averted. While mission command may be perceived as a lessoning of authority through distributed leadership, the need for local leadership becomes even more important. The preparation for successful mission command-like operations becomes critical. Trust, preparation, subordinate development, and intent are all qualities and actions that should be developed before the crisis. Implementation of mission command principles by the USFS will be discussed later.

The resulting South Canyon accident investigation cites the "can do" attitude of the firefighters and their violation of the firefighting safety rules as factors in the tragedy.[283] Ted Putnam, one of the United States Forest Service investigators, refused to sign the report; he was frustrated that the investigation failed to fully examine the human dynamics such as decision making under stress. [284] Similarities between the circumstances surrounding the entrapment at South Canyon and the 1949 Mann Gulch fires were noted by Putnam and caused many to question whether the real causes had been addressed.[285] While the Mann Gulch fire spurred the adoption of a number of safety directives in 1957, none of them focused on human factors.[286] However, further federal fire agency introspection arose from additional reviews of the South Canyon Fire.

Was there a causal element that had been missed? A human or organizational explanation as to why this accident occurred? The *Wildland Firefighter Safety Awareness Study* explains:

> Following the soul searching, multiple-agency investigations, and special conferences on safety stimulated by the 1994 South Canyon incident that

283 The "Ten Standard Firefighting Orders" and "Eighteen Watchout Situations" are rules of engagement for fighting wildland fire. Written with firefighter safety as the priority, these orders and watch-outs are taught to most wildland firefighters across the nation at federal, state, and local levels. The orders and watch-outs are listed at http://www fs fed.us/fire/safety/10_18/10_18.html

284 Jennifer A. Thackaberry, "Discursive Opening and Closing in Organizational Self-Study," *Management Communication Quarterly* 17, no. 3 (2004): 328, DOI: 10.1177/0893318903259402

285 Putnam, "The Collapse of Decisionmaking," 55.

286 Maclean, *Young Men and Fire*, 221.

> killed 14 firefighters, a new idea arose: that the usual things sought in fatality investigations were not sufficient. There were likely to be organizational cultural problems, leadership issues, human factors problems, and possibly other issues that were underlying the firefighter safety problems.[287]

The year after the entrapment, Putnam articulated his concerns in a "landmark" paper entitled "The Collapse of Decisionmaking and Organizational Structure on Storm King Mountain."[288] In the paper, Putnam points out that "stress, fear, and panic predictably led to the collapse of clear thinking and organizational structure" during the the South Canyon incident. He also warned that "the lesson is clear: studying the human side of fatal wildland fire accidents is overdue."[289]

D. THIRTYMILE FIRE OF 2001

In 2001, disaster struck again when the Thirtymile Fire on the Okanogan National Forest in Washington trapped 16 firefighters. Of these 16, four firefighters perished in the burnover after an unattended campfire blew-up, which cut off their escape route. All of these firefighters were operating as a part of an ad-hoc crew (named the Northwest Regulars #6) and did not normally work together as they were from different districts. Ellreese Daniels was in charge of the crew and was also the designated incident commander of the fire. Daniels and part of the crew had travelled up the Chewuch River Canyon to extinguish some spot fires from the growing fire. He was described as being "supernice guy, but he does not have a command personality. He's soft spoken. He never wanted to lead. Ellreese is a follower. But they put on the pressure, and he couldn't find a way to say no."[290]

As the fire intensified along the road, the crew was cut off by a "wall of flames" and was forced to retreat to an area that appears to have less fuel loading due to a rock scree on one side of the road and a Chewuch River sand bar on the other. The fire,

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[287] TriData Corporation, *Wildland Firefighter Safety Awareness Study, Phase II* (Arlington, VA: Tri Data Corporation, 1997), 1.

[288] Putnam, "The Collapse of Decisionmaking," 54.

[289] Ibid.

[290] John N. Maclean, *The Thirtymile Fire* (New York, Henry Holt and Company, 2007), 49.

described as sounding like a "freight train" or a "tidal wave," made a run at the crew's location and the crew was forced to deploy their fire shelters. Part of the crew chose to seek refuge in the rock scree away from the rest of the crew on the road. Daniels purportedly tried to tell the people on the rocks to come down to the road. After the fire front passed, four of the six crewmembers that deployed on the rock scree were found dead due to inhalation and asphyxia of the superheated products of combustion.[291]

The ensuing accident report cites a significant finding, "leadership, management, and command and control were all ineffective due to a variety of factors, such as the lack of communication and miscommunication, fatigue, lack of situational awareness, indecisiveness, and confusion about who was in control."[292]

The events of the Mann Gulch, South Canyon and Thirtymile fires point to similar troubling themes, particularly with human dynamics and leadership. The mission command principles of trust, cohesion, shared awareness, disciplined initiative, and intent were not followed. It was these disasters that planted the seeds of change in the USFS leadership paradigm.

E. THE SEARCH FOR LEADERSHIP CHANGE IN THE USFS

As result of the tragedies at South Canyon and Thirtymile, there followed a number of investigations and reports and the call for deeper introspection on human factors from individuals like Ted Putnam. These activities spurred the formation of the Leadership Task Group by the National Wildfire Coordinating Group (NWCG) in 2000. The NWCG is an operational group designed to coordinate programs of the participating wildfire management agencies, including the USFS.[293] The goal of the Leadership Task

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[291] Ibid., 114, 135.

[292] U.S. Department of Agriculture, Forest Service, *Thirtymile Investigative Report: Accident Investigation Factual Report and Management Evaluation Report* (Washington, DC: U.S. Department of Agriculture, Forest Service, 2001), 30.

[293] The NWCG participating members include Department of Agriculture, Forest Service; four Department of the Interior agencies: Bureau of Land Management (BLM), National Park Service (NPS), Bureau of Indian Affairs (BIA), and the Fish and Wildlife Service (FWS); Department of Homeland Security, International Association of Fire Chiefs, and state forestry agencies through the National Association of State Foresters. "NWCG Membership," accessed February 12, 2015, http://www.nwcg.gov/nwcg_admin/members htm

Group was to analyze the current leadership training curriculum, identify alternatives, and make recommendations.

The Leadership Task Group was frank in the assessment that its work would not be easy. In the 2001 *Report of the Leadership Task Group to the Working Team*, it is noted that leadership issues are "complex, defying simple explanation or easy understanding." [294] A number of different types of organizations were examined including private sector, government, and military. The task group found that there was no such thing as a "military model" or a "corporate model" for leadership, but rather there are many different leadership concepts and practices. The challenge for the task group was to sift through these models and determine which concepts and practices worked best for the wildland fire community.

The task group made note of the parallels between the military environment and the wildland fire response environment: "These organizations all operate in high risk environments where decisions must be made within compressed time frames, often by people under a great deal of stress."[295] In noting these similarities, the task group chose to use some of the military leadership concepts for application in the wildland fire response environment.[296]

Another consideration of the task group was the ad-hoc nature of wildland firefighting response teams. Resources deployed to a wildland fire most often arrive at different times and from different home units and agencies. It is very common to see resources deployed from out-of-state, especially when certain regions experience high fire activity and local resources become overstretched. Before the blowup of the South Canyon fire, there were three leaders and three crews with firefighters from five different states deployed to the incident.[297]

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294 National Wildfire Coordinating Group, *Report of the Leadership Task Group to the Training Working Team* (February 2001), accessed January 29, 2015, http://www.fireleadership.gov/committee/reports/February_2001_Task_Group_Report.pdf, 3.

295 Ibid.

296 Ibid.

297 Michael Useem, James Cook, and Larry Sutton, "Developing Leaders for Decision Making Under Stress: Wildland Firefighters in the South Canyon Fire and Its Aftermath," *Academy of Management Learning & Education* 4, no. 4 (2005): 471.

Division supervisors and incident commanders will often be responsible for crews and individuals with whom they have never worked previously. Useem, Cook, and Sutton refer to this as ambiguous authority, which undermines optimal decision making.[298] Three sources help explain this lessening of authority: ad-hoc "crews are often undeveloped as teams; related parties bring self-interested agendas to bear; and leaders must orchestrate others that they sometimes scarcely know."[299]

This challenge to authority is repeated on many large-scale homeland security events where multi-agencies are working together in a common effort. The Incident Command System (discussed in Chapter III) helps to define ambiguous authority, but on tactical scale, a leader must work hard to gain the trust of an ad-hoc workforce. Ambiguous authority works against the trust that has been identified as a key to the implementation of mission command. The mission command principle of providing clear leader's intent will help clarify such ambiguous authority.

F. IMPLEMENTATION OF MISSION COMMAND BY THE USFS

In response to these challenges, the Leadership Task Group recommended a series of steps to improve leadership development in the wildland service. Some of the highlights include:

- Leadership Principles—Adopt a specific set of desired leadership principles and values that are common to all the wildland fire organizations." These principles and values have been formalized and are located on the wildland fire leadership website and incorporated into leadership courses.[300]
- Required Training—Revise the Fire Qualification System Guide to make specific leadership courses required training for certain key ICS positions. Up until this time, leadership and supervision courses were never emphasized, much less required. Develop a continuum of leadership courses tied to career development and increasing responsibility.
- Self-Study Component—Develop self-study resources that allow individuals to study leadership concepts and principles outside the context

298 Ibid.

299 Ibid., 467.

300 "Values and Principles Download," Wildland Fire Leadership Development Program, accessed March 9, 2015, http://www.fireleadership.gov/images/V_P/values_principles_expanded.jpg

> of formal classroom training." This has resulted in a wildland fire leadership website with multiple avenues of educational exploration. The resources on the website include: a fire leadership reading list; multiple leadership and cinema reviews; and, several staff ride resources for fatality fire sites throughout the nation.[301]

These components provide insight as to how a homeland security organization might implement the principles of mission command, which will be discussed further in the final chapter. Ultimately, the task group recommended the formation of a standing committee to continue the development efforts and implementation of the program.

Since the report from the NWCG Leadership Task Group was issued, thousands of federal, state, and local wildland firefighters across the nation have completed some or all of the Wildland Fire Leadership Development Program courses, commonly referred to as the "L" series of courses. The leadership ethos that forms the basis of these courses is contained in a publication entitled *Leading in the Wildland Fire Service*. In this reference handbook,[302] the Army's six principles of mission command (which are used to assess the IDF and USFS case studies) are interwoven. Other facets of the program involve practical exercises, tie-ins, and lesson plans for motion pictures that portray the leadership principles in action, and a self-development worksheet for continued learning.

A series of staff rides have been developed for many of the significant, and unfortunately, fatal wildland fires. Staff rides are based on the practice of military commanders and staffs visiting a historic battlefield to gain a sense of the environment and decision making in order to enhance learning. Useem, Cook, and Sutton explain the educational benefit that a classroom cannot provide:

> By witnessing other settings, mentally reconstructing the decisions taken in those settings, and then drawing implications for one's own settings, such out-of-classroom experiences can instill the principles of leadership more enduringly than classroom experience alone.[303]

The final leadership course in the NWCG Wildland Fire Leadership Development Program is entitled L-580 Leadership is Action. In this course, a facilitated staff ride is

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301 National Wildfire Coordinating Group, *Report of the Leadership Task Group*, 3–5.

302 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*.

303 Useem, Cook, and Sutton, "Developing Leaders for Decision Making under Stress," 480.

conducted at the site of the Civil War battlefield at Gettysburg, Pennsylvania. Using the battlefield as a historical backdrop, experts in leadership and incident management discuss the sense making and decision making that Civil War leaders experienced. The Gettysburg staff ride focuses on individual and team decision making, successful traits of senior leaders, and incident management at a strategic level. A number of locations or stands are visited during the staff ride, many of them examples of the principles of mission command.

The NWCG Leadership Subcommittee meets regularly to maintain the leadership or "L" series of courses and keep the Wildland Fire Leadership Development Program moving forward. Participation by anyone from the wildland fire community is strongly encouraged. Interestingly, some of the work of the NWCG Leadership Committee seems to have preceded the development of foundational doctrine by the USFS in 2005. This suggests that the efforts to change the organizational thinking of the wildland fire agencies and the USFS in particular started out as a grass-roots effort. This ground-up (versus top-down) process is very much the type of evolution that the ethos of mission command is aimed at promulgating. The formulation of USFS doctrine is worth examining as it illustrates the shift that will be necessary for homeland security response organizations who wish to implement mission command.

G. DOCTRINAL CHANGES IN THE USFS

Further indications of a shift in USFS organizational thinking is evident in a paper entitled *Defining Doctrine for Wildland Fire Suppression in the USDA Forest Service*. In the 2004 paper, the myth of control is discussed, which is the misperception that

> …command flows down and results in control of on-the-ground operations, even in highly chaotic environments. When in reality control of on-the-ground operations is in the hands of the ground forces, and feeds upward to command. Operating within this myth leads to the assertion that negative outcomes may be avoided by asserting more control, by establishing more rules. Effective command relies on the expression of clear intent, confidence in subordinate capabilities, acceptance of mutual

> responsibilities, a specified objective, and freedom to act… all firmly rooted in shared and understood doctrinal principles.[304]

The preceding quote could have been attributed to General von Moltke discussing the principles of *auftragstaktik* with the Prussian military in 1860s. In the previous chapter, the IDF eschewed rule-driven doctrine in favor of decisive and creative decision making. The need to consider doctrine as a dynamic process for learning and sharing best practices was also discussed.[305] The following describes the path that the USFS took to arrive at a similar conclusion regarding doctrine.

The *Defining Doctrine* paper traces the USFS organizational model to industrial age concepts and sociologist Max Weber. He is acknowledged for his study of organizations that managed large, dispersed work forces engaged in complex activities. Weber concluded that bureaucracy was necessary to "subdue human affairs to the rule of reason."[306] He was convinced that bureaucracy was the dominant form of modern control—an "iron cage" that was highly rational, powerfully oppressive, and inevitable.[307] This thinking was the basis for the structure of many industrial age organizations and was the pattern on which the USFS structure was based.[308] Yet, while the complexity of the work in the fire suppression has "increased exponentially" since Weber's observations, many of these same bureaucratic principles have guided the USFS operations until recently. The paper, prepared by the USFS National Fire Operations Safety Office, called for a self-examination of the USFS organization with a focus on redefining doctrine.[309]

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304 U.S. Department of Agriculture, Forest Service, *Defining Doctrine for Wildland Fire Suppression in the USDA Forest Service*, 2004, accessed January 27, 2015, http://www.fs.fed.us/fire/doctrine/genesis_and_evolution/briefing_papers/2004-defining_doctrine.doc, 3.

305 Alberts, "Information Age Transformation," 122.

306 Forest Service, *Defining Doctrine for Wildland Fire Suppression*, 1.

307 James R. Barker, "Tightening the Iron Cage: Concertive Control in Self-Managing Teams," *Administrative Science Quarterly* 38, no. 3 (1993): 410.

308 The USFS was created in 1905 with Gifford Pinchot the inaugural agency head. "Our History," accessed March 1, 2015, http://www fs.fed.us/learn/our-history

309 Forest Service, *Defining Doctrine for Wildland Fire Suppression*, 1.

As a result, the USFS convened the First Pulaski Conference in 2005 with the purpose of establishing a wildland fire suppression doctrine. The conference notes state,

> Our agency's current doctrine is fragmentary, confused and combined. And, it is unfortunately intuitive-rather than explicit. Furthermore, it can only be found—often with much difficulty and frustration—concealed in a mishmash of guides, manuals, and handbooks.[310]

Another reference laments the reality that there are now 156 inviolate wildland fire suppression-related rules that have evolved over the last decade and though the environment has become more complex, "the wildland firefighter's ability to adapt and react has ironically—and precariously—become even more constrained. Unfortunately, our agency's probability of failure has, thus, increased proportionately." [311] The conference was attended by representation from every level of the USFS organization and from each forest service region. The other federal wildland fire agencies sent representatives to support and participate in the process.

As a result of the conference, the *USFS Fire Suppression Foundational Doctrine* was developed. One focus of the doctrine is the recognition of leadership down to the lowest levels of the USFS organization: "Our agency culture embraces mentoring and continuous learning as essential to development of future leadership where every leader is a firefighter, and every firefighter is a leader." [312] Additionally, empowerment of subordinates was also highlighted. A statement from the doctrine emphasizes, "(Leaders) will only order details regarding execution if measures … have to be harmonized or if political or firefighting constraints require it. They give the latitude to subordinate leaders in the execution of their mission." [313] Many felt that the Pulaski conference and the resulting doctrine heralded the beginning of a new culture for the USFS.

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[310] Forest Service, "The First Pulaski Conference: Taking the First Step: How We Did It" (synopsis paper from the First Pulaski Conference, Alta, Utah, June 2005), http://www.fs.fed.us/fire/doctrine/genesis_and_evolution/source_materials/final_report_pulaski_conference.doc, 4.

[311] Ibid., 5.

[312] U.S. Department of Agriculture, Forest Service, *USFS Fire Suppression Foundational Doctrine* (U.S. Department of Agriculture, Forest Service, 2005), http://www.fs.fed.us/fire/doctrine/doctrinefinala.pdf, 14.

[313] Ibid., 16.

Mission command principles are interwoven into the *USFS Fire Suppression Foundational Doctrine*. Several papers on *auftragstaktik* are cited as source documentation in the formulation of the USFS leadership ethos and the influence is apparent.[314] In a similar fashion to the IDF case study, the next section will examine the USFS experience in the implementation of the principles of mission command.

H. THE USFS THROUGH THE FRAMEWORK OF MISSION COMMAND PRINCIPLES

The six principles of mission command from the U.S. Army will be used to assess the USFS. These principles were introduced in Chapter I and consist of the following: 1) Build cohesive teams through mutual trust; 2) Create shared understanding; 4) Exercise disciplined initiative; 5) Use mission orders; 6) Accept prudent risk.[315] They are the basis on which the U.S. Army has chosen to introduce the concepts of mission command and offer some practical steps in which to implement this philosophy. These principles provide a common framework in which to evaluate the case study from the previous chapter and the USFS experience.

1. Build Cohesive Teams through Mutual Trust

The wildland fire service recognizes the value of mutual trust and cohesiveness. As pointed out previously, several sources of USFS doctrine and leadership philosophy now advocate these values. Driessen studied the intracrew and intercrew cohesion of fire crews on three fatality fires: the Mann Gulch, the Thirtymile, and the South Canyon fires.[316] His definition of cohesion is how closely tied together the individuals are as a group. Driessen remarked, "People in cohesive groups will openly speak of themselves as

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314 Faris R. Kirkland, *Auftragstaktik*" *Leadership Ethics*,1998, U.S. Department of Agriculture, Forest Service, accessed March 10, 2015, http://www.fs.fed.us/fire/doctrine/philosophy/source_materials/auftragstaktik-kirkland.doc; Michael M. O'Leary, "*Auftragstaktik*" *Regimental Rogue*, 2000, U.S. Department of Agriculture, Forest Service, accessed March 10, 2015, http://www fs.fed.us/fire/doctrine/firesuppression.html; Silva, "Auftragstaktik: Its Origin and Development," 6–8; Keithly, and Ferris "Auftragstaktik, or Directive Control, in Joint and Combined Operations."

315 U.S. Department of the Army, *Mission Command*, 2.

316 Jon Driessen, *Crew Cohesion, Wildland Fire Transition and Fatalities*, U.S. Department of Agriculture, Forest Service, 2002, http://www.fs fed.us/t-d/pubs/pdfpubs/pdf02512809/pdf02512809.pdf, 1.

'a little family.'"[317] This interconnectedness or chemistry enables the group to operate at a higher level and have a "special kind of strength." Interestingly enough, accident rates are inversely related to cohesion in crews; the greater the cohesion the fewer the accidents. Driessen observed that the three fatality fires involved groups of firefighters that had little crew cohesion, either intracrew, as in the case of the Mann Gulch fire, or intercrew, as seen in the South Canyon fire.[318] The Thirtymile fire was a combination of both intracrew and intercrew failures.

Furthermore, Driessan postulates that it takes from six to eight weeks for seasonal wildland fire fighters to "click" into crews.[319] Team cohesion is a focus in the previously mentioned L-series of courses, with emphasis on teambuilding exercises. A crew cohesion assessment tool is available on the fire leadership website.[320] The assessment provides criteria for a number of categories, include ratings on trust, conflict, and learning. The assessment can be utilized by crew leaders or wildfire engine personnel to benchmark the cohesion of the crew and look for ways to improve.

Trust implies direct and honest communication between leaders and followers. The *Fireline Leadership Course* (L380) workbook offers a number of techniques for both leaders and followers to engage in direct and honest communication without antagonism.[321] Unhealthy conflict can develop when feedback turns to criticism and the focus is on the "who" rather than the "what." Clear leader's intent, active listening, feedback, and humor are offered as ways to de-escalate tension and prevent unhealthy conflict. However, the instruction in the workbook does not downplay the significance of conflict, "…any organization with more than one person has conflict—guaranteed.

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[317] Ibid., 7.

[318] Ibid., 4.

[319] Ibid., 7.

[320] Tool can be found at: http://www.fireleadership.gov/toolbox/documents/Crew_Cohesion_Assessment.pdf

[321] Mission-Centered Solutions, *L380 Fireline Leadership* (Franktown: Mission-Centered Solutions, Inc., 2007), 157.

Furthermore, a little conflict can be good… a positive sign that the crew is learning, growing, and trying new things."[322]

2. Create Shared Understanding

All the leadership and position courses taught through the NWCG emphasis situational awareness, briefings, and communication. Situation awareness is not static but more of a dynamic and fleeting process that is constantly updating as conditions change. The flow and filtering of data from both a technological and human perception standpoint was discussed in Chapter III by Shattuck and Miller.[323] The following excerpt from *Leading in the Wildland Fire Service* describes the process on how people process information: "People gather information through both observation, which includes input from the senses, and communication, which includes face-to-face conversation, written communication, and radio or telephone exchanges"[324] These inputs are then processed by individuals in different ways, which is further described in *Leading in the Wildland Fire Service* as: "All perceptions are subject to filtering and focusing: people constantly filter information and shift focus. People also produce a lot of internal inputs such as thoughts about what to do next, stress, memories of similar experiences, fear."[325]

Weik discusses the basic idea of sensemaking—that reality is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs. Sensemaking emphasizes that people try to make things rationally accountable to themselves and others. Weik describes sensemaking in the context of the Mann Gulch fire tragedy (discussed in this chapter):

> Sensemaking is about contextual rationality. It is built out of vague questions, muddy answers, and negotiated agreements that attempt to reduce confusion. People in Mann Gulch did not face questions like where should we go, when do we take a stand, or what should our strategy be?

322 Ibid., 157.

323 Shattuck, and Miller, "Extending Naturalistic Decision Making to Complex Organizations," 4.

324 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*, 31.

325 Ibid.

> Instead, they faced the more basic, the more frightening feeling that their old labels were no longer working.[326]

In addition, Weik describes the role that effective leaders can take and the type of conversation that leads to shared understanding According to him, the conversation that should have occurred at the Mann Gulch and South Canyon incidents would have sounded like this: "1) Here's what I think we face; 2) Here's what I think we should do; 3) Here's why; 4) Here's what we should keep our eye on; 5) Now, talk to me."[327] The missed communications during the Mann Gulch and South Canyon fires raise the issue of how best a leader can convey what is to be done. The third mission command principle provides a format in which to convey this message even when direct communication is not possible.

3. Provide a Clear Commander's Intent

The need for leaders (or commanders) to translate vision into clear intent is emphasized in the NWCG leadership principles, curriculum, and the leadership ethos captured in *Leading in the Wildland Fire Service*. Moreover, leader's intent is at the heart of the Wildland Fire Leadership Development program. This philosophy is based on the understanding that competent subordinate leaders who are at the scene of action understand the current situation better than a senior commander some distance removed does.[328] A warning is provided in the *Leading in the Wildland Fire Service* for those that might misinterpret intent as a license for independent action; subordinate actions must be coordinated toward the common objective.

Clear leader's intent is composed of the task, purpose, and end state or how it should look when complete. Conspicuously left out of leading by intent is "how" the task

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326 Karl Weik, *South Canyon Revisited: Lessons from High Reliability Organizations*, Technical Report 9951-2855-MTDC (Missoula, MT: U.S. Department of Agriculture, Forest Service, 1995), 42–53; Karl Weik, "The Collapse of Decisionmaking and Organizational Structure on Storm King Mountain," in *Findings from the Wildland Firefighters Human Factors Workshop* (Missoula, MT: U.S. Department of Agriculture, Forest Service, 1995), https://www.iaff.org/hs/LODD_Manual/Resources/USFS%20Findings%20from%20the%20Wildland%20Firefighters%20Human%20Factors%20Workshop.pdf, 63.

327 Weik, *South Canyon Revisited* 43.

328 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*, 15.

needs to be done, which is a component of detailed command. In mission command, "how" a task is accomplished is left up to the initiative, innovation, and imagination of the subordinate leader, who, in turn, will provide leader's intent to lower echelons within the chain of command. Silva posits that the result of this framing of direction is to encourage participation and unleash the collective wisdom of the entire organization down to the lowest levels. A secondary effect is that subordinates have a sense of "buy-in" when their perspectives are considered. Silva adds, "The subordinate had a personal stake in the outcome…..because he knew he contributed to it intellectually and independently."[329]

4. Exercise Disciplined Initiative

Initiative is encouraged but not at the expense of coordination and collaboration. A "bias for action" is a concept that is found throughout the NWCG leadership literature and is described as the empowerment of wildland fire service leaders to act on a situation that is within their power to influence. Leaders are encouraged to take the initiative and are "duty-bound" to act. The literature acknowledges the chaotic nature of wildfires and that there are times when one person may be the only one to see what needs to be done and to make it happen. It also advocated taking action prior to informing the chain of command may be necessary due to time pressure and need. Initiative by subordinate leaders also frees the leader to focus on higher level tasks and decisions.

Discipline is discussed in the literature in regards to initiative, especially where time pressure and circumstance dictate immediate action. Under these circumstances, fire leaders are admonished to use judgment, work in concert with others, act within the intent of their leaders, develop and communicate a plan, and then inform leaders of actions as quickly as the situation allows.[330]

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329 Silva, "Auftragstaktik: Its Origin and Development," 6.

330 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*, 27.

5. Use Mission Orders

Mission orders are directives that should align with the leader's intent. Of the six mission command principles, mission orders and how to give them, are discussed the least in the Wildland Leadership Development Program literature. Brevity and maintenance of subordinate freedom of action are discussed but only in the context of leader's intent. Wildland fire service leaders are taught to utilize SMART objectives (specific, measurable, attainable, relevant and time-dependent). Mission orders should contain all that the subordinate must know to carry out the mission but nothing more. Otherwise, the orders infringe on the prerogative of the subordinate, and the leadership style becomes authoritarian and potentially micromanaging.[331] As discussed in Chapter III, micromanagement works against the trust and delegation needed for mission command to be successful in an organization.

6. Accept Prudent Risk

The risk and complex nature of the wildland firefighting environment is explained in *Leading in the Wildland Fire Service*:

> We are asked to make tough decisions under a compressed time frame, given limited information in a complex and high-risk environment. This operational environment routinely brings together people, machinery, and the destructive energy of wildfire in the close, three dimensional space of the fireground and its airspace. ...Wildland fire operations have inherent risks that cannot be eliminated, even in the best of circumstances.[332]

It is in this context that much of the command philosophy of wildland fire service is based. While fatality fires have been the catalyst for many of the rules, operating procedures, and organizational controls in the wildland fire service, there is greater recognition that the interpretation of the word "safe" has come to mean a zero defect, full compliance, and unattainable condition of operation. This dilemma was recognized in the 2006 *USFS Fire Suppression Foundational Doctrine*: "(S)afety and performance reliability are seen as proactively managed through alignment with principles of risk

331 U.S. Department of the Army, *Mission Command*, 2-4.

332 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*, 10.

management ….The doctrine views safety as the active process of managing risks than trying to manage outcomes (or compliance with rules)."[333]

There are individuals in the USFS advocating for a "just culture." According to Reason, a "just culture" is a safety management system within an organization that acknowledges human factors and risk management.[334] Holdsambeck proposes that in a mature organizational just culture, information is the lifeblood of safety and learning.[335] All employees must disclose unsafe conditions and individual mistakes, but will only do so with the knowledge that they will be held to account for their mistakes in a fair and reasonable manner.

Holdsambeck describes how risk is viewed differently and how this disparity is perceived in a "Just Culture." According to him, this disparity might be most evident in the risk acceptance "between an office -trained administrator and a highly experienced, battle hardened firefighter. A just culture recognizes this as a human factor, not an error or a causal factor."[336]

This framing of risk complements the mission command ethos where mistakes made in the earnest attempt to meet the leader's intent are treated as a learning opportunity rather than a disciplinary action. The USFS is attempting to move towards a just culture through the use of after-action reviews and facilitated learning analysis (FLA). An FLA is an investigation of an unintended outcome (close call or near-miss incident) with an eye towards learning rather than placing blame.[337]

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[333] Steve Holdsambeck, "Just Culture Part 2: Understanding Why Accidents Happen," *Fire Management Today* 71, no. 1 (2011): 23.

[334] James Reason as quoted in Steve Holdsambeck, "Just Culture Part 2," 23.

[335] Ibid., 27.

[336] Ibid., 26.

[337] U. S. Department of Agriculture, Forest Service, *Facilitated Learning Analysis Implementation Guide*, U. S. Department of Agriculture, Forest Service, 2010, accessed February 28, 2015, http://www.wildfirelessons.net/viewdocument?DocumentKey=180d1fad-7c2d-4f46-98a5-89e75c5443d1, 6.

I. MISSION COMMAND IMPLEMENTATION CHALLENGES IN THE USFS EXPERIENCE

While the USFS leadership changes are aligned with the principles of mission command, there are several challenges that may hinder full implementation. These challenges are discussed in an effort to provide insight for other homeland security organizations that may look to introduce mission command principles as their leadership ethos. These shortcomings are not intended to denigrate the USFS, but to rather point out that these issues or others like them may exist in any organization.

1. Liability

As a result of the political reaction to the Thirtymile fire, federal statutes were passed requiring that all fatality fires be investigated by the Department of Agriculture's Office of Inspector General (OIG), which had *no* experience investigating wildland fires. Criminal proceedings were initiated against the incident commander, Ellreese Daniels, who was charged with: "eleven felonies, including four counts of manslaughter. The charges were later reduced to two counts of making false statements, to which Mr. Daniels pled guilty," according to Gabbert, and served three years of probation.[338]

Subsequently, charges were brought against the incident commander on the 2003 Cramer fire, where two firefighters were entrapped on a fire on the Salmon-Challis National Forest in Idaho. The legal precedents set after these two fires sent an ominous message throughout the firefighting community and especially to those who were looking for increased leadership responsibilities. These actions worked against the organizational trust that is critical for mission command to be successful.

The criminal proceedings against Daniels had a "chilling effect" on the willingness of firefighters to operate in positions of responsibility on fires. In a joint statement of the International Association of Wildland Fire and the Federal Wildland Services Association, which together represent a broad spectrum of firefighters: "Firefighters have been coming forward stating their unwillingness to accept the

338 Bill Gabbert, "Thirtymile Fire, 10 Years Ago Today, and the Consequences," *Wildfire Today*, July 10, 2011, accessed March 10, 2015, http://wildfiretoday.com/2011/07/10/thirtymile-fire-10-years-ago-today/, 2.

responsibilities of making the sometimes split-second decision, only then to find their decisions reviewed with 20–20 hindsight (after) more than five years."[339]

Dick Mangan, who retired from the USFS Missoula Technology and Development Center and investigated more than 20 fire entrapment and fatality incidents, commented on the negative impact of the Thirtymile fire litigation:

> Unfortunately, four people lost their lives. There were obviously mistakes made at a number of different levels. But the way it was (before Thirtymile), everybody else gets the benefit of learning from it, because it is free and open and everyone admits to it. Now there's always the threat that when an investigation or review team comes in, if I tell them something it may be held against me.[340]

This unease about liability will stifle the mission command principles of organizational innovation and willingness to lead. A homeland security organization that implements mission command may want to consider making personal liability insurance available to its personnel.

2. Preparedness

The effectiveness of mission command is dependent on the preparation of subordinates. In addition, training must include leaders who need to understand and implement mission command principles and thus represents a significant investment for an organization. Training subordinates to assume greater responsibility in their efforts to act within their leader's intent, exercise disciplined initiative, and accept prudent risk requires funding and commitment. Stewart makes note that decentralization of authority requires extensive training and education of subordinate personnel. These personnel will also need the ability to coordinate efforts with adjacent forces in order to attain synchronicity. Furthermore, Stewart offers that the investment costs of mission command will be offset in theory by smaller staff organizations at the central headquarters level and improved work performance.[341]

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339 Maclean, *The Thirtymile Fire*, 218.

340 Dick Mangan as quoted by Gabbert "Thirtymile Fire, 10 Years Ago Today," 2.

341 Stewart, "The Evolution of Command Approach."

The continued work of the NWCG Leadership Subcommittee and the ongoing delivery of the L series of courses is a testament to the commitment of the federal wildland firefighting agencies to leadership development. The coursework does require a significant investment of time and funding. While these efforts are preparing individuals to be better leaders, the return on investment is not easy to quantify. However, as Stewart points out, effectiveness might be measured by other indicators.[342] The challenge of shifting an organization towards a different leadership ethos will be in defining and measuring success.

3. Morale

Despite the internal leadership efforts and the introduction of mission command, the USFS has been subject to several external issues that have caused frustration agency wide. Low morale in the last number of years has been caused by budget cuts, employee retention issues, ever increasing administrative and political pressures, and selective promotional practices. Chojnacky muses:

> What happened to the USDA Forest Service?...Once heralded as among the most respected and effective government agencies, the Forest Service has become a case study of bureaucratic red tape and low morale. Employees give it low marks for leadership, ranking it 198th out of 229 agencies in a recent survey (Partnership for Public Service 2011), and describe a stressful and demoralizing work environment.[343]

Fukuyama also ascribes the USFS decline to increasing bureaucracy. He notes:

> …many regard the Forest Service as a highly dysfunctional bureaucracy performing an outmoded mission with the wrong tools… It operates under multiple and often contradictory mandates from Congress and the courts and costs taxpayers a substantial amount of money while achieving questionable aims. The service's internal decision-making system is often

[342] Ibid.

[343] Cindy C. Chojnacky, "Leadership Impact on Forest Service Operations: Intriguing Ideas from Public Administration Theories." *Journal of Forestry* 110, no. 8 (December 2012): 457, accessed January 27, 2015, http://www.ingentaconnect.com/content/saf/jof/2012/00000110/00000008/art00012?crawler=true&mimetype=application/pdf

> gridlocked, and the high degree of staff morale and cohesion that Pinchot worked so hard to foster has been lost."[344]

Retention of qualified individuals, especially in the firefighting ranks, has been an issue for the USFS. Pay disparities and better benefits cause many experienced USFS firefighters to leave and go work for state or local fire agencies. The problem has been especially acute in states like California where the cost of living is high and salaries of state and municipal departments can be almost double the amount paid by the USFS.[345] Local and state firefighters working the same fire as their federal counterparts are paid for 24 hours in a day while the federal time clock stops at 16 hours in a day. These issues will work against the innovation, trust, and camaraderie that mission command requires to be effective.

Despite these issues, the vast majority of USFS firefighters take great pride in the work that is accomplished in managing wildland fire in the nation's forests. There is a strong heritage in the USFS and the symbols such as Smokey the Bear and smoke jumping have attained a certain iconic status. The national forests are treasured by many as places of beauty and recreation. The latest Partnership for Public Service ranking shows the USFS making modest gains in leadership empowerment and overall ranking (moving up 2.9 points in overall rating from 2013).[346] Hopefully, the adoption of the *USFS Fire Suppression Foundational Doctrine* and the emphasis on leadership development will continue this trend by preparing USFS leaders to be more effective in fighting fires and addressing organizational issues.

J. SUMMARY

The USFS experience brings perspective to the issue of how mission command principles can be implemented by a homeland security organization. Fatal fires, such as

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344 Francis Fukuyama, "America in Decay: The Sources of Political Dysfunction," *Foreign Affairs* (September–October 2014), accessed February 7, 2015, http://www.foreignaffairs.com/articles/141729/francis-fukuyama/america-in-decay?nocache=1

345 Erica Werner, "Forest Service Studying Loss of U.S. Firefighters to California Force," *Santa Ynez Valley Journal*, February 14, 2008, accessed January 27, 2015, http://syvjournal.com/archive/6/7/1333/

346 Partnership for Public Service, "The Best Places to Work in the Federal Government Rankings 2014," accessed February 14, 2015, http://bestplacestowork.org/BPTW/rankings/detail/AG1

the South Canyon, Thirtymile and the Mann Gulch, are the catalyst for organizational self-reflection and the search for doctrinal changes by the USFS. The influence of *auftragstaktik* on the USFS doctrine, the bottom-up approach of how the doctrine was formulated, and the extensive leadership educational resources through the Wildland Fire Service Leadership program are positive signs that the mission command principles are being adopted. Leadership, crew cohesion, and sense making provide several lines of inquiry in which to assess the degree to which mission command principles have been adopted. The challenges to implementation were discussed with the prosecution of supervisors associated with fatality fires eroding organizational trust. The low USFS morale is another issue that works against trust and initiative; however, there are signs that these organizational issues are improving.

In the next chapter, an analysis will be conducted using the two case studies and the issue specific perspectives outlined in Chapter III. The IDF and the USFS differ in several ways, including the length of time that each has employed mission command principles and why such an ethos was adopted. Additional benefits and challenges not discussed in the case studies, such as the problems with mentorship programs and how mission command prepares subordinates for leadership responsibilities, will be examined. This analysis will compare several organizational attributes in order to further define how these principles could be used in a homeland security response setting.

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VI. ANALYSIS OF THE IDF AND USFS EXPERIENCE WITH MISSION COMMAND

A. INTRODUCTION

The experience of both the Israeli Defense Force (IDF) and the U.S. Forest Service (USFS) using the principles of mission command indicates varying success. The IDF has utilized its precepts since formation in 1948 and has had a number of military engagements in which to develop the philosophy. The USFS has advocated mission command precepts only since 2003 and has yet to fully institutionalize all of its elements. Both organizations have experienced challenges in the process of implementation: morale and distrust in the case of the USFS; political scrutiny and its involvement with asymmetric warfare in the case of the IDF. Table 1 summarizes mission command implementation in the two case studies and a homeland security response organization using several factors. This summary will be used to compare and analyze the extent to which each organization has been successful in the use of mission command principles. This analysis will consist of a series of observations regarding important facets of the case studies and how they relate to a homeland security organization.

B. ANALYSIS

This analysis will consist of a series of observations regarding important themes of the case studies and how they relate to a homeland security organization. These themes were chosen because they have come up repeatedly in the case studies and are key factors in the implementation of mission command.

1. Trust as the Cornerstone of Mission Command

Trust seems to be the one value that has the greatest impact on the successful implementation of mission command. As indicated in the U.S. Army's first principle of mission command, trust builds the team cohesion that is necessary between superior and subordinate. For a superior, this means trusting subordinates to act within the leader's

intent as the local situation changes.[347] For a subordinate, this means trusting that actions taken in the name of initiative and adherence to intent will be supported by the superior and the organization. Silva further explains this trust dynamic:

> Mission oriented command was based on the idea that undue criticism, after the fact, of the man on the scene—who was in a confused, dangerous, and pressured situation and who had the best command of immediate information—was unwarranted. Anything beyond a constructive critique would only destroy the subordinate's willingness to act and might even lead him to withhold adverse information or provide falsely optimistic reports simply to avoid his superior's wrath.[348]

[347] Silva, "Auftragstaktik: Its Origin and Development," 6–9.

[348] Ibid.

Table 1. Organizational Comparison Based on Mission Command

	IDF	**USFS**	**Homeland Security Organization (ex. fire department)**	**Notes**
Trust	Trust is valued, support of subordinates if mistakes are made	Trust is valued, ad-hoc teams are an issue, Morale may affect trust	Trust is valued, Inter-organizational trust can be an issue	Leader Subordinate trust is developed over time. Swift trust building is discussed in Chapter VII.
Culture	Deeply Imbedded, Societal	Somewhat Imbedded, Occupational	Somewhat Imbedded, Occupational	"Just Culture" and the treatment of error is important in regards to trust (See Ch. V).
Organizational Support	Hierarchical, (less so than others) Military, Minimal doctrine supports initiative	Hierarchical, Semi-militaristic, Rule and policy driven doctrine with 2005 rewrite	Hierarchical, Semi-militaristic, Rule and policy driven doctrine	Pressures on organizations to become heterarchical or networked (Ch. III). Tendency to centralize due to technology (Ch. III).
Mission Orders Leader's Intent	Mission orders and leader's intent are practiced but politics and insurgencies have led to centralization	Leader's intent is being practiced, Mission orders not as widely practiced as detailed orders	Some awareness of leader's intent, Detailed orders are the norm	Leader's giving intent and mission orders as well as subordinates reception of them must be practiced for proficiency (Ch. VII).
Personnel Development	Traditional training and educational methods, Emphasis on practical experience versus formal education	Traditional training and educational methods, Trainee development through task- book system on incidents	Traditional training and educational methods, Mentorship opportunities restricted by civil service rules and discrimination policies	Leadership related training has only recently been emphasized. The Wildland Fire Leadership Development Program is a good example. (Ch. V)
Creativity	Creativity and innovation encouraged	Creativity and innovation somewhat encouraged but restricted due to bureaucracy and tradition	Creativity and innovation somewhat encouraged but restricted due to bureaucracy and tradition	Adherence to organizational norms may preclude bottom-up creativity as discussed in this chapter.

	IDF	USFS	Homeland Security Organization (ex. fire department)	Notes
Risk and Liability	Not an issue during conventional warfare, Insurgency warfare has led to closer scrutiny	Risk is being addressed through "Just Culture" practices, Liability is an issue that has surfaced	Risk and liability are assumed by the organization, Discipline for errors is the norm	All organizations operate in high-risk environments where rapid decision making is required at times.
Reasons for Mission Command Philosophy	Geo-political Conflict Limited Resources Urgency	Fatality Fires Safety Litigation Politics	Safety Flexibility Innovation Effectiveness	Other reasons may include subordinate development and empowerment as discussed in this chapter.
Alignment with U.S. Army Principles of Mission Command	Close Alignment (Has varied due to nature of conflict, officer education, e.g., First Lebanon War)	Some Alignment (Trust, mission orders, tolerance of risk are issues)	Not applicable	These principles seem to build on one another with trust being the critical component
Challenges to Implementation of Mission Command	Insurgencies, Political	Liability, Morale	Authoritative norms, Culture	Other challenges include authoritative norms, micromanagement. These are discussed in Ch. III & VI.

In the USFS example, trust in others may come at great cost. Both environments are high risk with the potential for loss of life. As the USFS experience at the Mann Gulch fire suggests, if there had been better trust between smokejumpers and their leader perhaps others would have survived the fire in the safety of Wag Dodge's burned-out safety zone. The experience of the South Canyon fire suggests that the cohesion (and trust) of the ad-hoc crew had not been developed to the point where anyone was willing to speak out against a risky tactic of cutting a downhill fireline with potential fire down below. Some of the crew had expressed concern about the tactic, but none strongly enough to challenge the direction from the jumper-in-charge or change the course of events. The ambiguous authority described by Useem, Cook, and Sutton in Chapter V could have been a factor in this circumstance. They describe the results of ambiguous authority as "reduced flow of information to the fire leader, a weakened commitment by the leader to exercise authority, and diminished team compliance with the leader's instructions."[349]

Without superior and subordinate trust, innovation, creativity, and prudent-risk taking are stifled. Organizational trust is important too. This is the knowledge that the organization will tolerate the errors that will invariably result due to increased innovation and expanded leadership authority at lower levels of the organization. The experience of the USFS in the aftermath of the Thirtymile and Cramer investigations was that individuals were not willing to assume incident leadership due to liability concerns. This distrust of organization and leadership was the impetus for the implementation of a leadership development program by the USFS.

The IDF case study provides further example of the influence of trust on mission command principles. Captain Orde Wingate was able to gain the trust of the Jewish settlers in Palestine at a time when the British military was perceived as being indifferent to Arab aggressions towards the settlers. Not only did Wingate inspire the settlers, he practiced the mission command principles of decentralization of authority, commander's intent, and independence of action within his organization. Wingate also set the example

[349] Implied by Edmondson and Watkins in Useem, Cook, and Sutton, "Developing Leaders for Decision Making Under Stress," 467.

for his subordinates by participating in missions with his squads and sharing their hardships.

Moshe Dayan trained with Wingate's Special Night Squads, which may have influenced Dayan in later years as a commander, chief of staff for the IDF, and Defense Minister in Israel. Dayan's support of his subordinates, especially those that showed initiative in the face of danger, was discussed in Chapter V. His trust and backing of his subordinates, even when they made mistakes, has had an influence on the fighting ethos of the IDF ever since.

Lack of trust also plays a significant role in organizational effectiveness. The USFS experience, as discussed in Chapter V, provided several examples of leaders thrust into positions of command over subordinates who had not worked together. The ad-hoc nature of these events restricted the ability of the leader or subordinates to build trust beforehand. As a result, team cohesiveness suffered and the efforts resulted in tragedy. While the potential for an ad-hoc crew deployed to fight a wildfire or conducting a military assault against an enemy position will always exist, leaders and subordinates must recognize this circumstance and take steps to overcome it. Building trust quickly in ad-hoc teams will be discussed in Chapter VII.

For a homeland security response organization considering the implementation of mission command principles, trust will be the cornerstone. This trust must exist at a personal, unit (such as a crew or team), and organizational level in order to be successful. Laine notes, "High reliability organizations often relate to emergency situations where you need to have absolute trust in your partner or team. Firefighters, police and aircraft crews are a few examples of organizations where trust is a necessity."[350] While many emergency response organizations have high levels of trust and camaraderie, there will be some for which trust will need to be improved.

Inter-organizational trust can be an issue especially at large-scale, all-hazards events that require increased collaboration. Nahmod describes the challenge that response

[350] Nina Laine, "Trust in Superior-Subordinate Relationship: An Empirical Study in the Context of Learning" (dissertation, University of Tampere, 2008), 26.

agencies in New York City experience in the preparedness, response, and mitigation of large incidents.[351] He points out several factors that work against collaboration, including organizational culture, different operating norms and values, and lack of collaborative capacity. Nahmod also offers several recommendations to increase collaborative capacity, including: increased interagency training, joint duty assignments, and preparing first-line (initial response) supervisors to become more collaborative.[352]

Blomqvist and Stahle discuss both inter-personnel and inter-organizational trust from a business setting. They mention that researchers are not in agreement whether trust can be created intentionally, and "the link between personal and organizational trust is not been clear. It would seem that logical to say that it is always the people and not organizations that trust each other."[353] The authors conclude that it is possible to enhance the conditions for trust-building within an organization. The leader of an organization can set the tone in this regard and should have the most influence on the conditions that build trust in an organization. In order for a homeland security organization to embrace a leadership ethos, such as mission command, trust will need to be examined. Further recommendations on building organizational trust will be provided in Chapter VII.

2. The Influence of Organizational Culture and Mission Command

Culture has a significant influence on the ability to implement change within an organization. Watkins explains that while there is little consensus on what organizational culture is that "Culture is consistent observable patterns of behavior in organizations."[354] Formalities, communications, and procedures—or organizational norms—dictate these patterns of behavior and thus must be considered as a part of an organization's culture. These norms abound in organizations that are generally hierarchical and stratified, such

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[351] Abdo Nahmod, "The Collaborative Capacity of the NYPD, FDNY, and EMS in New York City: A Focus on the First Line Officer" (master's thesis, Naval Postgraduate School, 2010), 3.

[352] Ibid., 40.

[353] Kirsimajara Blomqvist, and Pirjo Stahle, "Building Organizational Trust," in *Proceedings of the 16th Annual IMP Conference* (2000), accessed February 8, 2015, http://www.impgroup.org/uploads/papers/37.pdf, 4.

[354] Michael Watkins, "What is Organizational Culture? And Why Should We Care?" *Harvard Business Review* (May 2013), accessed February 9, 2015, https://hbr.org/2013/05/what-is-organizational-culture/

as those found in the military and homeland security response environments. However, these norms also act as roadblocks on the path toward decentralization. Barney notes that older and larger organizations may have less flexible organizational cultures than younger and smaller ones, but cultural change is still possible. Organizations that are simultaneously loosely and tightly coupled typically have a culture with a strong set of core values (one that encourages creativity and innovation).[355]

The organizational culture of the IDF allowed commanders to operate with a mission command ethos in general but to be authoritative or detailed when the situation warrants. As discussed in Chapter V, General Ariel Sharon's actions against the fortified Egyptian positions at Abu Agheila during the initial stages of the 1967 Six Day War provided an example of a situation where the synchronicity of resources required detailed orders. This organizational flexibility to be mission-based or detailed-based, depending on the circumstances, must start with a culture of mission command precepts in order to be successful. Shamir provides further detail by stating, "You can move from mission command to detailed command… this is easier. But it is almost impossible to move from detailed command, if your culture is detailed command…it is almost impossible to move to mission command."[356] Based on their experience and capability, subordinates will need varying degrees of control and attention from a leader, but all direction should begin with a leader's intent and mission command principles.

This flexibility is important for a homeland security organization, such as a fire department, where the bulk of work day responses, such as building fires, heart attacks, and traffic accidents, are handled in a highly scripted and highly routine fashion. It is the crisis response such as an active shooter incident, earthquake, or terrorist attack where innovation and "out of the box" thinking will be important. Like all capabilities, a mission command mindset must be practiced and can be repeated on routine incidents.

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[355] Jay B. Barney, "Organizational Culture: Can it be a Source of Sustained Competitive Advantage?" *The Academy of Management Review* 11, no. 3 (July 1986): 659.

[356] Eitan Shamir in a video of a talk given on October 13, 2013 and posted online entitled: "Dr. Shamir discusses the philosophy of mission command. He is the author of the book *Transforming Command*, a study on the implementation of the philosophy of mission command in the American, British, and Israeli Armies." The talk can be found at http://www.benning.army mil/mssp/Mission%20Command/ Comments made starting at 40 minutes.

Just as the Incident Command System is implemented (though not a necessity) on any incident with the potential to grow, so should the practice of mission command principles, if for no other reason than to practice. After all, leader's intent, mission type orders, shared understanding, and initiative (hallmarks of mission command) define a style of organizational control. The principles of mission command guide a relationship between superiors, subordinates, and peers within an organization regarding how to set about accomplishing the work that is to be done. There is no reason that these principles could not be practiced even in administrative or non-emergency settings. Further thoughts on the implementation of mission command by a homeland security organization are contained in Chapter VII.

Leaders who emphasize the principles of mission command as organizational culture risk being judged by their subordinates and peers by those very same principles. In the previous section, trust and the need for leaders to set the example was discussed. Chatman and Eunyoung Cha describe the potential hypocrisy when they note, "Over time, an event inevitably occurs that puts leaders at risk of being viewed as acting inconsistently with the very values he or she has espoused."[357] Honest and open communications, acknowledgement of mistakes, and a just-culture approach to correcting errors needs to be practiced by all echelons of an organization. The IDF's approach to lesson learning (with the leader discussing their own mistakes first) was noted in Chapter IV. The USFS has embraced the after-action review (AAR) as a lesson learning process, and there are several supporting documents on the leadership development website describing how an AAR can be successfully conducted. An online Wildland Fire Lessons Learned Center was established in 2002 and provides best-practice information on how to derive and communicate the correct lessons learned from an incident.[358]

These feedback actions are generally practiced by homeland security organizations at least at the crew or unit level. Lessons-learned processes and dissemination become less effective in larger organizations due to issues of shame or

[357] Jennifer A. Chatman, and Sandra Eunyoung Cha, "Leading by Leveraging Culture," *California Management Review* 45, no. 4 (2003): 29.

[358] "Home," Wildfire Lessons Learned Center, accessed March 9, 2015, http://www.wildfirelessons.net/home

blame and must be handled appropriately. How mistakes are treated varies from organization to organization, and this disparity can be addressed through the use of mission command principles. As discussed in the previous chapter, the online Wildland Fire Lessons Learned Center provides a template for homeland security organizations that wish to learn from unintended outcomes and move toward a just culture.

3. Organizational Support and Mission Command

Organizational support is necessary in order for a mission command culture to flourish. Adoption of doctrine that supports mission command, such as the *USFS Fire Suppression Foundational Doctrine*, is just a beginning. Moving a hierarchical organization to one that is more decentralized requires considerable effort. It is possible for any leader to individually initiate a mission command style of leadership with subordinates, but organizational acceptance is the goal. Vassiliou points out that personnel at all echelons will need to think and act differently. He remarks, "Higher levels of command must become accustomed to delegating and not over-specifying or micromanaging missions. Lower levels must become accustomed to taking initiative and not receiving highly detailed orders."[359] Stewart notes that subordinates conditioned to detailed command "will expect and prefer to receive detailed direction, even in high-risk situations."[360] It is this mindset that must be changed. On an organizational scale, the example of the IDF in the 1982–2000 South Lebanon Conflict suggests that the principles of mission command must be continually reinforced or centralization and micromanagement will prevail.

Organizational support may extend to rooting out leaders who abuse their authority. Benson and Fontenot claim that due to misinterpretations of mission command within the U.S. Army, a "cult of command" has surfaced and that cohesive thinking or groupthink have manifested.[361] Rather than producing an environment where open discourse and critical feedback are encouraged, the Army's adoption of mission

[359] Vassiliou, *The Evolution towards Decentralized C2*, 12.

[360] Stewart, "Mission Command: Problem Bounding or Problem Solving?" 51.

[361] Ibid., 34.

command has led to a dark side, where commander-centric ideas and cohesion of command staff has produced groupthink. As similarly discussed in Chapter III, the authors propose that the solution is not to abandon the philosophy of mission command, but to ensure that commanders do not act cavalierly under the guise of initiative.[362]

Micromanagement and toxic leadership were discussed in Chapter III, and while both issues have received recent attention by the U.S. military community, neither the IDF nor the USFS is immune. As defined by Reed, three elements of toxic leader syndrome could describe more than a few leaders in organizations as large as the IDF or the USFS. These elements are: "1) An apparent lack of concern for well-being of subordinates; 2) A personality or interpersonal technique that negatively affects organizational climate; 3) A conviction by subordinates that the leader is motivated primarily by self-interest."[363] Nelson notes that the organizational support is important for mission command to be successful. He elaborates, "Broad acceptance (of mission command) is particularly important since any Auftragstaktik-like approach must be implemented from the top downward in the chain of command. Implementation can be blocked by any commander who wishes to operate in a centralized fashion."[364] Toxic leaders, cults of command, and micromanagers—any one of these elements will negate the mutual trust, identified as a principle of mission command, and from an organizational standpoint must not be tolerated.

The morale challenges within the USFS have impeded the implementation of mission command. Issues of wages, cost-cutting, attrition, and liability dampen the spirits of employees who are being asked to innovate and take risk. The USFS foundational doctrine changes are a promising sign that, with time, risk and error will be placed in the proper perspective in the wildland fire suppression environment. Their focus on leadership development will help hasten the solutions needed to address these organizational issues.

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[362] Fontenot, and Benson, "The Conundrum of Mission Command," 28–35.

[363] George Reed, "Toxic Leadership," *Military Review* 84, no. 5 (July–August, 2004): 67.

[364] Nelson, "Auftragstaktik," 32.

Issues of morale, organizational support, and poor leadership are applicable to any homeland security response organization. Leaders will need to ensure that organizational support exists for a shift towards mission command. This will require clear understanding and training regarding the concept. Case studies from the military may help illustrate the principles of mission command to a homeland security agency, but examples from similar organizations, such as other law enforcement or fire service agencies, would be better received and comprehended. Unfortunately, the literature on such examples is lacking, as noted in the literature review of Chapter II. Organizational and supervisor feedback surveys are tools that could provide senior leaders with a better sense of the organizational culture and potential problem areas, and other suggestions will be examined in the next chapter.

4. Mission Orders and Leader's Intent

Mission orders must be utilized and practiced by leaders. As discussed in the IDF case history in Chapter IV, military leaders such as Wingate, Sharon, and Talik gave mission-style orders and communicated their intent to subordinates. This resulted in understanding and action even when direct communications could not be maintained. While the USFS case study provided no specific examples, its evolution towards leading with intent was reviewed. Had the crewmembers on the South Canyon fire been given the latitude through leader's intent to think of better ways to control the west flank fireline, perhaps the tragedy could have been averted. Prior to engagement, an open discussion between the leader and the various crew members might have covered the following points: 1) The intent is to control this flank of the fire in a safe manner 2) Building fireline downhill is a risky tactic 3) We have not worked together before 4) What are everyone's concerns and suggestions? This process would have empowered the collaborative creativity and experience of the group as a whole. Unfortunately, a discussion like this never took place; the piecemeal fashion in which the various firefighters arrived might have been one reason why and the need to "get to work" may have been another.

The framing of direction in terms of intent and mission orders requires practice. The *Kriegsakademie* was the Prussian military's war academy and intellectual center for general staff officers during the 1860s. The manner of how orders were written was given a high priority in the officer corps at the academy, and the training emphasized clarity and conciseness with consideration of maximum latitude for discretion by the subordinates that were to carry out the orders.[365] Orders below the brigade level were verbal. Bucholz describes the expectation in the Prussian military for giving direction: "Simplicity, brevity and lucidity were the watchword of orders."[366]

The leader's intent was the most important component of the order in the Prussian military. Nelson elaborates on the importance of intent:

> In carrying out their tasks, the subordinates were to always focus on the intent. It was virtually sacrosanct. Subordinates using initiative in response to the unexpected had to conform, insofar as possible, with this intent. Thus, the commander's intent promoted unity of effort in fluid situations which failed to conform nicely to plans and expectations. The intent, therefore, both circumscribed and focused the exercise of initiative in subordinates.[367]

Intent took precedence over detailed planning, which often became irrelevant as the situation changed. When subordinates altered a task or did not carry it out, they were to inform their superior; the subordinate was held responsible for the consequences.[368] A bias for action over inaction was highly encouraged. When mistakes occurred, leniency was granted for those acting within leader's intent and displays of initiative.

A visual representation of the communication of intent is shown in Figure 4. This figure illustrates how a remote supervisor can direct the subordinate (local agent) through intent-based direction. Following the work-flow from left to right, the remote supervisor has communicated both detailed-based direction (in the form of task, order and mission) and also intent. In carrying out this direction, the local agent follows a procedural or

365 Shamir, *Transforming Command*, 40.

366 Bucholz, *Moltke and the German Wars 1864–1871*, 58.

367 Nelson, "Auftragstaktik," 25.

368 Bungay, "The Road to Mission Command," 7.

canonical path using the detailed based direction, which is adequate to meet objectives one, two and three. If these directions become invalid due to an unanticipated event or condition (as shown by the jagged line at "f") the local agent has the authority to create a "work-around" or alternate path of action ("g") by following the supervisor's intent.

Through conveyance of intent, the supervisor allows the local agent the freedom to react to an unforeseen event within the bounded solution space. The desired end state is still reached but perhaps in a novel or better way than initially planned. The path labeled "h" represents a course of action that is outside of the bounded solution space or leader's intent and may not be acceptable. Both the USFS literature and IDF experience suggest that when a deviation or work around occurs, it is incumbent that the local agent communicates the change to superior and impacted peers.

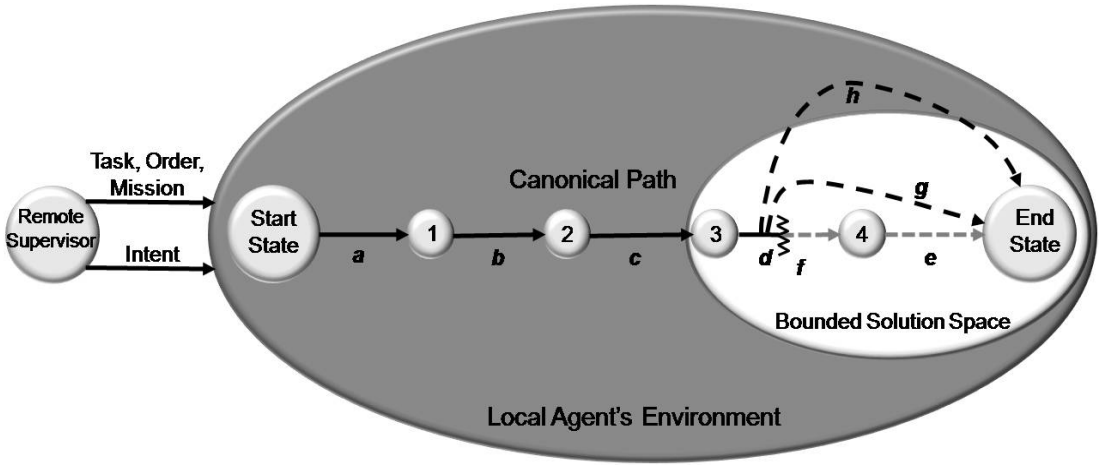

Figure 4. Communicating Intent: Path versus State[369]

Communication of intent and utilization of mission orders are skills that must be practiced and utilized in order for mission command to become effective. Subordinates must be receptive to listen for and understand intent as a part of this process. Techniques that can be utilized to practice communicating intent and issuing as well as receiving mission orders are reviewed in Chapter VII.

[369] Lawrence Shattuck, email to author, December 13, 2013.

5. Personnel Development and Mission Command

What better method to prepare subordinates for leadership than by allowing them to assume responsibility, make interdependent decisions, and act decisively? Mission command provides a framework to "lean forward" in regards to subordinate development. It also requires subordinates to think creatively and anticipate leader's actions. Furthermore, the mission command dynamic also allows leaders to provide intent but yet become more detailed in direction depending on the experience and capability of each individual subordinate. Thus, subordinates in need of greater coaching or seasoning can be given the extra attention while the more experienced subordinates can be trusted and empowered to act within the bounds of the leader's intent.

Mentorship programs are when certain individuals within an organization are paired with a more experienced individual in order to provide career guidance. These programs, especially the informal ones, can be perceived as favoritism unless applied to every subordinate equally. Clutterbuck elaborates on the difficulties with mentorship programs: "Resentment from people not included is common (along with) …gossip, especially with cross-gender pairs."[370] Mentorship within a government agency that is governed by civil service rules and grievance procedures may draw complaints or worse by those not given the same opportunity. In comparison, mission command prepares all potential leaders as a byproduct of the intent-based process.

The Wildland Fire Leadership Development Program, used by the USFS and described in Chapter V, is an example of a tiered educational program. This program contains curriculum designed for multiple echelons of personnel, from entry-level wildland firefighter to leaders of leaders. The L-series of courses are also aligned with leader positions (squad, unit, supervisor, general staff section chief, command staff officer, and incident commander) within the Incident Command System (ICS). The trainee position designation within ICS also allows hands-on training and leadership development through incidents. As an additional training tool, the USFS has embraced

[370] David Clutterbuck, *Why Mentoring Programmes and Relationships Fail* (Burnham, IL: Clutterbuck Associates, 2011), 4.

the "staff ride," a concept developed and refined by Moltke in the 1800s.[371] In addition, sand table exercises are also a component of USFS training, much like the military's use of sand tables for decision making in simulated terrain.

A high priority is given to subordinate development by homeland security organizations. Yet, the training and educational focus is usually on skill-based tasks. Leadership courses are not prevalent in the homeland security enterprise, as the experience of the USFS prior to 2001 revealed. Recently, more attention is being placed on the role of leadership education by response organizations. In order for the concept of mission command to be understood, some sort of educational program and material must be introduced.

6. Unleashing Organizational Creativity through Mission Command

Under mission command principles, instead of relying on the wisdom of a few hierarchical leaders, individuals at all levels of an organization become engaged to solve problems. The tradeoff for organizational creativity is the loosening of controls. As discussed in the IDF experience, military leaders and their subordinates came up with several innovative methods to overcome obstacles. The use of "swarming" techniques against a Palestinian insurgency in Nablus by the IDF was one example. The USFS experience indicated several occasions where innovation and creativity might have prevented tragedy. An example is the hypothetical discussion with the leader and subordinates about concerns and suggestions on the west flank fireline of the South Canyon fire.

Creativity is not an easy quality to promote within a traditionally hierarchical organization. Vego elaborates on the obstructions to creativity in an authoritative organization such as the military:

> Like any other large organizations, military institutions are often heavily bureaucratized. They force their members to apply numerous fixed techniques and procedures in the erroneous belief that this would enhance effectiveness. Yet it has just the opposite effect because the rank-and-file

[371] Antulio J. Echevarria II, "Moltke and the German Military Tradition: His Theories and Legacies," *Parameters* 26, no. 2 (spring 1996): 91–99.

> relies on a fixed routine instead of judgment and experience. The mission of the institution is increasingly forgotten or ignored. The chiefs of various departments or sections create veritable fiefdoms of power and influence and try to devise ways to protect and expand their authority and power. They are also often resistant to any change because change is considered a threat rather than an opportunity. Hence, any novel idea is usually dismissed as impractical, irresponsible, or absurd. The existing rules and regulations become the ends in themselves.[372]

Another obstruction to creativity in a hierarchically dominate organization is the concern that superiors may look bad. The effect of this worry is described by Vego:

> The highly centralized and hierarchical command organization reinforces the authoritarian tendencies on the part of higher commanders. Authoritarianism is a major obstacle to the creativity of both individuals and the military institution as a whole. Often, higher commanders are reluctant or unwilling to acknowledge their own failings openly or tacitly. They try to keep the image of infallibility. They also often refuse to learn from their errors. Finding someone to blame for errors and accidents is a common occurrence in a military organization. Authoritarian structures allow pressure only to be applied top-down, not bottom-up. Yet in practice it is from the bottom that creative ideas are usually generated.[373]

The shift from hierarchical norms is apparent in both the IDF and USFS, even though they operate in environments that are typically regimented and tightly controlled. Creativity and innovation are a result of this shift and increase organizational effectiveness is improved, at least in the case of the IDF. The USFS experience with mission command principles is more recent and changes in organizational effectiveness may take some time to develop. In the homeland security response environment, hierarchical thinking is discouraging creativity and innovation. The fire service, for example, is being challenged to improve its delivery of emergency medical services (which represents 80 percent of their incident responses) in the face of competition from private medical service companies. Creativity and innovation through mission command might be useful in this circumstance.

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[372] Milan Vego, "On Military Creativity," *Joint Forces Quarterly*, 70, no. 3 (2013): 84.

[373] Ibid., 84.

7. Risk, Liability and Mission Command

Both the IDF and USFS operate in high-risk work environments where mistakes can be fatal. The tolerance for fatalities in these organizations is different, however, with wildland fire suppression, as a civilian occupation, which operating under higher safety expectations and less tolerance for casualty. Yardley and Kakabadse describe mission command as "…inherently a risk-taking management methodology which empowers individuals to analyze directives, question their relevance as the situation unfolds and to take executive decisions when required." [374] While neither organization would intentionally sacrifice the lives of their personnel, the element of risk is an ever-present reality and must be managed. Mission command addresses the risk of subordinate personnel making command decisions through the use of prudent or calculated risk. This requires reasonable estimation, analysis, and mitigation considerations by subordinates prior to execution of an action. Clancy acknowledges that human factors play a role in the assessment of risk in the wildland firefighting environment and remarks, "There will always be variability in judgments when people are involved in the risk assessment process." [375] He advocates an assessment model that consists of two components, a simplified risk- rating matrix, which limits the choices available in assessing risk, and a decision model that highlights cognitive biases.

Liability is a concern for both IDF and USFS. Legal precedents in both homeland security response and military environments are placing individuals operating in these conditions under increased pressure to perform without flaw. Krulak's article entitled "The Strategic Corporal: Leadership in the Three Block War," described in Chapter IV, is an example of the pressures on those who must perform under increasing scrutiny.[376] Hopefully, future legal decisions acknowledge the difficulties of decision making in these environments. A concern about liability will be an obstacle towards the innovation and

[374] Yardley, and Kakabadse, "Understanding Mission Command," 74.

[375] David Clancy, "Can Acceptable Risk Be Defined in Wildland Firefighting?" in *Proceedings of the Second Conference on the Human Dimensions of Wildland Fire* (April 2010): 1.

[376] Krulak "The Strategic Corporal: Leadership in the Three Block War."

willingness to lead that mission command requires. As discussed in Chapter V, personal liability insurance offered by an organization to personnel may be a solution.

C. CONCLUSION

The comparison of both the IDF and USFS experiences in the use of mission command principles provides insight for any homeland security organization considering the adoption of a similar leadership ethos. Several observations were made based on this comparison with trust, culture, and organizational support recognized as the key components in order for mission command to be successful. Creativity and subordinate development were two organizational facets that would be enhanced through the use of mission command principles. In addition, risk and liability were discussed and these issues may hinder the implementation of mission command if not addressed. The success of the IDF in using these principles was discussed; however, the success of the USFS may not be as apparent. This could be attributed to the fact that the USFS has only recently (since 2003) attempted the requisite organizational shift, as compared to the IDF, which has utilized mission command principles since its inception in 1948.

In the next chapter, a conditional recommendation will be proffered that mission command should be adopted by response organizations within the homeland security enterprise. In addition, an implementation plan will be provided for those organizations that choose to implement this leadership ethos. Within this plan will be strategies for ways to market such a philosophy, identification of influential groups within an organization, and the circumstances that can lead to organizational change. Finally, a conclusion will be drawn as a summarization of the key elements within this thesis.

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VII. MISSION COMMAND: RETOOLING THE LEADERSHIP PARADIGM

A. INTRODUCTION

The IDF and USFS experience with mission command indicates that a homeland security response organization can benefit from this leadership ethos. However, this recommendation is conditional, and the nature of these conditions will be discussed in this chapter. Both the IDF and USFS encountered difficulty in the implementation process and their experience is useful for an organization that is looking to follow suit. In addition, a plan for implementation from both a policy and a marketing perspective is suggested in this chapter. A Department of Homeland Security policy on mission command does not currently exist; however, several resources are provided that most closely mirror the mission command precepts.

The IDF and USFS each have adopted mission command principles out of circumstance—the IDF due to a need for a rapid, flexible response in a geo-politically, constrained security environment, and the USFS due to a need for leadership development in an accident intolerant environment. This chapter also reviews circumstances that favor an organizational shift by a homeland security response agency and the potential challenges. Finally, the chapter conclusion highlights remaining questions and issues, avenues for further research, and the key elements within this thesis.

B. RECOMMENDATION TO ADOPT MISSION COMMAND

The research and analysis for thesis leads to the recommendation that homeland security response organizations should consider the implementation of mission command principles in order to respond to crises more effectively. This recommendation is conditional and is based on the ability of an organization to train personnel to accept and apply these principles, to address liability issues as a result of potential error, and to garner the trust and willingness of operational personnel to operate in a new paradigm. Since crisis response (as defined in Chapter I) is not an everyday occurrence for an organization, the mission command precepts will need to be practiced during non-crisis

events and even while performing daily administrative functions. Shamir recommends (in Chapter IV) that an organization's operating policy be based on mission command principles as the norm with the flexibility to move to a detailed-style of command as circumstances dictate.[377] This requires a paradigm shift in a homeland security organization's leadership ethos.

Mission command relieves superiors from some of the decision-making pressure in chaotic conditions. From a psychological and practical standpoint, it also serves to empower subordinates to lead upwards, and it can increase organizational nimbleness, effectiveness, and innovation. The leadership burden of centralized control and the resulting power of decentralization are described by Wheatley:

> The personal impact on leaders' morale and health is also devastating. When leaders take back power, when they act as heroes and saviors, they end up exhausted, overwhelmed, and deeply stressed. It is simply not possible to solve singlehandedly the organization's problems; there are just too many of them! One leader who led a high risk chemical plant spent three years creating a highly motivated, self-organizing workforce. He described it this way: 'Instead of just me worrying about the plant, I now have nine hundred people worrying. And coming up with solutions I never could have imagined.'[378]

As mentioned in the first chapter, the flexibility of moving from a hierarchical organizational model to one that is more collaborative and networked should be helpful to a response agency, especially in the event of a terrorist or catastrophic situation. Homeland security crisis response demands that organizations become more heterarchical (and less hierarchical) due to the widespread impact of these events and the increased number of agencies that will be involved.

Mission command provides this flexibility and allows for more detailed and authoritative direction when necessary. Hierarchical norms, such as rank, position, and

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[377] Eitan Shamir in a video of a talk given on October 13, 2013 and posted online entitled: "Dr. Shamir Discusses the Philosophy of Mission Command. He is the author of the book, *Transforming Command*, a study on the implementation of the philosophy of mission command in the American, British, and Israeli Armies." Comments made starting at 40 minutes. http://www.benning.army.mil/mssp/Mission%20Command/

[378] "How Is Your Leadership?" Margaret Wheatley, accessed February 19, 2015, http://www.margaretwheatley.com/articles/howisyourleadership.html

approval, are still maintained within an organization, but command becomes intent-based rather than detail-based. Mission command simply changes the dynamic of how direction is given, received, and acted upon.

The results of implementing mission command principles will be limited, however, unless there is organizational support and cultural acceptance. The training expense, uncertain liability, and organizational trust are conditions that must be addressed by an organization. These are not easy issues to overcome as both the IDF and USFS have demonstrated. While the IDF example shows success with these principles, the effectiveness of the USFS experience is yet to be determined. This disparity might be explained based on the shift to a mission command paradigm and the time required of an organization, steeped in a detailed-command culture, to move towards mission command.

Sinek suggests that leaders in successful organizations are able to communicate why the organization exists or why a change is needed.[379] This aligns with the mission command precept of giving clear leader's intent by describing the task, purpose, and end state. There must be shared understanding (another mission command precept) within the organization about the need to embrace mission command or it risks being perceived as the latest leadership fad.

C. MISSION COMMAND IMPLEMENTATION PLAN

A comprehensive plan is needed to prepare a homeland security organization for the actions necessary to implement mission command. Training and education is a major component, as General Martin Dempsey has indicated in his directive to the armed services (and mentioned in Chapter I):

> Leaders must be taught how to receive and give mission orders, and how to clearly express intent. Students must be placed in situations of uncertainty where critical and creative thinking and effective rapid decision making are stressed. Training must replicate the chaotic and uncertain nature of military operations. Training must place leaders in situations where fleeting opportunities present themselves, and those that see and act appropriately to those opportunities are rewarded…Training

[379] Sinek, *Why Start with Why*, 6.

> must reinforce in commanders that they demonstrate trust by exercising restraint in their close supervision of subordinates.[380]

Based on the experience of IDF and USFS, the following steps are directed at any emergency response organization (or leader) that wishes to move from a hierarchical, directive command philosophy to one that is mission-based:

1. Analysis

Examine historical organizational effectiveness during crisis management through the use of after-action reviews or by an independent audit. Several questions should be asked: Are there deficiencies or areas where improvement is needed? Would the use of mission command principles increase the effectiveness? Would the culture of the organization allow such a change? Does the organizational doctrine support such a concept as mission command or does it need revising? If the answers to these questions are affirmative, then a leadership shift to mission command should be considered.

2. Case Studies

Examine how others have implemented mission command through case studies.[381] For example, the IDF experience provides a number of examples that can be used organizationally. Additionally, the U.S. Army has adopted mission command as doctrine and has established the Mission Command Center of Excellence to provide further information.[382] Historical accounts of military operations and how mission command has been used are available in the book; *Sixteen Cases of Mission Command*, edited by Donald Wright. As explained in the forward "This collection of historical vignettes seeks to sharpen our mission command philosophy and practice by providing examples from the past in which mission command principles played a decisive role."[383]

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380 Martin Dempsey quoted in Michael Flynn, and Chuck Schrankel, "Applying Mission Command through the Operations Process" *Military Review* 93, no. 2 (March–April, 2013): 31.

381 Vandergriff, "Misinterpretation and Confusion," 11.

382 U.S. Department of the Army, *Mission Command*, 2.

383 Donald P. Wright, ed. *Sixteen Cases of Mission Command* (Fort Leavenworth, KA: Combat Studies Institute Press, 2013), iii.

3. Decision Point

The organization or leader must make a conscious decision to shift to a mission command ethos. Optimally, this would be decided with the support of organizational personnel or key players. In order to transform an organization, Kotter recommends that a powerful guiding coalition should be formed that can lead the effort and overcome barriers.[384] In addition, several influential groups within and around an organization will need to be convinced. These groups are discussed in the implementation strategy section.

4. Educate, Train, and Practice

If the decision is made to implement mission command, several aspects need to be considered. Organizational awareness, personnel education and training, and practice of the skills needed for mission command are essential in order for mission command to be effective. Decentralization of authority in an organization requires significant investment towards training and education of both leaders and subordinate personnel. These subordinates need to be proficient in their normal responsibilities and prepared to take the initiative as the opportunity arises.[385] From the U.S. Army doctrine on mission command: "Commanders at all levels need education, rigorous training, and experience to apply these principles effectively."[386]

For example, communication of intent and use of mission orders are techniques that must be practiced for proficiency. Opportunities for practice by a homeland security organization can be as simple as a discussion at the morning line-up or shift briefing. Additionally, leader's intent can be added to any detailed-based direction as an added clarification. Subordinates can be empowered to ask for clarification if the intent is not clear. As in the Prussian *Kriegsakademie,* what-if scenarios or table-top exercises can be utilized to practice potential events and the issuance of mission orders.

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384 John P. Kotter, "Leading Change: Why Transformation Efforts Fail," *Harvard Business Review OnPoint* (March–April, 1995): 59–67, accessed March 2, 2015, http://www.sykehusapoteket.no/Upload/Topplederprogrammet/Litteratur/2.1%20Leading%20Change%20-%20Why%20Transformation%20Efforts%20Fail%20by%20JP%20Kotter.pdf

385 Stewart, "The Evolution of Command Approach."

386 U.S. Department of the Army, *Mission Command*, 1-4.

5. Maintain the Focus

As the IDF and USFS experiences demonstrate, there is a need to maintain the focus on mission command principles. The establishment of a standing committee within the organization would serve this purpose, much like the NWCG leadership committee efforts discussed in Chapter V. Not only would a standing committee work to ensure that mission command principles are being practiced, but it could be utilized as the conduit to provide organizational feedback. Additionally, oversight of "just-culture" practices such as facilitated learning analysis and after-action reviews could be another responsibility.

Other mission command focused efforts might include benchmarking organizational trust and the development of "swift-trust" awareness. As an example, Fahy describes swift trust as a solution for the dilemma of ad-hoc teams working towards specific tasks under time constraints.[387] The USFS case study in Chapter V provided several examples of ad-hoc teams that met with tragedy when trust was diminished (amongst other contributing factors). From the book *Building Trust in Diverse Teams: The Toolkit for Emergency Response*, there are four criteria for establishing swift trust: competence (based on a perception that team members are competent), openness with information (team members share information), integrity (team members maintain promises, are team oriented and respectful), and reciprocity (team members are trusting and cooperative).[388] Swift trust awareness and other exercises could be conducted through a leadership program administered by the standing committee.

While there are no mission command training programs specifically for first responders, there are several other programs that can be used for curriculum development or as a basis for training. These programs and resources are discussed in the following section.

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[387] Michael J. Fahy, "Understanding 'Swift Trust' to Improve Interagency Collaboration in New York City" (master's thesis, Naval Postgraduate School, 2012), 4.

[388] Emergency Capacity Building Project, *Building Trust in Diverse Teams: The Toolkit for Emergency Response* (Oxford, U.K: Oxfam Publishing, 2007), 9.

D. MISSION COMMAND PROGRAMS AND RESOURCES

Several resources and programs contain some or all of the precepts that define mission command, and though designed for a different environment, they can be adapted or modified by the homeland security enterprise. The list is not exhaustive but may be used as a starting point for a homeland security organization that decides to implement mission command.

1. United States Army Mission Command Resources

While the IDF's experience with mission command is useful, there is limited open-source material regarding implementation of mission command. The U.S. Army's effort to operationalize mission command has produced a number of resources and discussions that might prove helpful to a homeland security organization looking for insight. While the military environment may not translate entirely to a homeland security setting, there are many similarities, many of which have been discussed in this thesis. Several references are available include: the Army doctrine on mission command, journal articles from *Military Review*, online books from the Combat Studies Institute Press at the U.S. Army Combined Arms Center, and a mission command website that contains several videos and study guides.[389] Another responsibility of the standing leadership committee (recommended in the previous section) could be to coordinate with the Army on training methods and curriculum.

2. Wildland Fire Leadership Development Program

The Wildland Fire Leadership Program has been mentioned several times in reference to the USFS experience. Sponsored by the National Wildfire Coordinating Group (NWCG) of which the USFS is a part, the program provides an impressive array of tools for an organization to orientate, educate and train its members. This program and the course curriculums are closely aligned with the mission command ethos and are accessible to any homeland security response organization. Only the military branches, such as the U.S. Army, have more invested in teaching the principles of mission

389 "Maneuver Self Study Program," U.S. Army Fort Benning, accessed February 19, 2015, http://www.benning.army.mil/mssp/Mission%20Command/

command, but the military courses are not currently available to the homeland security enterprise. Wildland fire suppression is the setting for the instruction and coursework, however the lessons on intent, communication, crew cohesion and leadership transcend organizational disciplines.

An example of this is the L580 "Leadership is Action" course which is conducted at the Civil War battlefield at Gettysburg. An all-hazards responder version of these leadership courses is provided through certain approved vendors. In addition, grant funding through the Department of Homeland Security has been utilized to sponsor these courses through regional Urban Area Security Initiative (UASI) groups. The NWCG document, "Leading in the Wildland Fire Service" expresses the fundamental leadership concepts of the wildland fire service and provides practical guidance regarding leader's intent.[390] Furthermore, this document captures the essence of the mission command philosophy in an easy to read format, is applicable to all homeland security organizations, and is available online at no cost.

3. Leader-Leader Model

On an individual leader level, Marquet describes a type of mission command philosophy that he utilized to transform a poorly performing crew in the book: *Turn the Ship Around! A True Story of Turning Followers into Leaders*.[391] While he was assigned as the captain on the nuclear submarine USS *Santa Fe*, Marquet empowered his crew to become the most improved ship in the Pacific Fleet. His method of encouraging decision-making authority among his subordinates and the resultant change in performance and culture on the submarine are chronicled in the book. Marquet bases his method on a leader-leader relationship with his entire crew rather than the hierarchical leader-follower model. Essentially, this was a command-by-negation technique (discussed in Chapter II) taken to the subordinate level. An example of this crew transformation over time is the conversation below based on Marquet's three pillars of control, competence, and clarity:

Traditional leader-follower pattern:

390 National Wildfire Coordinating Group, *Leading in the Wildland Fire Service*.

391 Marquet, *Turn the Ship Around*.

Captain: "Submerge the ship"
Subordinate: "Submerge the ship, aye"

To push *Control* down in the organization, Marquet began using the following speech pattern:

Captain: "What do you think we should do?"
Subordinate: "I think we should submerge the ship, sir"
Captain: "Then tell me you intend to do that"
Subordinate: "Captain, I intend to submerge the ship"
Captain: "Very well"

Giving control without an assurance of competence could lead to disaster on a nuclear submarine, and so over time, the pattern evolved to include an assurance of technical *Competence*, becoming:

Subordinate: "Captain, I intend to submerge the ship."
Captain: "What do you think I'm concerned about?"
Subordinate: "You're probably concerned about whether it's safe to do so"
Captain: "Then convince me it's safe"
Subordinate: "Captain, I intend to submerge the ship. All crew are below decks, the hatches are shut, the ship is rigged for dive, and we've checked the bottom depth."
Captain: "Very Well"

The final evolution of the language added the third pillar—*Clarity* of mission, becoming:

Subordinate: "Captain, I intend to submerge the ship. All crew are below decks, the hatches are shut, the ship is rigged for dive, and we've checked the bottom depth."
Captain: "Is it the right thing to do?"
Subordinate: "Yes sir, our mission requires that we submerge now in order to …(classified reason)"
Captain: "Very Well"[392]

The final evolution captures the leader-leader pattern that soon became the norm for the crew of the USS *Santa Fe*. The effect of this communication was to shift authoritative control by "emancipating" subordinates and creating thinking leaders.

Marquet's leader-leader model provides a practical method to promote the mission command principles of initiative and decentralization of authority. It also provides a pattern of interaction that ensures the leader's intent is understood and being followed. Additionally, the subordinate's learning development is enhanced by changing

[392] Peter Green, "Agile and Leadership—Turn the Ship Around," accessed February 19, 2015, http://blogs.adobe.com/agile/2014/10/10/agile-and-leadership-turn-the-ship-around/

the leader-subordinate dynamic. The model provides a way of interacting that any homeland security organizational unit, crew, or division could implement.

4. "Just Culture"

A "just culture" provides a solution to the issue of liability created by subordinates taking prudent risk (a mission command principle). The term "just culture" (discussed in Chapter V) provides a solution to the dilemma of error and discipline. Reason posits, "the problem of human error can be viewed in two ways: the person approach and the system approach."[393] Franklin, Leonard, and Denham explain, "A 'just culture' is about fair, enlightened, and reasonable assessment of behavior and produces a work environment that supports high reliability." They point to Reason's unsafe acts algorithm and give the example from Kaiser Permanente, which adapted the algorithm using four simple questions:

> Did the employee intend to cause harm?
> Did the employee come to work drunk or equally impaired?
> Did the employee knowingly and unreasonably increase risk?
> Would another similarly trained and skilled employee in the same situation act in a similar manner (Reason's substitution test)?
>
> If the first three answers are "No" and the last "Yes" the origin of the unsafe act lies in the organization, not the individual.[394]

The adoption of a "just-culture" approach to error would bolster the organizational and individual trust, which is necessary for a mission command ethos to be successful. It would also assist in the creation of shared situational awareness, another mission command precept. Finally, a "just culture" would encourage subordinate initiative and willingness to assume greater responsibility by removing the disciplinarian approach to error.

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393 James Reason, "Human Error: Models and Management," *West Journal of Medicine* 172, no. 6 (June 2000): 393.

394 Allan S. Frankel, Michael W. Leonard, and Charles R. Denham, "Fair and Just Culture, Team Behavior, and Leadership Engagement: The Tools to Achieve High Reliability," *Health Services Research* 41 (August 2006): 1697.

E. MISSION COMMAND IMPLEMENTATION STRATEGY

An organizational implementation strategy is necessary once a decision is made to move forward with mission command. The influence from groups within and outside of an organization must be considered in order to enact this change. The following is a perspective regarding these groups and potential avenues of support.

1. Group Influence

The "rules governing how people rule"[395] were discussed in reference to hierarchical organizations in Chapter I. Bueno de Mesquita and Smith elaborate further by pointing out that all organizations contain a mix of interchangeable, influential, and essential groups. These groups, and how they intersect, unlock the political puzzle of how those in power maintain power.[396] This framework is worth discussing in light of the implementation of mission command as a policy within an organization.

The interchangeables are the individuals who are the followers in a homeland security organization. This group includes supervisors, who have supervisors, and work in a followership mode as a part of their job responsibilities. Generally, these individuals constitute the majority of the work force within an organization. Patrol officers within a police department would be considered interchangeables, for example.

The influentials are those that are in positions of leadership or in supervisory roles. These individuals are key to implementing mission command although this group may not have decision-making authority regarding adoption of the policy. Watch commanders and lieutenants are examples of the influentials within a police department.

The essentials are those that are in positions of authority that can effect change in an organization and have direct influence on the leader. Examples of individuals in this group are the deputy police chiefs or deputy fire chiefs, the union president, or one who is motivated enough to bring change to an organization. Essentials may be those that are outside of an organization such as a city manager, local news reporter, or the police

395 Bueno de Mesquita, and Smith, *The Dictator's Handbook*, 17.

396 Ibid., 7.

chief's spouse. Ultimately, the customers or the community served has a voice in a democratic society. It is to their benefit that a more efficient means of conducting business should be pursued and their influence must be considered.

2. Policy Changes, Rewards, or Punishments

The interchangeables (subordinates) have experience greater opportunities to influence decision making and improve the effectiveness of their homeland security organizations. They have increased opportunity to interact with other organizations, especially during crisis response, and are looked to for innovation and initiative. The basket of goods increase for this group and thus ultimately benefits the organization as a whole; however, there are be some in this group who will not benefit.[397] Organizational culture, inexperience, concern about litigation or failure, and peer pressure may be reasons why certain interchangeables are not willing to assume greater responsibility under a decentralized organizational model. As much as the leaders' trust of followers is a key component of mission command, follower trust in the leader and the organization is equally important.

The influentials (supervisors) experience the greatest change if a policy of mission command is implemented. The shift in decision making will require this group to relinquish some of their authority. Their directive communication to subordinates must become intent-based rather than authoritative. This is a shift from detailed command, where subordinates are told what to do and how to do it. As mentioned previously, intent based direction opens up the opportunities for subordinate innovation, especially in a dynamic environment when a change in plan is necessary. The influentials have to build greater trust between themselves and their followers. Their focus evolves to serving the purposes of the lower echelons or layers in order to support organizational resiliency.[398]

The essentials (decision makers) also need to relinquish some of their decision-making authority and to support their subordinates when mistakes occur. As van der

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397 Houghton, and Yoho, "Toward a Contingency Model," 65.

398 Donella H. Meadows, *Thinking in Systems: A Primer* (White River Junction, VT: Chelsea Green Publishing, 2008), Kindle location 1505.

Heijden posits, "organizations in fast changing environments tend to decentralize, with top management acting more as a coordinating body than as a setter of strategy."[399] Their reward is in leading an organization that will perform better in crisis response by being resilient, flexible, innovative, and nimble.

3. Opportunities for Implementation of Mission Command

Unfortunately, the impetus to change often only follows on the heels of tragedy, as the USFS experience suggests. Another example is the genesis of the Incident Command System, which was designed after the 1970 wildfire siege in California described in Chapter III. While tragedy provides a strong incentive to change, it is hoped that the implementation of mission command can be promulgated before the next crisis event occurs.

Organizational leaders will need convincing that mission command has a benefit. "Essentials" and "influentials" can have a role in convincing leaders and identifying needed improvements. The challenge will be to gain support and effect change throughout the entire HSE. As mentioned in Chapter I, the homeland security enterprise is vast. Along with the 22 federal agencies that work under the Department of Homeland Security, the homeland security enterprise consists of 18,000 law enforcement agencies, 30,000 fire departments, and thousands of public health, hospital, and other response organizations. To enact change in such a large and widespread industry would be a monumental task. However, there is precedent—the Incident Command System and the National Incident Management System, which were mandated through presidential directive and implemented through the Department of Homeland Security in 2004.[400]

It took decades before the Incident Command System (ICS) was adopted as a nationwide standard after being validated by the California wildland fire suppression community. ICS was born out of a local need (the southern California fires of 1970) and adapted nationwide after other disasters in true bottom-up fashion. Like ICS, the policy

399 Kees van der Heijden, *Scenarios: The Art of Strategic Conversation* (West Sussex, UK: Wiley, 2011), Kindle location 1397.

400 White House, *Homeland Security Presidential Directive (HSPD)–5: Management of Domestic Incidents* (Washington, DC: General Printing Office, 2003), 229.

of mission command should be ground truthed at a regional level. If the principles of mission command are determined to be successful, then a wider audience will follow.

F. CONCLUSION

Wheatley captures the challenge of leadership during crisis, when she states, "I'm sad to report that in the past few years, ever since uncertainty became our insistent 21st century companion, leadership has taken a great leap backwards to the familiar territory of command and control."[401] The authoritative and hierarchical approach just does not fit well in the current crisis management environment described by Waugh and Streib as one of "shared authority, dispersed responsibility and collaborative networking."[402]

A new leadership paradigm is needed, one that recognizes chaos and complexity, yet has the flexibility to be either loosely guided or tightly controlled. Encouraging subordinates at the point of action to be creative and opportunistic can be a force multiplier in terms of organizational nimbleness and effectiveness. According to Yardley and Kakbadse, mission command "enables an organization to achieve unity of effort, focus and momentum whilst empowering individuals to use their own discretion and initiative in the implementation process."[403]

While the intent of this thesis is to establish a nexus between military mission command and potential use by a homeland security response organization, there are several areas or themes that were only touched upon and require further research. One area is the means of measuring the effectiveness of mission command principles, which currently is anecdotal at best. Another area is quantitative research on the impact of mission command on critical decision making during crisis (faster, simpler, less stressful?). A third area for research is the impact of technology on hierarchical organizations and a deeper look at private industry efforts to decentralize and collaborate.

The thesis supposition from Chapter I was that if homeland security response organizations can become more decentralized and collaborative, they can respond to

401 "How Is Your Leadership?" Margaret Wheatley.

402 Waugh, and Streib, "Collaboration and Leadership," 131.

403 Yardley, and Kakbadse, "Understanding Mission Command," 69.

crisis events more effectively. A mission command ethos encourages this decentralization and collaboration. The case study experience indicates that by adoption of these principles the IDF was more effective than its adversaries from a military perspective. However, the case study experience from the USFS suggests that in order for mission command to be effective, it will take more than decentralization and collaboration. Trust, culture, support, training, awareness, and funding are all critical organizational facets that must be considered in detail.

The nature of crisis in the twenty-first century with the added dilemma of human-caused destruction through terrorism demands a reappraisal of response methodology. Flexibility is necessary to respond effectively to events that are complex in nature. Without a change, the lessons of past homeland security crises will be repeated and lives that could have been saved will be lost. Homeland security leaders faced with the possibility of managing these crises in the future would do well to consider the principles of mission command.

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