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**STRATEGIC MUTUAL AID RESPONSE TO
TERRORISM: A NEW APPROACH**

by

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March 2020

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**STRATEGIC MUTUAL AID RESPONSE TO TERRORISM:
A NEW APPROACH**

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Submitted in partial fulfillment of the
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ABSTRACT

This research examines military doctrine and warfare maneuver strategy to determine its efficacy for improving law enforcement command and control efforts for mutual aid during paramilitary terrorist attacks. A qualitative analysis of case studies was conducted on terrorist attacks in Boston, Paris, and San Bernardino to uncover commonalities with the law enforcement response challenges. The identified law enforcement challenges were then compared with aspects of warfare maneuver strategy and military doctrine that were shown to demonstrate utility for improving law enforcement response efforts. The results indicate that warfare maneuver strategy and military doctrine can be used to improve law enforcement command and control efforts for mutual aid during paramilitary terrorist attacks. Recommendations include implementing a reciprocal model of command and control, establishing a strategy for providing mutual aid resources during paramilitary terrorist attacks, and providing training that reinforces key principles of military doctrine without creating a police force that mirrors the military. To summarize, this is a SMART approach, a Strategic Mutual Aid Response to Terrorism.

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TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	PROBLEM STATEMENT	1
B.	LITERATURE REVIEW	3
1.	Introduction.....	3
2.	Military Doctrine	3
3.	Paramilitary Terrorism.....	5
4.	Mutual Aid.....	7
5.	Summary.....	9
C.	RESEARCH QUESTION	9
D.	RESEARCH DESIGN	9
II.	CASE STUDIES.....	11
A.	INTRODUCTION.....	11
B.	BOSTON MARATHON BOMBING	11
1.	Terrorist Attack	11
2.	Law Enforcement Response.....	14
3.	Conclusion	19
C.	PARIS TERRORIST ATTACKS.....	20
1.	Terrorist Attacks.....	20
2.	Law Enforcement Response.....	22
3.	Conclusion	24
D.	SAN BERNARDINO TERRORIST ATTACK.....	25
1.	Terrorist Attack	26
2.	Law Enforcement Response.....	29
3.	Conclusion	33
E.	CASE STUDY COMMONALITIES	34
F.	SUMMARY	36
III.	MILITARY DOCTRINE	37
A.	INTRODUCTION.....	37
B.	MANEUVER WARFARE STRATEGY	37
1.	Nature of War	38
2.	Theory of War	41
3.	Maneuver Warfare	43
C.	COMMAND AND CONTROL	45
1.	Nature of Command and Control	45
2.	Theory of Command and Control.....	49

3.	Creating Effective Command and Control.....	54
D.	STRATEGY AND TACTICS	57
1.	Nature of Strategy and Tactics	57
2.	Strategic and Tactical Theories	58
3.	Applying Strategy and Tactics.....	63
E.	SUMMARY	67
IV.	ANALYSIS	69
A.	INTRODUCTION.....	69
B.	BOSTON MARATHON BOMBING	69
1.	Maneuver Warfare Strategy Applied	69
2.	Command and Control Applied	71
3.	Strategy and Tactics Applied.....	78
C.	PARIS ATTACKS	82
1.	Maneuver Warfare Strategy Applied	82
2.	Command and Control Applied	86
3.	Strategy and Tactics Applied.....	90
D.	SAN BERNARDINO ATTACK.....	93
1.	Maneuver Warfare Strategy Applied	93
2.	Command and Control Applied	95
3.	Strategy and Tactics Applied.....	99
E.	SUMMARY	101
V.	RECOMMENDATIONS AND CONCLUSION.....	103
A.	INTRODUCTION.....	103
B.	RECOMMENDATIONS.....	103
C.	CONCLUSION	106
	LIST OF REFERENCES.....	107
	INITIAL DISTRIBUTION LIST	113

LIST OF FIGURES

Figure 1.	Unidirectional and Reciprocal Models of Command and Control.	47
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LIST OF TABLES

Table 1.	Method of Attack, Boston Terrorists	14
Table 2.	Law Enforcement Response Challenges, Boston Marathon Bombing	19
Table 3.	Method of Attack, Paris Terrorists.....	22
Table 4.	Law Enforcement Response Challenges, Paris Terrorist Attacks	24
Table 5.	Method of Attack, San Bernardino Terrorists.....	28
Table 6.	Law Enforcement Response Challenges, San Bernardino Terrorists Attack	33
Table 7.	Method of Attack among the Three Case Studies	34
Table 8.	Results of Attack among the Three Case Studies	35
Table 9.	Law Enforcement Response Challenges among the Three Case Studies.....	35
Table 10.	Boston Marathon Bombing Maneuver Warfare Strategy Applied	71
Table 11.	Boston Marathon Bombing Command and Control Applied	77
Table 12.	Boston Marathon Bombing Strategy and Tactics Applied	81
Table 13.	Paris Attacks Maneuver Warfare Strategy Applied.....	85
Table 14.	Paris Attacks Command and Control Applied.....	89
Table 15.	Paris Attacks Strategy and Tactics Applied.....	93
Table 16.	San Bernardino Attack Maneuver Warfare Strategy Applied	95
Table 17.	San Bernardino Attack Command and Control Applied	98
Table 18.	San Bernardino Attack Strategy and Tactics Applied	101

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LIST OF ACRONYMS AND ABBREVIATIONS

BRI	Brigade de Recherche et d'Intervention
CIA	Central Intelligence Agency
DHS	Department of Homeland Security
EHS	Environmental Health Services
EOD	explosive ordnance disposal
FBI	Federal Bureau of Investigation
FIPN	Force d'Intervention de la Police Nationale
FSB	Federal Security Service
ICS	Incident Command System
IRC	Inland Regional Center
MMT	militarized maneuver terrorism
MSP	Massachusetts State Police
NIMS	National Incident Management System
OODA	Observation-Orientation-Decision-Action
PTAs	Paramilitary Terrorist Attacks
RAID	Recherche, Assistance, Intervention, Dissuasion
SBPD	San Bernardino Police Department
SMART	Strategic Mutual Aid Response to Terrorism
SUV	sports utility vehicle
SWAT	Special Weapons and Tactics

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EXECUTIVE SUMMARY

Contemporary strategies for managing law enforcement resources during terrorist attacks rely on mutual aid and rapid deployment. While these two combined strategies are useful when responding to lone, active-shooter attacks, they have not been effective strategies for stopping paramilitary terrorist attacks (PTA). PTAs are by multiple terrorists who are trained and well-armed, and who use military tactics in urban terrain to nullify law enforcement response efforts. Fortunately, the law enforcement profession does not need to develop its own conceptual framework for addressing these challenges. For decades, U.S. military war colleges have combined scholarly and applied research to create doctrine and warfare maneuver strategies to deal with human conflict.¹ And while the mission of the military is distinctly different from law enforcement, the challenges associated with human conflict are the same. This thesis asks the following question: How can military doctrine and maneuver warfare strategy be used to improve law enforcement command and control efforts for mutual aid during active PTAs?

The following research examines PTAs that occurred in Boston, Paris, and San Bernardino. These case studies were chosen because, in each attack, terrorists used militarized infantry tactics in urban terrain to neutralize law enforcement response. The comparative analysis of all three case studies identified common law enforcement response challenges. Specifically, law enforcement suffered from an uncoordinated police response, police self-deployment, and police vehicles blocking ingress and egress to the location of attacks. Next, the research focuses on Marine Corps' warfighting doctrine and maneuver strategy publications to study the nature of human conflict and related theories.

The Marine Corps philosophy of maneuver warfare explains how the combination of decision-making, mission tactics, and commander's intent are used to fight smartly. An examination of the nature and theory of command and control shows how the command and control structure can be used to create swift and harmonious efforts to defeat an

¹ *Encyclopedia Britannica*, s.v. "war college," accessed June 12, 2019, <https://www.britannica.com/topic/war-college>.

opponent. Furthermore, the relationship between strategy and tactics uncovered how strategy is a problem-solving process, which commanders can use to gain an advantage and defeat an opposing force. While strategy focuses on the goals to be achieved, tactics refer to the concepts and methods used to achieve those objectives.²

A comparison of the Marine Corps strategic concepts with the law enforcement challenges identified in the case studies revealed solutions for improving law enforcement command and control efforts for mutual aid during active PTAs. The following recommendations focus on further actions to be carried out by police executives/commanders at municipal, county, and state law enforcement organizations.

- (1) Police executives should implement a reciprocal model of command and control to improve mutual aid efforts during PTAs.

All three case studies examined in this thesis demonstrate that police response to active PTAs gravitate toward disorder. A reciprocal model of command and control can assist law enforcement commanders and subordinates with capitalizing on rapidly emerging opportunities to exploit terrorist vulnerabilities when responding to PTAs.

- (2) Police leadership should establish a strategy for providing mutual aid resources during PTAs while maintaining response capabilities within their own jurisdictions.

A continual challenge in all three case studies was the self-deployment of officers. Law enforcement executives should create a process for identifying and dispatching their police officers to neighboring jurisdictions that are confronted with a PTA. At the same time, the law enforcement organization providing mutual aid should retain adequate resources within its own jurisdiction so it has the appropriate resources to respond to a secondary PTA in the organization's area of responsibility.

² U.S. Marine Corps, *Tactics*, Marine Corps Doctrinal Publication 1-3 (Washington, DC: Department of the Navy, 1997), 3, <https://www.marines.mil/Portals/59/Publications/MCDP%201-3%20Tactics.pdf>.

- (3) Police executives should implement training that reinforces the importance of mission tactics, low-level initiative, and shaping the environment to improve law enforcement response to PTAs.

Law enforcement executives should ensure subordinates receive training that emphasizes low-level initiative while reinforcing the importance of restrictive control measures. Commanders should also be provided with training that exposes them to the common challenges associated with the positions they hold in the command and control structure.

- (4) Create, develop, and deliver a formalized training program to improve law enforcement command and control efforts during PTAs and other acts of terrorism.

Unlike the military, the law enforcement profession does not have a formalized education institution to instruct law enforcement commanders in the theoretical framework of maneuver, strategy, and command and control efforts to effectively mitigate the challenges associated with PTAs. The Center for Homeland Defense and Security at the Naval Postgraduate School is in the ideal position to bring together experts, develop such a course, and lead a new intellectual renaissance for how the law enforcement profession thinks about, prepares for and responds to PTAs.

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More than twenty-five years ago, as a young Marine, I never imagined I would have the honor and privilege of walking through the sacred halls of the Naval Postgraduate School. The Center for Homeland Defense and Security was created out of the smoldering ashes of the terrorist attacks on September 11, 2001, and I will never forget the immense burden we bear to protect our homeland from future threats, both foreign and domestic. This thesis is not the finish of some great race but is merely a ticket to the starting line. To my fellow classmates, we have been called upon to build up a new generation of scholars to guide and protect America's freedom and prosperity for future generations, which is not a task for the faint of heart. The real work starts now.

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I. INTRODUCTION

A. PROBLEM STATEMENT

The law enforcement profession in the United States has traditionally struggled to prepare for the next attack or other threat to public safety. For example, in 1965 during the Watts Riots in Los Angeles, California, heavily armed snipers systematically targeted law enforcement officers who did not have the strategy, tactics, training, or equipment to adequately stop the threat.¹ Special Weapons and Tactics (SWAT) teams were subsequently developed to counter these threats to society. In 1997, two bank robbers armed with automatic weapons and body armor shot at responding officers who were only armed with handguns and shotguns.² The suspects held the officers at bay while the entire nation watched on live TV.³ After this incident, law enforcement organizations in the United States began to issue rifles to patrol officers. In 1999, in Columbine, Colorado, two teenage suspects killed 13 people and committed suicide before law enforcement officers were in a position to intervene.⁴ The concept of rapid deployment, a strategy used to stop active shooters, was subsequently developed and implemented by law enforcement agencies across the United States.

Law enforcement has been similarly ill-prepared for terrorist attacks on U.S. soil. Over the last decade, from Paris to Boston and San Bernardino, terrorists have used

¹ “S.W.A.T. Special Weapons and Tactics,” Los Angeles Police Department, accessed June 12, 2019, http://www.lapdonline.org/inside_the_lapd/content_basic_view/848.

² Ryan Fonseca, “Timeline of Terror: How the Infamous North Hollywood Shootout Unfolded 20 Years Ago,” Daily News Projects, February 2017, <http://projects.dailynews.com/north-hollywood-shootout/>.

³ Fonseca.

⁴ Illinois State Police Academy, *Rapid Deployment as a Response to an Active Shooter Incident* (Springfield: Illinois State Police Academy, 2003), <https://www.scribd.com/doc/16693309/Rapid-Deployment-as-a-Response-to-an-Active-Shooter-Incident>.

paramilitary tactics to attack urban centers and inflict mass casualties.⁵ Although these paramilitary terrorist attacks (PTA) have been years and miles apart, the persistent pattern identified in each attack was the ease in which terrorists inflicted harm and avoided capture. PTAs are carried out by multiple individuals who are trained and well-armed and who use military tactics in urban terrain to nullify traditional law enforcement response.

Contemporary strategies for managing law enforcement resources during terrorist attacks rely on mutual aid and rapid deployment. Mutual aid is a framework for sharing resources when responding to natural disasters, and while it excels as a means to plan and prepare for critical incidents, it does not guide deployment strategies, tactics, or the means to condense competing efforts into a unified force to combat PTAs. Additionally, rapid deployment is a tactic that was designed to stop lone school shooters and not PTAs.⁶ While these two combined strategies are useful when responding to lone active-shooter attacks, they have not been effective strategies for stopping PTAs. Most importantly, law enforcement lacks a coherent strategy for thinking about how to best plan, prepare, and deploy resources during PTAs. Fortunately, the law enforcement profession does not need to develop its own conceptual framework for addressing these challenges. For decades, U.S. military war colleges have combined scholarly and applied research to create doctrine and warfare maneuver strategies to deal with human conflict.⁷ And while the mission of the military is distinctly different than law enforcement, the challenges associated with human conflict are the same.

⁵ John P Sullivan and Adam Elkus, “Preventing Another Mumbai: Building a Police Operational Art,” *CTC Sentinel* 2, no. 6 (2009); Rick Braziel et al., *Bringing Calm to Chaos: A Critical Incident Review of the San Bernardino Public Safety Response to the December 2, 2015, Terrorist Shooting Incident at the Inland Regional Center* (Washington DC: U.S. Department of Justice, 2016); Massachusetts Emergency Management Agency et al., *After-Action Report for the Response to the 2013 Boston Marathon Bombings* (Washington, DC: Police Foundation, 2014), https://www.policefoundation.org/wp-content/uploads/2015/05/after-action-report-for-the-response-to-the-2013-boston-marathon-bombings_0.pdf.

⁶ Bureau of Justice Assistance, *Mutual Aid: Multijurisdictional Partnerships for Meeting Regional Threats*, NCJ 210679 (Washington, DC: U.S. Department of Justice, 2005), <https://www.hsdl.org/?view&did=456684>; and Illinois State Police Academy, *Rapid Deployment as a Response to an Active Shooter Incident*.

⁷ *Encyclopedia Britannica*, s.v. “war college,” accessed June 12, 2019, <https://www.britannica.com/topic/war-college>.

B. LITERATURE REVIEW

1. Introduction

Paramilitary terrorist attacks on U.S. soil continue to harm the public and frustrate law enforcement efforts to efficiently respond to and stop the threat.⁸ Identifying new response strategies has the potential to improve homeland security and save lives. This literature review has been divided into three sections. The first section reviews key components of military doctrine that include warfighting theory, command and control, and strategy and tactics. The second section analyzes paramilitary terrorism and how it differs from conventional types of attacks. The last section describes law enforcement mutual-aid strategies. It explores the national response framework and the difference between mutual and automatic aid response efforts.

2. Military Doctrine

Several Marine Corps publications make up the framework for understanding the complexities of combat and provide unifying strategies to fight and win wars. These publications are the driving philosophies of the Marine Corps and have significantly affected theories and concepts about war throughout the world.⁹

a. Warfighting

The U.S. Marine Corps' *Warfighting* publication is the foundational document upon which all Marine Corps doctrine, strategy, and philosophy are built.¹⁰ *Warfighting* takes a broad perspective on the nature of war, including its "moral, mental, and physical characteristics and demands."¹¹ The underlying concept is that to wage and win wars successfully, one must understand the nature of war in all its complexities. The complexities of war include challenges such as friction, uncertainty, fluidity, disorder,

⁸ Bill Tallen, "Paramilitary Terrorism: A Neglected Threat," *Homeland Security Affairs* 6, no. 2 (June 2018), <https://www.hsaj.org/articles/123>.

⁹ U.S. Marine Corps, *Warfighting*, Marine Corps Doctrinal Publication 1 (Washington, DC: Department of the Navy, 1997), <https://www.marines.mil/Portals/59/Publications/MCDP%201%20Warfighting.pdf>.

¹⁰ U.S. Marine Corps.

¹¹ U.S. Marine Corps.

violence, danger, and the role that humans play in navigating these dangerous encounters. *Warfighting* brings clarity to the chaos of human conflict while continually reminding the reader that “everything in war is simple, but the simplest thing is difficult.”¹²

b. Command and Control

Command and control is the most critical concept of the Marine Corps warfighting theory.¹³ Without command and control, military operations lose form and function and degenerate into chaos. In contrast, effective command and control cuts through the “fog of war” and provides sharp lines for action and unity of efforts in support of common goals. The application of command and control is known as “mission command and control,” which is best described as a leadership philosophy that encourages action and “embraces calculated risk to generate opportunity.”¹⁴ Mission command and control is unique in that it is best suited for dealing with uncertainty and time, both of which are ever-present challenges in combat.

c. Strategy and Tactics

Marine Corps strategy and tactics build on command and control by providing a framework for understanding the dynamic relationship between policies and the “violent expression of politics,” also known as war.¹⁵ The constant struggle among policy, politics, and conflict is described as a complex adaptive system, which is inherently unpredictable.¹⁶ The challenge for the strategic decision-maker is to develop a resilient strategy while balancing opportunity and risk in the face of uncertainty. Whereas strategy

¹² U.S. Marine Corps.

¹³ U.S. Marine Corps, *Command and Control*, Marine Corps Doctrinal Publication 6 (Washington, DC: Department of the Navy, 1996), <https://www.marines.mil/Portals/59/Publications/MCDP%206%20Command%20and%20Control.pdf>.

¹⁴ U.S. Marine Corps, *Marine Corps Operating Concepts*, 3rd ed. (Washington, DC: Department of the Navy, 2010), <https://www.mcwl.marines.mil/Portals/34/Documents/Concepts/Marine%20Operating%20Concepts%20-%20Third%20Edition%20-%20June%202010%5B1%5D.pdf?ver=2015-12-09-124545-383>.

¹⁵ U.S. Marine Corps, *Strategy*, Marine Corps Doctrine Publication 1-1 (Washington, DC: Department of the Navy, 1997), <https://www.marines.mil/Portals/59/Publications/MCDP%201-1%20Strategy.pdf>.

¹⁶ U.S. Marine Corps.

focuses on when, where, why, and how to bring opposing forces together, tactics focus on the methods needed to win the conflict. Concepts such as exploiting terrain, being faster than the enemy, creating flexible plans, and building an advantage are all examples of tactics used to support the overall strategy.¹⁷

3. Paramilitary Terrorism

a. Defining Terrorism

The first challenge in understanding terrorism is choosing among the more than 250 definitions that exist.¹⁸ This variation most likely stems from terrorism being a concept that can take many different forms and be used in new and creative ways. For this research, the framework for understanding terrorism comprises the definitions used by the Department of Defense and Federal Bureau of Investigation (FBI). The Department of Defense defines terrorism as “the calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological.”¹⁹ Similarly, the FBI defines terrorism as “the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population, or any segment thereof, in furtherance of political or social objectives.”²⁰ Reviewing the numerous definitions of terrorism reveals the pattern of terrorist attacks as political, psychological, violent, dynamic, and deliberate.²¹

In a working paper titled “Evolving Terrorist Threat,” the Strategic Foresight Initiative, which is funded by the Federal Emergency Management Agency, examines key

¹⁷ U.S. Marine Corps, *Tactics*, Marine Corps Doctrinal Publication 1-3 (Washington, DC: Department of the Navy, 1997), <https://www.marines.mil/Portals/59/Publications/MCDP%201-3%20Tactics.pdf>.

¹⁸ Bruce Hoffman, *Inside Terrorism*, 3rd ed (New York: Columbia University Press, 2017), 35.

¹⁹ Office of the Chairman of the Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Washington, DC: Department of Defense, 2019), <https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/dictionary.pdf>.

²⁰ Federal Bureau of Investigation, *Terrorism 2002-2005* (Washington, DC: Department of Justice, 2005), <https://www.fbi.gov/stats-services/publications/terrorism-2002-2005>.

²¹ U.S. Army Training and Doctrine Command, *A Military Guide to Terrorism in the Twenty-First Century* (Ft. Leavenworth: Department of the Army, 2005).

trends and drivers of terrorist tactics and how they may shift to exploit vulnerabilities in the United States.²² The initiative’s research shows that terrorists tend to gravitate toward methods of attack that “avoid effective countermeasures and exploit vulnerabilities.”²³ An example of such a method is an active-shooter incident. The Department of Homeland Security (DHS) defines an active shooter as “an individual actively engaged in killing or attempting to kill people in confined and populated area.”²⁴ It is important to note the DHS’s definition of an active-shooter attack does not account for teams of terrorists who use firearms to kill people. Moreover, while conventional terrorist attacks, such as chemical, biological, or improvised explosive devices, will likely result in more casualties, terrorist active-shooter attacks have a higher chance of success.²⁵

b. Paramilitary Terrorist Attacks

The best way to understand the dynamics of terrorists who use active-shooter tactics to inflict harm is through the lens of paramilitary terrorist attacks. PTAs have been described as “terrorists operating in platoon or squad sized elements using military small arms, improvised explosive devices, and heavy weapons. They use snipers to target first responders and use defensive positions meant to repel assaulting law enforcement officers.”²⁶ These types of PTAs require a significant amount of training, equipment, coordination, and resolve to hold and maintain positions of advantage against responding law enforcement resources.

c. Militarized Maneuver Terrorism

A more common form of PTA is militarized maneuver terrorism (MMT), which involves “multiple (more than two) highly trained individuals, well-armed and capable of

²² Strategic Foresight Initiative, “Evolving Terrorist Threat” (Washington, DC: Federal Emergency Management Agency, September 2011), <https://www.hsdl.org/?view&did=692881>.

²³ Strategic Foresight Initiative, 2.

²⁴ Department of Homeland Security, *Active Shooter: How to Respond* (Washington, DC: Department of Homeland Security, 2008), 3, https://www.dhs.gov/xlibrary/assets/active_shooter_booklet.pdf.

²⁵ Strategic Foresight Initiative, “Evolving Terrorist Threat,” 2.

²⁶ Craig Broyles, “Militarized Maneuver Terrorism” (master’s thesis, U.S. Army Command and General Staff College, 2015), 9, <https://www.hsdl.org/?view&did=793192>.

executing planned and coordinated attacks.”²⁷ MMT avoids direct conflict with law enforcement by using hit-and-run attacks to carry out acts of violence. Hit-and-run attacks, also referred to as swarming attacks, are “quick, coordinated strikes from small units.”²⁸ The primary objective of these tactics is to attack a specific target and then flee before responding forces can arrive to stop the attack or capture the assailants.

While MMT involves more than two attackers committing acts of violence, PTAs can also be carried out by smaller teams of only two terrorists who use firearms and/or explosives to carry out hit-and-run tactics. In its simplest form, and for this research, PTAs are best defined as a team of at least two people who use military tactics, strategies, and equipment to carry out acts of violence.

4. Mutual Aid

a. National Incident Management Systems

The National Response Framework guides the nation’s response to disasters and emergencies and is built on the National Incident Management System (NIMS).²⁹ NIMS is a scalable, flexible, and adaptable concept that assists law enforcement with managing everything from local incidents to natural disasters and even large-scale terrorist attacks.³⁰ The *National Incident Management System* manual produced by the Federal Emergency Management Agency goes into great detail explaining how to establish and maintain command and control during emergencies with the use of the Incident Command System (ICS). ICS establishes procedures for the incident commander to follow, and if the demands of the emergency outweigh the agency’s response capabilities, the incident commander can initiate a request for mutual aid and transition to a unified command.³¹

²⁷ Broyles, 4.

²⁸ John Arquilla and David F. Ronfeldt, *Swarming & the Future of Conflict* (Santa Monica, CA: RAND, 2000), 25.

²⁹ Federal Emergency Management Agency, *National Response Framework*, 3rd ed. (Washington, DC: Department of Homeland Security, 2016).

³⁰ Federal Emergency Management Agency, 7.

³¹ Federal Emergency Management Agency, *National Incident Management System*, 3rd ed. (Washington, DC: Department of Homeland Security, 2017).

b. Mutual Aid Structure

Mutual aid is built on the idea of “neighbor helping neighbor” and can be traced to the early 19th century during the Westward Expansion, when U.S. Army troops helped local county sheriffs.³² One of the earliest challenges with mutual-aid response in California was the lack of statutory authority to create written agreements for sharing resources. The California Emergency Services Act of 1970 established the legal structure for agencies to share resources, and since that time, the use of mutual aid has rapidly expanded.³³ The significant increase of mutual-aid requests was identified during a National Sheriff’s Association Conference in 2005, which led to the U.S. Department of Justice creating the publication *Mutual Aid: Multijurisdictional Partnerships for Meeting Regional Threats*.³⁴ This document reviews the structure of mutual-aid agreements and expands on its utility when used as a part of the ICS structure and NIMS. Moreover, it provides guidance on establishing terms and conditions for mutual-aid agreements and identifies pre-deployment considerations and best practices for activating a mutual-aid plan.

c. Automatic Aid

One of the challenges described in the literature about the mutual-aid process is that it takes time. The incident commander must first realize the demands of an emergency has exceeded current response capabilities and then request mutual aid from a neighboring agency, which must respond to provide assistance.³⁵ A concept to overcome the time delay with responding resources is known as automatic aid, whereby neighboring jurisdictions automatically dispatch resources to the scene of an emergency. Therefore, while the type of assistance offered in automatic aid depends on the emergency, mutual-aid agreements

³² John Baines et al., *Mutual Aid Planning* (Washington, DC: National Sheriff’s Association, 1973), <https://www.ncjrs.gov/pdffiles1/Digitization/11431NCJRS.pdf>.

³³ Bureau of Justice Assistance, *Mutual Aid*, 7.

³⁴ Bureau of Justice Assistance, 7.

³⁵ Federal Emergency Management Agency, *National Incident Management System*, 27–28.

recognize those responding agencies may need to withdraw resources to address emergencies in their jurisdictions.³⁶

5. Summary

This literature review examines the challenges associated with PTAs. Military doctrine and warfare maneuver strategy identify the framework for effectively addressing the uncertainty and complexity intrinsic to human conflict. It suggests that well-established command-and-control structures, coupled with supporting strategies and tactics, can be used to exploit opposing forces while creating opportunities for success and minimizing risks. These same concepts and strategies have also been adopted by terrorists to defeat conventional law enforcement response strategies. The National Response Framework of NIMS and ICS guides mutual-aid strategies but does not adequately address the complexities and challenges associated with PTAs. This literature review emphasizes the need to update current law enforcement response to PTAs. It is expected that a comparative analysis among PTAs, military doctrine, and warfare maneuver strategy will identify new law enforcement response strategies that can be integrated into existing mutual aid response frameworks.

C. RESEARCH QUESTION

This thesis asks the following question: How can military doctrine and maneuver warfare strategy be used to improve law enforcement command and control efforts for mutual aid during active PTAs?

D. RESEARCH DESIGN

The research design involves a qualitative analysis of case studies, military doctrine, and warfare maneuver strategies. Qualitative analysis of case studies is best used to “learn more about an unknown or poorly understood situation.”³⁷ Furthermore, according to Robert Yin, case studies are the “preferred strategy when ‘how’ or ‘why’

³⁶ Bureau of Justice Assistance, *Mutual Aid*, 12.

³⁷ Paul Leedy and Jeanne Ormrod, *Practical Research Planning and Design*, 12th ed. (New York: Pearson, 2019), 92.

questions are being posed” and are useful when attempting to “understand complex social phenomena.”³⁸ The analytical framework focuses on law enforcement response to paramilitary terrorist attacks coupled with military doctrine and maneuver warfare strategies to improve law enforcement command-and-control efforts.

First, I describe each paramilitary terrorist attack on urban centers in chronological order. The Boston Marathon bombing is first, followed by the Paris terrorist attack, and then the San Bernardino terrorist attack. These case studies were selected because, in each attack, terrorists used militarized infantry tactics in urban terrain to nullify law enforcement response. With each case study, I describe the strategies and methods used by the terrorists to carry out their attacks and the law enforcement response to each incident. Then, using the lessons learned as identified in the case studies, I compare the terrorists’ methods and duration of attack, the number of people injured or killed, and the challenges confronting law enforcement response.

Next, I review the Marine Corps warfighting doctrine and maneuver strategy publications to examine the nature of human conflict and related theories of war. This includes describing the correlations between command and control, strategies of incapacitation versus erosion, tactics, and the human dimensions in conflict including friction, uncertainty, surprise, and centers of gravity.³⁹ Last, I compare the Marine Corps strategic concepts with the law enforcement challenges identified in the case studies to illuminate new ways of thinking about solutions for law enforcement preparation and response to PTAs.

³⁸ Robert K. Yin, *Case Study Research Design and Methods*, 2nd ed. (Thousand Oaks, CA: SAGE Publications, 1994), <http://www.madeira-edu.pt/LinkClick.aspx?fileticket=Fgm4GJWVTRs%3D&tabid=3004>.

³⁹ U.S. Marine Corps, *Warfighting*.

II. CASE STUDIES

A. INTRODUCTION

This chapter begins with a review of the 2013 terrorist attack at the Boston Marathon in Massachusetts. The strategies and methods used by the terrorists to carry out their attacks are described as well as with the law enforcement response. I follow the same process for the Paris and San Bernardino case studies. Next, using the information from the official after-action reports from each of these attacks, I list the terrorists' methods and duration of attack, the number of people injured or killed, and the challenges confronting law enforcement response. Charting is used to identify commonalities in all three attacks.

B. BOSTON MARATHON BOMBING

Marathon races are known for testing the limits of human endurance, and the terrorist attacks at the Boston Marathon would test the endurance of an entire city and nation. After the bombs exploded near the finish line, 118 people were transported by ambulance to local hospitals and more than 260 people sought medical attention for injuries received.⁴⁰ It would take first responders three days to locate the suspects, and upon first contact, police were met with explosives and rapid gunfire. The terrorists were able to exploit conventional law enforcement deployment strategies with hit-and-run tactics for at least nine hours before finally taken into custody.⁴¹

1. Terrorist Attack

In 2011, the Russian Federal Security Service (FSB) contacted the FBI and the Central Intelligence Agency (CIA) with information about two brothers, Tamerlan and Dzhokhar Tsarnaev, who were possible Islamic extremists and living in the United States.⁴² The Tsarnaevs immigrated to the United States from Kyrgyzstan in 2003 and the

⁴⁰ Massachusetts Emergency Management Agency et al., *After-Action Report*, 40.

⁴¹ Massachusetts Emergency Management Agency et al., *After-Action Report*.

⁴² Office of the Inspector General, *Unclassified Summary of Information Handling and Sharing Prior to the April 15, 2013 Boston Marathon Bombings* (Washington, DC: Department of Justice, 2014), 1, <https://oig.justice.gov/reports/2014/s1404.pdf>.

FSB had information that the brothers were attempting to meet with extremist terrorist groups in Russia.⁴³ The CIA shared the information with the National Counterterrorism Center, which added the brothers to the terrorist watchlist, but this did not prevent Tamerlan Tsarnaev from traveling to Russia.⁴⁴ It is unclear if Tamerlan met with Islamic extremists while in Russia, but he did begin sharing Islamic extremist propaganda while there.⁴⁵

In 2012, one year after Tamerlan's trip to Russia, the Tsarnaev brothers had fully functional improvised explosive devices and were ready to carry out an attack. During their search for a target, they discovered the Boston Marathon was only a few days away and would be an ideal event to carry out their attack.⁴⁶ On April 15, 2013, the Tsarnaev brothers, each carrying a backpack with an explosive device, placed their backpacks on the ground by the finish line of the marathon and walked away.⁴⁷ At the same time, marathon participants were running across the finish line with arms raised in victory. At 2:49 p.m., runners and spectators suddenly found themselves on the ground with injuries from two deadly explosions.⁴⁸ The police response to the area of the explosion was immediate but the attackers were already gone. The Tsarnaev brothers would avoid contact with law enforcement for the next two days.

On April 18, the FBI held a press conference and while they did not know the names of the attackers, they did release photos of the Tsarnaev brothers that were captured from surveillance cameras during the attack.⁴⁹ A few hours later, the Tsarnaev brothers killed a Massachusetts Institute of Technology police officer because they wanted to steal his gun,

⁴³ Office of the Inspector General, 1.

⁴⁴ Office of the Inspector General, 1, 12.

⁴⁵ Office of the Inspector General, 19.

⁴⁶ Ann O'Neill and Deborah Feyerick, "From Backpacks to 'Flash-Bangs': Boston's Week of Terror," CNN, accessed July 19, 2019, <https://www.cnn.com/2013/04/21/us/boston-week-review/index.html>.

⁴⁷ O'Neill and Feyerick.

⁴⁸ Massachusetts Emergency Management Agency et al., *After-Action Report*, 20.

⁴⁹ Massachusetts Emergency Management Agency et al., 53.

but they were unable to remove it from the safety holster.⁵⁰ At 11:20 p.m., the Tsarnaev brothers carjacked a Mercedes sports utility vehicle (SUV) and drove around with the victim still inside.⁵¹ The victim was eventually able to escape and reported the crime to police as well as the fact that the two suspects identified themselves as the Boston Marathon Bombing suspects and were planning to carry out more attacks.⁵²

On April 15, at 12:19 a.m., dispatchers at the Watertown Police Department told officers about the stolen SUV and that it was being tracked in the area of 81 Dexter Avenue.⁵³ However, the dispatchers did not know that the occupants of the SUV were the suspects from the Boston Marathon Bombing.⁵⁴ A police officer responded to the area and saw the SUV but decided to keep his distance and not act until another officer arrived to help.⁵⁵ The officer advised dispatch that a Honda sedan was following the SUV and both cars made a left turn onto Laurel Street.⁵⁶ As the officer turned onto Laurel Street, Tamerlan Tsarnaev quickly exited the SUV and started walking toward the officer while firing a gun.⁵⁷ At the same time, Dzhokhar Tsarnaev exited the Honda sedan and began throwing improvised explosive devices at the responding officers.⁵⁸ During the ensuing gunfight, Tamerlan was shot by police and as Dzhokhar fled the location in the stolen SUV, he ran over his brother who was lying in the street.⁵⁹ Tamerlan was subsequently taken into custody and later died in a hospital from his wounds but Dzhokhar was still on the run.⁶⁰

⁵⁰ Ann O’Neill, “Marathon Bomber Dzhokhar Tsarnaev Placed at Cop’s Death,” CNN, accessed July 19, 2019, <https://www.cnn.com/2015/03/11/us/boston-bombing-trial/index.html>.

⁵¹ Massachusetts Emergency Management Agency et al., *After-Action Report*, 55.

⁵² Massachusetts Emergency Management Agency et al., 55.

⁵³ Massachusetts Emergency Management Agency et al., 27.

⁵⁴ Massachusetts Emergency Management Agency et al., 55.

⁵⁵ Massachusetts Emergency Management Agency et al., 55.

⁵⁶ Massachusetts Emergency Management Agency et al., 56.

⁵⁷ Massachusetts Emergency Management Agency et al., 56.

⁵⁸ Massachusetts Emergency Management Agency et al., 56.

⁵⁹ Massachusetts Emergency Management Agency et al., 56.

⁶⁰ Massachusetts Emergency Management Agency et al., 57.

At 1:57 a.m., law enforcement established a 20-block perimeter to search for Dzhokhar and advised all residents to shelter in place.⁶¹ After 16 hours of a detailed search and no sign of Dzhokhar, law enforcement concluded their efforts and lifted the order to shelter in place.⁶² Less than an hour later, a citizen was investigating a loose strap on his boat and saw a bloody person hiding inside. The citizen called 911 and within minutes, over 100 police officers were at the location.⁶³ At 8:41 p.m., after a tense standoff, the FBI Hostage Response team persuaded Dzhokhar to surrender, and he was subsequently taken into custody. Table 1 shows the method of attack used by the Boston Marathon Bombing terrorists, as explained in the case study. I use the data from this table to identify the commonalities between methods of attack in the Paris and San Bernardino terrorist attacks.

Table 1. Method of Attack, Boston Terrorists

Method of Attack	Boston
Organization	– Two-person team
Training	– Internet research on how to make improvised explosive devices
Equipment	– Backpacks with explosives – Improvised explosive hand grenades – Handguns
Strategy	– Selected large-scale public event to attack
Tactics	– Hit-and-run – Ambushed police officers

2. Law Enforcement Response

The Boston Marathon is a unique race in that the route of the course is not circular but in a straight line through eight different cities and towns.⁶⁴ The design of the Boston Marathon route requires multi-jurisdiction coordination and extensive pre-planning efforts,

⁶¹ Massachusetts Emergency Management Agency et al., 58.

⁶² Massachusetts Emergency Management Agency et al., 63.

⁶³ Massachusetts Emergency Management Agency et al., 64.

⁶⁴ “Course,” Boston Athletic Association, accessed July 20, 2019, <https://www.baa.org/races/boston-marathon/watch/course>.

which includes a robust public safety committee. Each year, the public safety committee meets in January to review and update their operational plans based on lessons learned from prior events.⁶⁵ The public safety committee also conducts tabletop exercises for many different scenarios such as responding to medical emergencies and even terrorist attacks.⁶⁶ As a result of experience and scenario training, the public safety committee assigns a large contingent of medical personnel and police officers to the finish line.⁶⁷ As a result, when the terrorist bombs exploded at the end of the course, the first responders were already first on scene.

The police officers, medical personnel, volunteers, and even spectators immediately reacted to the bombing attacks by providing medical attention to those who were wounded.⁶⁸ Some police officers began coordinating the response for additional resources and explicitly told responding personnel to avoid blocking the roadway with their vehicles. This coordination allowed ambulances to quickly access the area to gather and evacuate those who needed immediate medical attention within 22 minutes of the bombings.⁶⁹ Police explosive ordnance disposal (EOD) teams who were already staged at the end of the course began to sweep the area for additional bombs while also evacuating people from the area to increase safety and preserve evidence.⁷⁰ At the same time, police officers a mile up from the end of the race blocked the course so that runners were prevented from continuing into harm's way.⁷¹

As police and medical personnel responded to the bombings, senior commanders who were already on scene before the first blast began to form a joint command post, but

⁶⁵ Massachusetts Emergency Management Agency et al., *After-Action Report*, 35.

⁶⁶ Christine M. Cole, Arnold M Howitt, and Philip B. Heymann, *Lessons from the Boston Marathon Bombing* (Cambridge, MA: Harvard Kennedy School, 2014), 6.

⁶⁷ Cole, Howitt, and Heymann, 7.

⁶⁸ Cole, Howitt, and Heymann, 7.

⁶⁹ Cole, Howitt, and Heymann, 8.

⁷⁰ Cole, Howitt, and Heymann, 11.

⁷¹ Cole, Howitt, and Heymann, 11.

had to move several times due to possible nearby secondary explosive devices.⁷² While the senior commanders searched for an optimal location to establish an on-scene command post, police and fire executives decided to meet at the Westin Copley Place Hotel to establish a Unified Command.⁷³ Senior commanders eventually arrived at the Unified Command post at which time coordination efforts began to take shape. For example, the Unified Command directed SWAT teams to deploy at hospitals and other critical areas in case there were secondary attacks.⁷⁴ With no other explosions or known suspects to pursue, the Unified Command transitioned from a response mode to investigative operations. In a few days' time, the terrorists would resurface and their use of hit-and-run tactics would test the resolve of responding police.

During the early morning hours of Friday, April 19, the Watertown police officer driving behind a stolen SUV and a suspicious Honda sedan had no idea he was following the terrorists from the Boston bombing. As the officer followed the vehicles onto a side street, he was immediately met with gunfire from the terrorists.⁷⁵ A police sergeant arrived on-scene within seconds of the first gunshots and both officers returned fire while also radioing for help from surrounding police agencies.⁷⁶ By all accounts, the ensuing gun battle was chaotic as the terrorists continued to shoot at responding officers while also throwing improvised explosive devices.⁷⁷ The response of additional police was overwhelming and consisted of officers from Watertown PD, Boston PD, Cambridge PD, the Transit Police, and the Massachusetts State Police (MSP), which resulted in over 200 bullets fired by law enforcement officers.⁷⁸ When officers finally shot and tackled Tamerlan Tsarnaev, the second terrorist, Dzhokhar Tsarnaev, got into the stolen SUV and

⁷² Cole, Howitt, and Heymann, 10.

⁷³ Cole, Howitt, and Heymann, 11.

⁷⁴ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 43.

⁷⁵ Massachusetts Emergency Management Agency et al., 56.

⁷⁶ Massachusetts Emergency Management Agency et al., 56.

⁷⁷ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 21.

⁷⁸ Massachusetts Emergency Management Agency et al., *After-Action Report*, 56.

attempted to drive away. Because so many of the responding officers parked in a manner that blocked other police cars from moving, no officers were able to give immediate pursuit.⁷⁹ Dzhokhar abandoned the SUV a half-mile away and escaped capture at that time.⁸⁰

The resulting 18-hour search by law enforcement officers trying to capture Dzhokhar would be filled with confusion and conflict. Police cordoned off an area 20 blocks wide to search for the terrorist and a shelter in place order was put in place to keep the public out of harm's way.⁸¹ The initial searches for Dzhokhar were uncoordinated and driven by independent actions taken by officers on the ground. A contributing factor to the confusion was that over 2,500 officers from 166 different federal, state, and police agencies arrived at the operations staging area, many of who self-deployed without requested by higher command.⁸² Moreover, the Unified Command did not create a system to track or manage these additional officers so over time the officers would respond to areas on their own accord based on radio traffic.⁸³ A unified command was eventually obtained and the decision was made to divide the search area into grids with teams of officers assigned to search specific grids.⁸⁴ The process for a systematic search quickly unraveled. First, search teams were unable to secure the areas they had already cleared, which meant that Dzhokhar could have easily doubled back and hid in a location that was already checked.⁸⁵ Second, as teams were searching their assigned grids, the Command Post would reassign them to other areas based on 911 calls from residents who saw or heard something suspicious.⁸⁶

⁷⁹ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 22.

⁸⁰ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 56.

⁸¹ Massachusetts Emergency Management Agency et al., 58.

⁸² Massachusetts Emergency Management Agency et al., 61.

⁸³ Massachusetts Emergency Management Agency et al., 62.

⁸⁴ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 25.

⁸⁵ Cole, Howitt, and Heymann, 25.

⁸⁶ Cole, Howitt, and Heymann, 25.

After 16 hours, law enforcement abandoned their search and removed the order to shelter in place.⁸⁷

When a citizen in Watertown discovered a person hiding inside his boat, he immediately called 911 and within minutes, three officers from Watertown PD and three from the Boston PD were at the location.⁸⁸ The senior officer on-scene, believing the person hiding in the boat could be the outstanding terrorist, radioed for help from a tactical team.⁸⁹ The second the transmission went out, a multitude of police officers from different agencies heard the request and decided to self-deploy to the area. Within minutes over 100 police officers surrounded the residence with the boat.⁹⁰ The area surrounding the target location was chaotic. Officers were fighting over who was in charge and seconds later a tactical officer, positioned on a nearby roof, saw movement in the boat and decided to shoot his rifle.⁹¹ The area erupted in police gunfire. A commander who was on-scene can be heard on audio tapes shouting for officers to “cease fire” but bullets continued flying for at least 10 seconds with hundreds of rounds being fired.⁹² As the gun smoke cleared, an incident commander finally emerged and was able to gain control of the scene. The FBI’s Hostage Rescue Team, which includes crisis negotiators, started negotiating with Dzhokhar and after almost two hours, he was finally taken into custody.⁹³ Table 2 shows the law enforcement response challenges as explained in the case study. The data from this table is used to identify the commonalities between the law enforcement response challenges in the Paris and San Bernardino terrorist attacks.

⁸⁷ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 62–63.

⁸⁸ Massachusetts Emergency Management Agency et al., 64.

⁸⁹ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 27.

⁹⁰ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 64.

⁹¹ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 27.

⁹² Cole, Howitt, and Heymann, 28.

⁹³ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 64.

Table 2. Law Enforcement Response Challenges, Boston Marathon Bombing

Law Enforcement Response	Boston
Challenges	<ul style="list-style-type: none"> – Uncoordinated police response – Police officers self-deployed – Police vehicles blocked ingress and egress routes – Police unable to pursue fleeing terrorist – Lack of weapons discipline

3. Conclusion

In the aftermath of the Boston Marathon Bombing, the U.S. House of Representatives Committee on Homeland Security (the Committee) investigated the circumstances regarding the terrorist attack and released their findings in March 2104.⁹⁴ Members of the Committee traveled to Russia to learn more about Tamerlan Tsarnaev’s activities there but the information they gathered was conflicting. The Committee did not find any evidence that Tamerlan had connections to an external terror network but they did state it was possible Tamerlan’s trip to Russia afforded him the opportunity to meet with Islamist extremists.⁹⁵ In 2014, attorneys who were preparing to prosecute Dzhokhar Tsarnaev filed a pre-trial motion that stated it “would have been difficult for the Tsarnaevs to fabricate successfully without training or assistance from others ... strongly suggesting that others had built, or at least helped the Tsarnaevs build, the bombs, and thus might have built more.”⁹⁶ It is still unclear if the Tsarnaevs had help in planning their attack or how they learned to use the explosives they detonated. What is clear is that with the use of

⁹⁴ Michael McCaul et al., *The Road to Boston--Counterterrorism Challenges and Lessons from the Marathon Bombings* (Washington, DC: U.S. House of Representatives Committee on Homeland Security, 2014), 1, <https://www.hsdl.org/?abstract&did=751158>.

⁹⁵ McCaul et al., 14.

⁹⁶ “Unanswered Questions About Tamerlan Tsarnaev,” WBUR, June 15, 2017, <https://www.wbur.org/radioboston/2017/06/15/tsarnaev-mcphee-fbi>.

explosives, firearms, and hit-and-run tactics, the Tsarnaev brothers successfully killed 5 people, injured over 260, and avoided capture for five days.⁹⁷

C. PARIS TERRORIST ATTACKS

Paris is the capital city of France and is located in the northern part of the country. The city is divided into 20 districts and contains 717 “sensitive urban zones,” the majority of which are populated by Muslims who experience the highest rate of poverty and unemployment.⁹⁸ The large population of young, disenfranchised Muslim men has led to an increase in radicalization and terrorist attacks in Paris. For example, on January 7, 2015, two terrorists armed with rifles shot and killed 11 people at the *Charlie Hebdo* magazine offices.⁹⁹ Then, on August 25, 2015, a terrorist on a high-speed train traveling from Brussels to Paris started shooting.¹⁰⁰ Fortunately for the passengers on the train, the terrorist was quickly subdued by three Americans, which significantly limited the number of people injured.¹⁰¹ A few months later, Paris would find itself at the center of another terrorist attack, but this time 130 people would be dead with hundreds more injured.

1. Terrorist Attacks

Three days before the terrorist attacks took place in Paris, two brothers, Salah and Brahim Abdeslam arrived in the city and finalized the planning and logistics to carry out coordinated, paramilitary terrorist attacks.¹⁰² On November 13, 2015, a total of nine terrorists split into three groups and deployed to their target locations dispersed throughout

⁹⁷ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*; Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*; Jan Ransom Globe Staff et al., “Death Benefit given to Family of Officer Wounded in Tsarnaev Shootout - The Boston Globe,” *BostonGlobe.com*, accessed July 21, 2019, <https://www.bostonglobe.com/metro/2015/05/28/line-duty-death-benefits-given-family-boston-police-officer-wounded-tsarnaev-shootout/cr0zpUGx4KaKVkTRmqhH0J/story.html>.

⁹⁸ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned* (Los Angeles: Quinn Williams, 2016), 20, <https://static1.squarespace.com/static/5782ad8f9de4bb114784a8fe/t/5783fec9d482e95d4e0b79bf>.

⁹⁹ Homeland Security Advisory Council and Paris Public Safety Delegation, 12.

¹⁰⁰ Homeland Security Advisory Council and Paris Public Safety Delegation, 13.

¹⁰¹ Homeland Security Advisory Council and Paris Public Safety Delegation, 13.

¹⁰² Homeland Security Advisory Council and Paris Public Safety Delegation, 14.

the city.¹⁰³ The targets selected to attack were the historic stadium, the Stade de France, the 10th and 11th arrondissement Parisian café and bars district, and last, the Bataclan concert hall.

At 9:20 p.m., a terrorist wearing explosives was stopped by security as he attempted to enter the Stade de France. The terrorist detonated the explosives, killing himself and a bystander. Five minutes later, in the 10th arrondissement, the second group of terrorists began shooting at groups of customers at the restaurants and bars, killing 15 people. The terrorists used hit-and-run tactics where they would shoot at patrons and then flee in a vehicle to attack another location. At 9:30 p.m., back at the Stade de France, a second terrorist detonated his suicide vest, killing only himself.¹⁰⁴ Meanwhile, the terrorists in the 10th arrondissement moved to the 11th district and continued shooting patrons of the restaurants and bars, killing 19 people.

At 9:40 p.m., while people were still bleeding in the streets in front of Paris restaurants and bars, a lone terrorist wearing explosives entered a restaurant and detonated his device, injuring 15 people.¹⁰⁵ At the same exact time, three terrorists exited a vehicle in front of the Bataclan concert hall and immediately killed the security guard. The terrorists then entered the location and began shooting into the crowd, killing a total of 90 people and taking the rest hostage.¹⁰⁶ At 9:53 p.m., back at the Stade de France, a third terrorist detonated his suicide vest, killing only himself.¹⁰⁷ At 12:20 a.m., French police finally stormed the Bataclan concert hall, at which time the two terrorists inside detonated their vests, again killing only themselves. All the hostages were freed.¹⁰⁸ In all, the nine terrorists killed 130 people and injured almost 500, making their assault the deadliest attack

¹⁰³ Homeland Security Advisory Council and Paris Public Safety Delegation, 14.

¹⁰⁴ Homeland Security Advisory Council and Paris Public Safety Delegation, 15.

¹⁰⁵ Homeland Security Advisory Council and Paris Public Safety Delegation, 15.

¹⁰⁶ Homeland Security Advisory Council and Paris Public Safety Delegation, 15.

¹⁰⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, 17.

¹⁰⁸ Homeland Security Advisory Council and Paris Public Safety Delegation, 17.

on French soil since World War II.¹⁰⁹ Table 3 shows the method of attack used by the Paris terrorists as explained in the case study. The data from this table is used to identify the commonalities between the methods of attack in the Boston and San Bernardino terrorist attacks.

Table 3. Method of Attack, Paris Terrorists

Method of Attack	Paris
Organization	– Nine attackers divided into three teams
Training	– Firearms, explosives, and tactical training in Syria
Equipment	– Explosive/suicide vests – Rifles – Handguns
Strategy	– Selected locations with large gatherings of people – Scouted locations days prior to attacking – Simultaneous attacks
Tactics	– Simultaneous dispersed attacks – Hit-and-run – Used encrypted smartphone applications to communicate between attack teams

2. Law Enforcement Response

France has two national police forces. The Police Nationale is the civil law enforcement organization in France and is responsible for public safety in large cities and towns.¹¹⁰ The other police entity is the military Gendarmerie, which focuses on small towns, rural areas, and border protection.¹¹¹ Both police forces were present in Paris during the terrorist attacks but the responsibility for response fell on the civil police forces.

¹⁰⁹ Alissa J. Rubin, “Paris: One Year On,” *The New York Times*, November 12, 2016, sec. World, <https://www.nytimes.com/2016/11/13/world/europe/paris-one-year-on.html>.

¹¹⁰ Saint Claire, *French National Police* (Geneva: Police Language and Culture, 2019), 1, <http://saint-claire.org/wp-content/uploads/2016/01/French-National-Police.pdf>.

¹¹¹ Saint Claire, 1.

Specifically, both the Brigade de Recherche et d'Intervention (BRI) and the Recherche, Assistance, Intervention, Dissuasion (RAID) units are required to deploy under a unified command structure known as Force d'intervention de la Police Nationale (FIPN).¹¹²

When the first terrorist detonated his suicide vest outside the Stade de France, police forces inside the stadium rushed French president Hollande—who was at the stadium watching the soccer game—to safety.¹¹³ Police suspected the explosion was designed to force a mass evacuation so the decision was made to place the stadium on lockdown without alerting attendees to the attack.¹¹⁴ Similarly, police commanders decided against sending additional resources to the area of the stadium, opting to keep police forces staged and ready for a possible second wave of terrorist attacks.¹¹⁵ While the police commanders waited for more attacks at the stadium, they were unprepared for the second wave of attacks that happened in the 10th arrondissement district. Twenty minutes later, the BRI finally deployed to the 10th arrondissement district, but at that point 15 people had already been killed and the terrorists had already moved to attack a new area.¹¹⁶

French police response strategy allows local police officers to self-deploy to active emergencies.¹¹⁷ As waves of police officers arrived at the 10th arrondissement, they parked their vehicles in locations that would block critical routes of ingress and egress, which further delayed BRI's response.¹¹⁸ As BRI struggled to catch up to the second group of terrorists in the 10th arrondissement, the third group of terrorists had already killed a security guard and stormed the Bataclan concert hall. Approximately 15 minutes later, a

¹¹² Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 23.

¹¹³ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

¹¹⁴ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

¹¹⁵ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

¹¹⁶ Adam Nossiter, "Response to Paris Attacks Points to Weaknesses in French Police Structure," *The New York Times*, December 21, 2017, sec. World, <https://www.nytimes.com/2016/01/01/world/europe/response-to-paris-attacks-points-to-weaknesses-in-french-police-structure.html>.

¹¹⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 23.

¹¹⁸ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

lone police officer armed only with a handgun arrived at the concert hall and shot one of the terrorists.¹¹⁹ He was immediately ordered to disengage and wait for BRI, who would take another 30 minutes to arrive at the location.¹²⁰ Two hours later, BRI would finally storm the concert hall and kill the two remaining terrorists.¹²¹ Table 4 shows the law enforcement response challenges as explained in the case study. The data from this table is used to identify commonalities between the law enforcement response challenges in the Boston and San Bernardino terrorist attacks.

Table 4. Law Enforcement Response Challenges, Paris Terrorist Attacks

Law Enforcement Response	Paris
Challenges	<ul style="list-style-type: none"> <li data-bbox="824 762 1203 793">– Lack of unified command <li data-bbox="824 800 1292 867">– Not prepared for second wave of attacks <li data-bbox="824 873 1271 940">– Police vehicles blocked ingress and egress routes <li data-bbox="824 947 1214 978">– Delayed response to attack <li data-bbox="824 984 1187 1052">– Police officer ordered to disengage from terrorists

3. Conclusion

As the French people tried to make sense of the terrorist attacks, the media and the government began to sift through the damage for clues. The resulting investigations pieced together vital information about the strategies and methods used by the terrorists while also identifying areas to improve police response to future attacks. Investigators discovered that several of the terrorist received hands-on training for using rifles and grenades and had real-world experience fighting in Syria.¹²² French authorities were able to determine the

¹¹⁹ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

¹²⁰ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 26.

¹²¹ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

¹²² Paul Cruickshank, “Inside the Paris and Brussels Terror Attacks,” CNN, accessed September 23, 2018, <https://edition.cnn.com/2016/03/30/europe/inside-paris-brussels-terror-attacks/index.html>.

terrorists used an encrypted phone application to communicate between teams, with a commander in Belgium who helped coordinate the operation.¹²³ Digital evidence from one of the terrorist's phones showed they downloaded detailed floor plans of the Bataclan concert hall.¹²⁴ French police documents suggest the terrorists used the information from the maps to select the best locations to attack people inside the concert hall.¹²⁵ Once in place, the terrorists would take turns shooting and reloading to keep a constant rate of gunfire to kill as many people as possible.¹²⁶ The final official government report summarizing the police response to the terrorist attack will not be available until 2021.

D. SAN BERNARDINO TERRORIST ATTACK

San Bernardino County, California, is the largest county in the United States. Despite its large size, the employees at the San Bernardino County Environmental Health Services (EHS) Department are a tight-knit team.¹²⁷ On December 2, 2015, EHS employees carried holiday decorations into the Inland Regional Center (IRC) to prepare for a holiday party after they completed a day of in-house training.¹²⁸ By all accounts, the training day was routine until at 11:00 a.m., when a terrorist wearing all black entered the training room and without warning fired a rifle into the crowd.¹²⁹ A second terrorist entered the room closely behind the first and also shot into the crowd, accelerating the killing.¹³⁰ Both terrorists fled the location before police arrived but not before killing 14 people and injuring 22 others. Law enforcement would soon learn one of the terrorists was

¹²³ Cruickshank.

¹²⁴ Cruickshank.

¹²⁵ Cruickshank.

¹²⁶ Cruickshank.

¹²⁷ Braziel et al., *Bringing Calm to Chaos*, 11.

¹²⁸ Braziel et al., 25.

¹²⁹ Braziel et al., 26.

¹³⁰ Braziel et al., 26.

an EHS employee and that the attack was a “premeditated act of terror inspired by the Islamic State of Iraq and Syria/the Levant (ISIS/ISIL).”¹³¹

1. Terrorist Attack

The suspects in the San Bernardino terrorist attack, Syed Farook and his wife, Tashfeen Malik, met in 2013 on an online dating service. Later that year, they discussed their “joint commitment to jihad and to martyrdom” and in August 2014, were married in California.¹³² By all accounts, Syed Farook, who worked for the San Bernardino EHS, was quiet and kept to himself.¹³³ Two days before the terrorist attack, Farook visited a firearms range carrying a rifle and handgun. Surveillance video shows Farook shooting at human silhouette targets and adjusting the sights on his rifle for better accuracy.¹³⁴

On the day of the attack, Farook was with his fellow EHS employees at the IRC for mandatory training. At 10:30 a.m., while training was still going on, Farook looked at his phone and then walked out of the building.¹³⁵ Unbeknownst to those inside, Farook and Malik were in the parking lot putting on tactical vests, prepping firearms, and arming improvised explosive devices for their attack. At 10:58 a.m., the two terrorists exited their vehicle, walked toward the IRC building, and immediately killed two men and a woman who were outside the entrance to the building.¹³⁶ Farook and Malik then entered the room full of EHS employees and began firing into the crowd. One of the bullets struck a fire sprinkler, causing water to spray down and making it hard to see. The terrorists changed their tactics and began walking between the tables, shooting anyone at close range who

¹³¹ CPARS Consulting Inc., *An Organizational Review of San Bernardino County’s Response to the December 2, 2015 Terrorist Attack* (San Bernardino, CA: CPARS Consulting Inc., 2018), v, <http://www.sbcounty.gov/uploads/CAO/reports/December2OrganizationalReview.pdf>.

¹³² “Syed Rizwan Farook,” Counter Extremism Project, September 29, 2016, <https://www.counterextremism.com/extremists/syed-rizwan-farook>.

¹³³ Saeed Ahmed, “Who Were Syed Rizwan Farook and Tashfeen Malik?,” CNN, accessed July 23, 2019, <https://www.cnn.com/2015/12/03/us/syed-farook-tashfeen-malik-mass-shooting-profile/index.html>.

¹³⁴ “Christmas Party May Have Triggered San Bernardino Terror Attack: Police,” ABC News, accessed July 23, 2019, <https://abcnews.go.com/US/christmas-party-triggered-san-bernardino-terror-attack-police/story?id=43884973>.

¹³⁵ Braziel et al., *Bringing Calm to Chaos*, 26.

¹³⁶ Braziel et al., 29.

moved or made a sound .¹³⁷ After approximately three minutes of killing, the terrorists left behind a bag with improvised explosive devices and fled the location before police arrived.¹³⁸

Once the terrorists fled the location, Malik posted a Facebook message pledging allegiance to ISIS and its leader, Abu Bakr al-Baghdadi.¹³⁹ For the next few hours, the terrorists avoided capture by driving around San Bernardino County and then returning to their home. However, through the use of eyewitness statements and record searches, fast-thinking detectives were able to track down the terrorists' identity and their home address.¹⁴⁰ Around 3:00 p.m., an undercover detective arrived at the terrorists' home and saw them drive away in their SUV.¹⁴¹ The undercover detective followed the terrorists and eventually flagged down a Redlands Police Department sergeant and alerted him to the situation, at which time the sergeant radioed for help.¹⁴² When the police sergeant activated the emergency lights on his police vehicle, the terrorists did not yield but continued to drive away.¹⁴³ Both Farook and Malik took turns donning their bulletproof vests and moments later, Malik took a position in the backseat of the SUV and began shooting her rifle.¹⁴⁴

The back window of the terrorists' SUV shattered as Malik shot at the Redlands police sergeant.¹⁴⁵ Farook drove a short distance then slammed on the brakes, bringing the SUV to a quick stop, at which time Malik opened the rear passenger door and then

¹³⁷ Braziel et al., 26.

¹³⁸ Braziel et al., 27.

¹³⁹ ABC News, "Christmas Party May Have Triggered San Bernardino Terror Attack"; Ahmed, "Who Were Syed Rizwan Farook and Tashfeen Malik?"

¹⁴⁰ Braziel et al., *Bringing Calm to Chaos*, 37.

¹⁴¹ Braziel et al., 38.

¹⁴² Braziel et al., 38.

¹⁴³ Braziel et al., 38.

¹⁴⁴ Braziel et al., 38.

¹⁴⁵ Braziel et al., 38.

continued shooting out the back window.¹⁴⁶ Farook jumped out of the driver’s seat and hid behind the rear passenger door that Malik already opened while also shooting at the responding police officers.¹⁴⁷ Malik continued shooting at the police officers as Farook moved away from the SUV and to the other side of the street.¹⁴⁸ As Farook was moving and shooting, the police officers realized Farook was trying to outmaneuver the officers and gain a position of advantage for his attack.¹⁴⁹ The police officers adjusted their locations to regain the advantage and continued to shoot at Farook, hitting him in the legs.¹⁵⁰ Farook fell down, transitioned to a handgun and kept shooting until a bullet struck him in the head and killed him.¹⁵¹ Malik continued her attack from the back of the SUV as responding officers surrounded the SUV and were shooting back. Eventually, 13 police bullets hit Malik’s body and two hit her in the head, which killed her and ended the terrorists’ attack.¹⁵² Table 5 shows the method of attack used by the San Bernardino terrorists as explained in the case study. The data from this table is used to identify the commonalities between methods of attack in the Boston and Paris terrorist attacks.

Table 5. Method of Attack, San Bernardino Terrorists

Method of Attack	San Bernardino
Organization	– Two-person team
Training	– Trained at firearms range prior to attack – Internet research on making pipe bombs
Equipment	– Improvised explosive devices – Rifles – Handguns – Medical kit for traumatic injuries

¹⁴⁶ Braziel et al., 39.

¹⁴⁷ Braziel et al., 39.

¹⁴⁸ Braziel et al., 39.

¹⁴⁹ Braziel et al., 39.

¹⁵⁰ Braziel et al., 39.

¹⁵¹ Braziel et al., 39.

¹⁵² Braziel et al., 40.

Method of Attack	San Bernardino
Strategy	<ul style="list-style-type: none"> – Selected event with large gathering of people – Left behind explosives to kill first responders
Tactics	<ul style="list-style-type: none"> – Hit-and-run – Ambushed police officers – Attempted to outmaneuver /flank police officers

2. Law Enforcement Response

When the San Bernardino terrorists fired their first bullet outside the IRC building, San Bernardino Police Lieutenant Mike Madden had just picked up food for lunch when heard the radio broadcast of a shooting at IRC.¹⁵³ At 11:04 a.m., Lt. Madden arrived at the location and he was quickly joined by three other police officers.¹⁵⁴ The San Bernardino Police Department had previously trained all police officers in active shooter response training, so when Lt. Madden told the other officers to form up in a “diamond formation,” everyone knew what to do.¹⁵⁵ When the team entered the building, it “looked like a bomb had gone off.”¹⁵⁶ Bodies with horrific wounds were lying around the conference room, people were crying for help, there was blood everywhere, the sprinkler systems were activated and the building was filled with gun smoke.¹⁵⁷ Based on their training, the officers knew their first priority was to find the attackers, so they continued moving deeper into the building, bypassing all those who were injured.¹⁵⁸

The San Bernardino SWAT team was conducting active shooter training when they heard the call of “shots fired” at the IRC. They immediately stopped their training and

¹⁵³ Braziel et al., 27.

¹⁵⁴ Braziel et al., 49.

¹⁵⁵ Braziel et al., 28, 67.

¹⁵⁶ Braziel et al., 30.

¹⁵⁷ Braziel et al., 30.

¹⁵⁸ Braziel et al., 30, 67.

responded to the IRC, arriving 11 minutes after the first emergency radio broadcast.¹⁵⁹ As the SWAT team geared up to make entry to the building, the SWAT commander evaluated the scene, which he would later describe as chaotic.¹⁶⁰ Numerous police officers from different law enforcement agencies were “doing something but not necessarily working cohesively.”¹⁶¹ Some officers had wounded people with them but did not know where to take them, others kept running in and out of the IRC as they tried to figure out what to do, and some officers were standing outside the building pointing their rifles at the second and third story windows in case the terrorists suddenly appeared.¹⁶² Once the SWAT team was geared up, the commander told the team to be cautious of improvised explosive devices, and then they entered the building.¹⁶³

As the SBPD SWAT team and other police officers cleared the building, it was impossible to keep track of which rooms had already been checked since the different agencies did not have a standardized marking system.¹⁶⁴ Making things even more difficult and slowing down the police response was the fact that many of the interior doors were locked and required specialized equipment to force them open.¹⁶⁵ While the officers continued searching for the terrorists, other teams were gathering the wounded to take them for medical attention. The overwhelming and unorganized police response resulted in police vehicles being left in locations that blocked entry and exit points for paramedics and firefighters.¹⁶⁶ Officers with wounded people tried to coordinate with paramedics over their radio system but the large volume of radio traffic and poor radio reception inside the

¹⁵⁹ Braziel et al., 32, 49.

¹⁶⁰ Braziel et al., 33.

¹⁶¹ Braziel et al., 33.

¹⁶² Braziel et al., 33.

¹⁶³ Braziel et al., 33.

¹⁶⁴ Braziel et al., 33.

¹⁶⁵ Braziel et al., 33.

¹⁶⁶ Braziel et al., 31.

IRC made coordination difficult.¹⁶⁷ Despite the difficulties, first responders were able to transport the wounded survivors to local hospitals within one hour.¹⁶⁸

At 12:38 p.m., a unified tactical command post was finally established and police supervisors began to coordinate responding resources and document the progress of search teams inside the IRC.¹⁶⁹ It took officers two hours to evacuate all of the people inside of IRC but the building search was not over.¹⁷⁰ While the evacuation was taking place, SBPD police officers, detectives, and analysts were following up on investigative leads in the hopes of identifying the attackers.¹⁷¹ An SBPD analyst finally located the suspects' house and the command post decided to send an unmarked police car to the location.¹⁷² Members of SBPD's undercover narcotics team also responded to the suspects' residence without asking for permission or notifying the command post.¹⁷³ At 3:08 p.m., SBPD undercover detectives notified the command post they were driving behind the suspected terrorist with a Redlands police sergeant.¹⁷⁴ Less than 30 seconds later, the terrorists began shooting at the police officers. The Redlands police sergeant and an SBPD deputy stopped their cars approximately 200 feet away from the terrorists and began to return fire.¹⁷⁵

When the shooting between the terrorists and police officers started, those police officers who were assigned to locations around the IRC building left their assignments and drove toward the officer-involved shooting without asking permission or notifying the command post.¹⁷⁶ The radio frequency immediately became overwhelmed by the large amount of responding officers and the officers nearest the shooting were unable to

¹⁶⁷ Braziel et al., 71.

¹⁶⁸ Braziel et al., 36.

¹⁶⁹ Braziel et al., 50.

¹⁷⁰ Braziel et al., 50.

¹⁷¹ Braziel et al., 37.

¹⁷² Braziel et al., 37.

¹⁷³ Braziel et al., 37.

¹⁷⁴ Braziel et al., 50.

¹⁷⁵ Braziel et al., 37.

¹⁷⁶ Braziel et al., 61.

communicate with each other.¹⁷⁷ The deputy who was closest to the terrorists' vehicle jumped out his car while shooting and continued to shoot as he moved to the rear of his patrol vehicle.¹⁷⁸ The deputy was pinned behind his patrol car because Farook was constantly changing positions to gain a tactical advantage over the deputy and the other officers.¹⁷⁹ Complicating the situation was the fact that Malik continued to shoot her rifle at the officers from the back of the SUV.¹⁸⁰ As the deputy behind the patrol car shot all of the ammunition in his rifle, shotgun, and then handgun, the other officers realized Farook was moving to a better position by flanking the deputy who was pinned down.¹⁸¹ The officers quickly adjusted their positions in response, continued to fire their weapons and subsequently killed Farook.¹⁸² The officers then directed their attention on the threat posed by Malik who was still shooting from inside the SUV. The officers repositioned themselves around the SUV and returned fire, hitting Malik 15 times, which killed her.¹⁸³

Though both terrorists were dead, the police on scene still had work to get done. First, the officers wanted an armored vehicle to move up to the terrorists and ensure they were in fact dead. However, more than 175 police officers from different agencies had arrived at the location and their vehicles blocked the roadways, which delayed the arrival of the armored car.¹⁸⁴ As the supervisors at the scene of the shooting attempted to get the tactical resources they needed, SBPD and the FBI SWAT officers continued to search the IRC building for any other threats or explosive devices. At 5:08 p.m., officers finally noticed a suspicious bag on a table in the conference room. The bomb squad responded to the location and determined the bag contained three active pipe bombs, which they then

¹⁷⁷ Braziel et al., 81.

¹⁷⁸ Braziel et al., 39.

¹⁷⁹ Braziel et al., 39.

¹⁸⁰ Braziel et al., 39.

¹⁸¹ Braziel et al., 39.

¹⁸² Braziel et al., 39.

¹⁸³ Braziel et al., 40.

¹⁸⁴ Braziel et al., 40.

rendered safe.¹⁸⁵ Further investigations revealed that Farook placed the bombs on the conference table when he first left the mandatory training session earlier in the day.¹⁸⁶ At 8:37 p.m., the IRC was officially cleared of all threats and handed over to detectives for evidence collection.¹⁸⁷ Table 6 shows the law enforcement response challenges as explained in the case study. The data from this table is used to identify commonalities between the law enforcement response challenges in the Boston and Paris terrorist attacks.

Table 6. Law Enforcement Response Challenges, San Bernardino Terrorists Attack

Law Enforcement Response	San Bernardino
Challenges	<ul style="list-style-type: none"> <li data-bbox="823 739 1269 808">– Uncoordinated police response <li data-bbox="823 816 1269 846">– Police officers self-deployed <li data-bbox="823 854 1269 924">– Police vehicles blocked ingress and egress routes <li data-bbox="823 932 1269 1001">– Lack of proper equipment to force open doors

3. Conclusion

An after-action review of the San Bernardino terrorist attack revealed that “while the number of officers who initially responded to the IRC was necessary, the manner in which they responded lacked coordination, adding to an already chaotic scene.”¹⁸⁸ Moreover, many responding officers were in unmarked police vehicles, not wearing police uniforms, and did not have the correct radio frequencies to communicate with SBPD, which made things even more difficult.¹⁸⁹ Despite these challenges, police officers were able to safely evacuate the IRC and ensure wounded survivors received medical attention.

¹⁸⁵ Braziel et al., 36.

¹⁸⁶ Braziel et al., 36.

¹⁸⁷ Braziel et al., 37.

¹⁸⁸ Braziel et al., 61.

¹⁸⁹ Braziel et al., 61.

Investigators determined that terrorists Farook and Malik were radicalized by the Islamic State and carefully planned out their attack similar to a military operation.¹⁹⁰ For example, Farook and Malik had a large amount of ammunition, they taped ammunition magazines together to more quickly load and unload their firearms, they left behind improvised explosive devices to ambush officers responding to IRC, and they also had a backpack with military grade medical supplies to address traumatic injuries like gunshot wounds.¹⁹¹ In total, the two terrorists killed 14 civilians, injured 22, and wounded two police officers before being shot dead by law enforcement.¹⁹²

E. CASE STUDY COMMONALITIES

Table 7 lists the terrorists’ methods of attack, Table 8 lists the duration of the attack and the number of people injured or killed, and Table 9 lists the challenges to law enforcement response. The charts can be used to identify commonalities among all three attacks.

Table 7. Method of Attack among the Three Case Studies

Method of Attack	Boston	Paris	San Bernardino
Organization	– Two-person team	– Nine attackers divided into three teams	– Two-person team
Training	– Internet research on how to make improvised explosive devices	– Firearms, explosives, and tactical training in Syria	– Trained at firearms range prior to attack – Internet research on making pipe bombs
Equipment	– Backpacks with explosives	– Explosive/suicide vests – Rifles – Handguns	– Improvised explosive devices – Rifles

¹⁹⁰ Frank Straub, Jennifer Zeunik, and Ben Gorban, “Responding to the Next Attack,” *CTC Sentinel* 10, no. 5 (May 2017): 2.

¹⁹¹ Braziel et al., *Bringing Calm to Chaos*, 46.

¹⁹² Braziel et al., xiii.

Method of Attack	Boston	Paris	San Bernardino
	<ul style="list-style-type: none"> – Improvised explosive hand grenades – Handguns 		<ul style="list-style-type: none"> – Handguns – Medical kit for traumatic injuries
Strategy	<ul style="list-style-type: none"> – Selected large-scale public event to attack 	<ul style="list-style-type: none"> – Selected locations with large gatherings of people – Scouted locations days prior to attacking – Simultaneous attacks 	<ul style="list-style-type: none"> – Selected event with large gathering of people – Left behind explosives to kill first responders
Tactics	<ul style="list-style-type: none"> – Hit-and-run – Ambushed police officers 	<ul style="list-style-type: none"> – Simultaneous dispersed attacks – Hit-and-run – Used encrypted smartphone applications to communicate between attack teams 	<ul style="list-style-type: none"> – Hit-and-run – Ambushed police officers – Attempted to out maneuver /flank police officers

Table 8. Results of Attack among the Three Case Studies

Results of Attack	Boston	Paris	San Bernardino
Duration of Incident	3 days	3 hours	9 hours 37 minutes
People Injured	260	500	22
People Killed	5	130	14

Table 9. Law Enforcement Response Challenges among the Three Case Studies

Law Enforcement Response	Boston	Paris	San Bernardino
Challenges	<ul style="list-style-type: none"> – Uncoordinated police response – Police officers self-deployed 	<ul style="list-style-type: none"> – Lack of unified command 	<ul style="list-style-type: none"> – Uncoordinated police response – Police officers self-deployed

Law Enforcement Response	Boston	Paris	San Bernardino
	<ul style="list-style-type: none"> – Police vehicles blocked ingress and egress routes – Police unable to pursue fleeing terrorist – Lack of weapons discipline 	<ul style="list-style-type: none"> – Not prepared for second wave of attacks – Police vehicles blocked ingress and egress routes – Delayed response to attack – Police officer ordered to disengage from terrorists 	<ul style="list-style-type: none"> – Police vehicles blocked ingress and egress routes – Lack of proper equipment to force open doors

F. SUMMARY

This chapter examined the terrorist attacks in Boston, Massachusetts; Paris, France; and San Bernardino, California. It also discussed the law enforcement response to each attack. Terrorists’ methods and duration of attack are compared, the number of people injured or killed are listed, and the challenges confronting law enforcement response are identified to chart commonalities and differences among all three attacks. A consistent challenge with all three law enforcement responses was an uncoordinated police response, police self-deployment, and police vehicles blocking ingress and egress routes to the location of attacks. The next chapter analyzes military doctrine related to warfare maneuver strategy, command and control, and the relationship between strategy and tactics.

III. MILITARY DOCTRINE

A. INTRODUCTION

This chapter begins with an examination of the United States Marine Corps' creation of maneuver warfare strategy. The nature and theory of war is described, including how they have coalesced into the modern understanding of maneuver warfare. Next, the concepts of command and control, strategy, and tactics are examined as well as how they are applied in the broader framework of maneuver warfare strategy. The information gleaned from these concepts is used to examine the efficacy of military doctrine and maneuver warfare strategy to improve law enforcement command and control efforts for mutual aid during active paramilitary terrorist attacks (PTA).

B. MANEUVER WARFARE STRATEGY

At the end of the war in Vietnam, a crisis was brewing among the senior ranks of Marine Corps generals. Leading up to and during the Vietnam War, the Marine Corps had well-established systems in place to train and equip its fighting forces for combat, and yet “the bloody sacrifice in that conflict had not staved off defeat.”¹⁹³ The Marine Corps generals struggled with two critical questions: “What was the Corps to do and how was the Corps to do it?”¹⁹⁴ At the same time, U.S. Air Force Colonel John R. Boyd was sharing the research he had conducted by publishing two seminal essays, “Destruction and Creation” and “Patterns of Conflict.” “Destruction and Creation” introduced “a new mental framework for analyzing how perception and decision-making contributed to survival on an individual level.”¹⁹⁵ “Patterns of Conflict” applied that same structure to “national survival in the face of military conflict.”¹⁹⁶

¹⁹³ Ian T. Brown, *A New Conception of War: John Boyd, the U.S. Marines, and Maneuver Warfare*, First edition (Quantico, VA: Marine Corps University Press, 2018), xxvii.

¹⁹⁴ Brown, 62.

¹⁹⁵ Brown, 85.

¹⁹⁶ Brown, 85.

Colonel Boyd's research resonated with many of the Corps' generals. In 1988, General Gray, the 29th Commandant of the Marine Corps, created the Marine Corps University and announced that research would take place to create a new capstone doctrinal manual.¹⁹⁷ One year later, General Gray signed his name to Fleet Marine Force Manual 1, *Warfighting*, which signaled the beginning of the Corps' intellectual renaissance.¹⁹⁸ *Warfighting* was a significant departure from historical Marine Corps manuals in that it did not tell Marines how to storm a beach or throw a grenade, but it created the "conceptual framework for thinking about war itself."¹⁹⁹ *Warfighting* teaches Marines how to attack the opposing forces' mental and moral cohesion in order to disrupt their adversaries' ability to think and respond effectively.²⁰⁰ *Warfighting* shifted the Corps' perceptual lenses from the physical aspects of conflict to the intellectual realm. Similarly, the concepts in *Warfighting* have the potential to improve law enforcement's ability to disrupt the cohesion and effectiveness of terrorists who attempt to carry out PTAs in urban environments. As Colonel Boyd famously said, "Terrain does not fight wars, people do it, and they use their minds."²⁰¹

1. Nature of War

Prussian general and famous military theorist Carl von Clausewitz said: "Everything in war is simple, but the simplest thing is difficult."²⁰² This quote hints at the philosophical challenges, complexities, and questions surrounding war. For example, what is the nature of war and, more importantly, for this research, how does the philosophy of war dovetail with modern-day law enforcement and public safety efforts? Clausewitz described war as *Zweikampf*, meaning "two-struggle," and believed that war was an

¹⁹⁷ Brown, 166.

¹⁹⁸ Brown, 172.

¹⁹⁹ Brown, xxv.

²⁰⁰ Brown, xxv.

²⁰¹ Brown, 174.

²⁰² U.S. Marine Corps, *Warfighting*, 10.

interactive social process.²⁰³ The Marine Corps built upon this idea by describing war as “a violent struggle between two hostile, independent, and irreconcilable wills, each trying to impose itself on the other.”²⁰⁴ The main object of war then is to impose one’s will upon the enemy while understanding the dynamic ebb and flow between opposing forces.

In the public safety domain, war is not a new concept in the law enforcement profession, but it is a contentious one. For example, in 1965, President Lyndon Johnson declared a “War on Crime,” and in 1971, President Richard Nixon declared the nation’s “War on Drugs.”²⁰⁵ In modern times, the idea of law enforcement officers fighting a war against the public they are sworn to serve has been met with staunch resistance. In the book *Rise of the Warrior Cop: The Militarization of America’s Police Forces*, author Radley Balko examines how the war on drugs has led to the rapid expansion of police departments creating SWAT teams and adopting military equipment to enforce drug laws.²⁰⁶ Balko’s research focuses on the relationships between U.S. law enforcement and the public in pursuit of enforcing drug laws. This research is explicitly different from Balko’s in that it focuses on law enforcement’s responsibility to shield the public from PTAs and seeks to uncover philosophical principles for success in the struggle between opposing wills.

Also true in law enforcement and public safety domain: the clash between opposing wills creates friction, which can make ordinary tasks extraordinarily difficult. *Warfighting* explains that friction can be experienced in many different forms, such as mental, physical, external, and even self-induced.²⁰⁷ The overarching goal during human conflict is to overcome the challenges associated with friction while increasing the effects of friction on the opposition. However, using friction to one’s advantage is difficult due to uncertainty,

²⁰³ U.S. Marine Corps, 3.

²⁰⁴ U.S. Marine Corps, 3.

²⁰⁵ Michael J. Flamm, “From Harlem to Ferguson: LBJ’s War on Crime and America’s Prison Crisis,” *Origins* 8, no. 13 (April 2015), <http://origins.osu.edu/article/harlem-ferguson-lbjs-war-crime-and-americas-prison-crisis>; “War on Drugs,” History.com, accessed September 7, 2019, <https://www.history.com/topics/crime/the-war-on-drugs>.

²⁰⁶ Radley Balko, *Rise of the Warrior Cop: The Militarization of America’s Police Forces* (New York: Public Affairs, 2013), 6.

²⁰⁷ U.S. Marine Corps, *Warfighting*, 5.

which is ever-present in the struggle between opposing wills.²⁰⁸ *Warfighting* is explicitly clear that because of uncertainty, all actions in human conflict will be “based on incomplete, inaccurate, or even contradictory information.”²⁰⁹ Herein lies a significant challenge for law enforcement officers responding to PTAs. Despite law enforcement’s best efforts to prepare for PTAs, plans must account for the unknown and be prepared to deal with it effectively. The Marine Corps warfighting philosophy offers a possible solution. Since uncertainty cannot be eliminated, strategies for dealing with it must be flexible and straightforward by “planning for likely contingencies; developing standing operating procedures; and fostering initiative among subordinates.”²¹⁰

The uncertainty of human conflict and the friction it produces creates an environment of disorder, and as the old military maxim explains, “No plan survives contact with the enemy.”²¹¹ Because of these challenges, the Marine Corps warfighting philosophy draws explicit attention to the ways that science and art are intertwined into the dynamics of human conflict. The realm of science in human conflict encompasses the “laws of ballistics, mechanics, and like disciplines.”²¹² For law enforcement dealing with PTAs, this would include the capabilities of their armaments, communications systems, and vehicle delivery platforms. However, *Warfighting* reminds the reader that in human conflict, the realm of art has a more significant role than that of science.²¹³ Art “includes the creative, situational application of scientific knowledge through judgment and experience, and so the art of war subsumes the science of war.”²¹⁴ Similarly, the equipment that law enforcement employs to stop PTAs is less important than the knowledge, judgment, and experiences of the officers who are deciding how those assets should be

²⁰⁸ U.S. Marine Corps, 5.

²⁰⁹ U.S. Marine Corps, 7.

²¹⁰ U.S. Marine Corps, 8.

²¹¹ “No Plan Survives Contact with the Enemy,” Boot Camp & Military Fitness Institute, September 8, 2015, <https://bootcampmilitaryfitnessinstitute.com/military-and-outdoor-fitness-articles/no-plan-survives-contact-with-the-enemy/>.

²¹² U.S. Marine Corps, *Warfighting*, 18.

²¹³ U.S. Marine Corps, 18.

²¹⁴ U.S. Marine Corps, 18.

used to stop an attack. In summary, *Warfighting* explains that the nature of war is a “dynamic process of human competition requiring both the knowledge of science and the creativity of art but driven ultimately by the power of human will.”²¹⁵ Having established the framework for understanding the nature of war, I examine how the Marine Corps uses this framework to develop a theory of war.

2. Theory of War

The most important concept to understand about the Marine Corps theory of war “is that war must serve policy.”²¹⁶ For law enforcement, this means that the police application of force must serve public safety whether the officers are facing criminals or terrorists. The actions taken during human conflict can be separated into two categories, which are “taking the initiative or reacting in response to the opponent.”²¹⁷ For example, establishing checkpoints at border crossings, weapons screenings at large public venues, and conducting surveillance operations for terrorist activity are all examples of taking the initiative to prevent an attack. Responding to an opponent, such as law enforcement reacting to a terrorist attack, is the least preferred form of action since the terrorists have already seized the initiative. The fluidity of human conflict is a result of “the interplay between initiative and response with the object being to seize and maintain the initiative.”²¹⁸

The Marine Corps theory of war emphasizes the importance of warfare by maneuver where the goal is to “circumvent a problem and attack it from a position of advantage rather than meet it straight on.”²¹⁹ The two most critical components of warfare by maneuver are speed and focus.²²⁰ Speed is the rapidity of action and allows one to

²¹⁵ U.S. Marine Corps, 19.

²¹⁶ U.S. Marine Corps, 23.

²¹⁷ U.S. Marine Corps, 32.

²¹⁸ U.S. Marine Corps, 49.

²¹⁹ U.S. Marine Corps, 37.

²²⁰ U.S. Marine Corps, 40.

“seize the initiative and dictate the terms of action.”²²¹ The challenge with speed as a weapon is that continually maintaining a high rate of speed is not possible.²²² This challenge can be mitigated by using the concept of focus, which is the convergence of superior power “at a particular time and place.”²²³ Therefore, combining speed and focus allows the commander to increase the strength and effectiveness of subordinate actions.²²⁴

In the context of law enforcement response to PTAs, police officers would focus their efforts on rapidly responding to a decisive location at the decisive moment.²²⁵ However, establishing speed and focus is not enough to gain a superior advantage over an opponent in and of itself. According to the Marine Corps theory of war, success “depends on the ability to direct our efforts against critical vulnerabilities or centers of gravity.”²²⁶ To identify centers of gravity, we must ask ourselves: “Which factors are critical to the enemy? Which can the enemy not do without? Which, if eliminated, will bend him most quickly to our will?”²²⁷ Examples of centers of gravity for terrorists can be their resolve to carry out an attack, their capabilities to inflict harm with rifles and explosives, their ability to communicate with each other, their methods of travel to carry out attacks and avoid capture, or even their ability to cause fear with threats of attack. Simply stated, “centers of gravity are any important sources of strength.”²²⁸ However, not all centers of gravity are equal, and some may result in a more significant loss to an opponent, which is a critical vulnerability. Critical vulnerabilities are those “that if exploited, will do the most significant damage to the enemy’s ability to resist.”²²⁹ Therefore, the theory of war

²²¹ U.S. Marine Corps, 40–41.

²²² U.S. Marine Corps, 41.

²²³ U.S. Marine Corps, 41.

²²⁴ U.S. Marine Corps, 42.

²²⁵ U.S. Marine Corps, 41.

²²⁶ U.S. Marine Corps, 49.

²²⁷ U.S. Marine Corps, 46.

²²⁸ U.S. Marine Corps, 46.

²²⁹ U.S. Marine Corps, 47.

demands that we protect our centers of gravity while at the same time attacking our opponent's most critical vulnerabilities so they are unable to resist.

3. Maneuver Warfare

In the context of military operations, maneuver is generally understood to be and defined as the “employment of forces on the battlefield through movement in combination with fire ... to achieve a position of advantage in respect to the enemy.”²³⁰ Understanding the spatial nature of maneuver is an essential factor in achieving an advantage over an opponent. However, the Marine Corps model of maneuver warfare moves beyond the concept of spatial maneuver to also include psychological, technological, and temporal maneuver.²³¹ Therefore, maneuver warfare is best understood as a warfighting philosophy that extends beyond the goal of using direct force to disrupting an opponent's ability to fight. The broader concept of maneuver warfare seeks to “shatter the cohesion of the enemy system ... [where] the ultimate goal is panic and paralysis, an enemy who has lost the ability to resist.”²³² However, maneuver warfare is a double-edged sword in that both sides of opposing forces will be confronted with an environment that is “inherently disorderly, uncertain, dynamic, and dominated by friction.”²³³ Maneuver warfare accounts for these challenges with the use of concepts encapsulated in the philosophy of command.

Maneuver warfare's philosophy of command includes three important concepts, which are decision-making, mission tactics, and commander's intent. The philosophy of command decision-making recognizes that choices are not made in a vacuum and that we must continually account for the opponent's reactions and counteractions.²³⁴ Due to the dynamic nature of human conflict, decision-making becomes a time-competitive event where “whoever can make and implement decisions consistently faster gains a tremendous,

²³⁰ U.S. Marine Corps, 105.

²³¹ U.S. Marine Corps, 72.

²³² U.S. Marine Corps, 74.

²³³ U.S. Marine Corps, 80.

²³⁴ U.S. Marine Corps, 85.

often decisive advantage.”²³⁵ The primary challenge with decision-making is that every situation is unique and has its own, often unknown, associated risks.²³⁶ However, the philosophy of command dictates that we should not agonize over trying to identify the perfect choice. Instead, we should “select a promising course of action with an acceptable degree of risk and do it more quickly than our foe.”²³⁷

The second critical concept of maneuver warfare philosophy is mission tactics, which is the practice of giving a subordinate a mission to accomplish without telling them how the mission must be done.²³⁸ Simply put, mission tactics is telling a subordinate what to do but not how to do it. Moreover, mission tactics grant the subordinate freedom to decide how the mission is best accomplished based on the circumstances at hand and “permits the high tempo of operations that we desire.”²³⁹ An example of mission tactics in the context of law enforcement would be when a commander tells a team of subordinates to stop an active shooter at a mall. The commander refrains from telling the subordinates how they should approach the mall, the tactics they should use inside the mall, or the safety equipment they should deploy. The team of officers are granted the freedom to exercise initiative and make decisions as the incident unfolds. It is important to note that mission tactics require subordinates to understand “how their actions fit into the larger situation.”²⁴⁰ Subordinates are able to understand how their actions fit into the overall mission through the use of the third concept of maneuver warfare philosophy, which is commander’s intent. Commander’s intent divides any mission into two parts: “the task to be accomplished and the reason or intent behind it.”²⁴¹ Of the two parts, the intent is more important since it affords the subordinate the ability to make decisions that are in support of the overall mission. Furthermore, clearly defining the intent of the overall mission grants

²³⁵ U.S. Marine Corps, 85.

²³⁶ U.S. Marine Corps, 87.

²³⁷ U.S. Marine Corps, 87.

²³⁸ U.S. Marine Corps, 87.

²³⁹ U.S. Marine Corps, 88.

²⁴⁰ U.S. Marine Corps, 88.

²⁴¹ U.S. Marine Corps, 89.

subordinates the freedom to change tasks if those tasks are no longer relevant. Granting subordinates the freedom to make decisions as events unfold is one of the hallmarks of maneuver warfare and demonstrates that maneuver warfare is a “philosophy for generating the greatest decisive effect against the enemy at the least possible cost to ourselves—a philosophy for fighting smart.”²⁴²

C. COMMAND AND CONTROL

The Marine Corps publication *Command and Control* provides a theory and philosophy on how to reach decisions and act on them faster than an opponent.²⁴³ It accounts for the challenges associated with human conflict as described in *Warfighting* and provides a framework for “fast, flexible, and decisive action in a complex environment.”²⁴⁴ Furthermore, the Marine Corps command and control doctrine is scalable in that it applies to conflicts both large and small as well as to missions outside the realm of conflict, such as humanitarian efforts. Most importantly, *Command and Control* allows the commander to “make the most of what they have—people, information, material and often, most important of all, time.”²⁴⁵

1. Nature of Command and Control

Command and control is one of the most important concepts in human conflict because without it, “units degenerate into mobs, and the subordination of force to policy is replaced by random violence.”²⁴⁶ Making things more challenging is that command and control is difficult to establish and even harder to maintain. As noted by Carl von Clausewitz, “The commander must work in a medium which his eyes cannot see; which

²⁴² U.S. Marine Corps, 96.

²⁴³ U.S. Marine Corps, *Command and Control*, 2.

²⁴⁴ U.S. Marine Corps, 3.

²⁴⁵ U.S. Marine Corps, 36.

²⁴⁶ U.S. Marine Corps, 35.

his best deductive powers cannot always fathom, and with which, because of constant changes, he can rarely become familiar.”²⁴⁷

The traditional view of command and control is one where command and control are unidirectional.²⁴⁸ The commander is “in control of their subordinates, and the subordinates are under the control of their commanders” (see Figure 1).²⁴⁹ In the Marine Corps, command exercises authority and control provides feedback about the effect of the action taken.²⁵⁰ For example, the commander exercises their authority by deciding what actions should be taken and directs subordinates to carry it out. The subordinates then provide feedback on the effects of the actions taken, at which time the commander can “adjust and modify command action as needed.”²⁵¹ It is important to note that the Marine Corps model of command and control emphasizes feedback, since feedback affords the commander the situational awareness to adjust and redirect efforts as they unfold.²⁵² The cyclic nature of command and control can be characterized as an open system in that it is a process of continuous adaptation that focuses on effectively connecting all available resources in a unified approach to defeat an opponent.²⁵³

²⁴⁷ U.S. Marine Corps, 33.

²⁴⁸ U.S. Marine Corps, 39.

²⁴⁹ U.S. Marine Corps, 39–40.

²⁵⁰ U.S. Marine Corps, 40.

²⁵¹ U.S. Marine Corps, 40.

²⁵² U.S. Marine Corps, 40.

²⁵³ U.S. Marine Corps, 46–47.

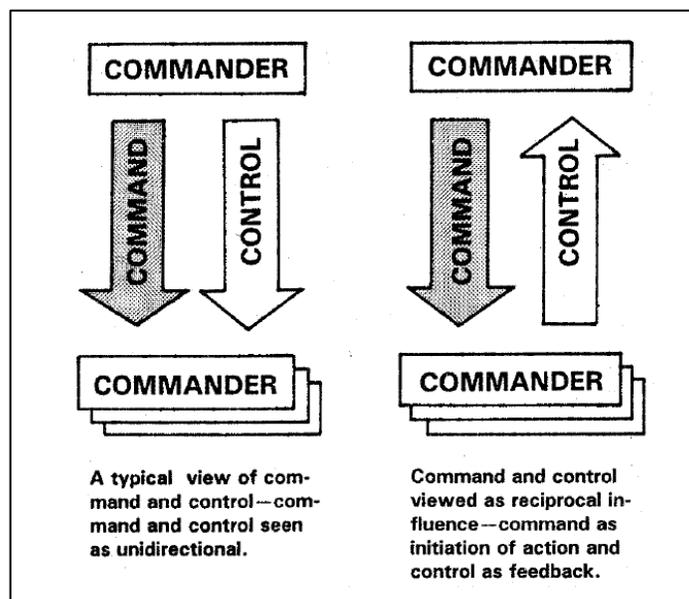


Figure 1. Unidirectional and Reciprocal Models of Command and Control.²⁵⁴

Command and control consists of three essential elements, which are people, information, and the command and control support structure.²⁵⁵ As previously noted in *Warfighting*, human conflict is shaped by human emotions, which is why command and control also accounts for the human element in its structure.²⁵⁶ Specifically, the overarching goal of command and control is to help people perform better by realizing humans are “integral components of the command and control system and not merely users of it.”²⁵⁷ In fact, command and control recognizes that the human capacity for intuition, imagination, and creativity during conflict is what makes command and control “ultimately an art rather than a science.”²⁵⁸

²⁵⁴ Source: U.S. Marine Corps, 41.

²⁵⁵ U.S. Marine Corps, 47.

²⁵⁶ U.S. Marine Corps, *Warfighting*, 13.

²⁵⁷ U.S. Marine Corps, *Command and Control*, 48.

²⁵⁸ U.S. Marine Corps, 48.

Information, the second element of command and control, is defined as “the words, letters, numbers, images, and symbols we use to represent things, events, ideas, and values.”²⁵⁹ Simply stated, information gives shape to the commander’s understanding of the situation at hand and provides the structure for making decisions.²⁶⁰ The command and control structure uses information for two specific tasks. First, it creates situational awareness that is used to make decisions. Second, information is used to “direct and coordinate actions in the execution of the decision.”²⁶¹ It is important to note that the quality and timeliness of information is more important than the amount of information received. For example, inaccurate information can mislead both the commander and subordinates and therefore degrade the quality of decisions made and actions taken. The key takeaway about information in the command and control structure is that “information is valuable only insofar as it contributes to effective decisions and actions.”²⁶²

The last element of command and control is the command and control support structure, which includes everything a commander has at their disposal to plan, direct, and influence the actions of subordinates.²⁶³ Examples of the command and control support structure are “facilities, equipment, communications, procedures, and personnel.”²⁶⁴ An effective command and control support structure allows the commander to generate tempo of action by making decisions faster than an opponent.²⁶⁵ Moreover, an effective command and control support structure creates opportunities for the commander to “generate swift, appropriate, decisive, harmonious, and secure action.”²⁶⁶ In a race to make decisions and act faster than an opponent, the speed of those decisions and actions taken becomes its own weapon to defeat an opponent.

²⁵⁹ U.S. Marine Corps, 49.

²⁶⁰ U.S. Marine Corps, 49.

²⁶¹ U.S. Marine Corps, 49.

²⁶² U.S. Marine Corps, 51.

²⁶³ U.S. Marine Corps, 141.

²⁶⁴ U.S. Marine Corps, 141.

²⁶⁵ U.S. Marine Corps, 53.

²⁶⁶ U.S. Marine Corps, 54.

2. Theory of Command and Control

Command and control theory starts with a very simple question, which is: “What does it mean to be in control?”²⁶⁷ This philosophical question begets more questions such as: A pilot is in control of an aircraft, but is the commander really in control of how the pilot flies? and Marines are in charge of their weapons but is the commander really in control when Marines use their weapons against the enemy?²⁶⁸ Command and control theory moves on to suggest that “it is a delusion to believe that we can truly be in control of the enemy or the situation.”²⁶⁹ Therefore, the goal for the military and law enforcement commander is not to pursue precise control, but to create a system that “provides the necessary guidance in an uncertain, disorderly, time-competitive environment without stifling the initiative of subordinates.”²⁷⁰

The foundational model used to address the challenges associated with achieving command and control is the observe, orient, decide, act (OODA) loop.²⁷¹ During human conflict, the commander must first observe the situation, which includes a self-assessment, an assessment of the surroundings, and the status of the adversary.²⁷² The next step is to orient to the situation by making “estimates, assumptions, analyses, and judgments” to better understand what is occurring.²⁷³ The commander must then decide what actions should be taken and then put that decision into action.²⁷⁴ Once the OODA loop cycle is completed, the entire process starts again, which demonstrates how “command and control is a continuous, cyclical process.”²⁷⁵ It is important to note that the OODA loop cycle is something that both sides of an opposing force must contend with. In the law enforcement

²⁶⁷ U.S. Marine Corps, 42.

²⁶⁸ U.S. Marine Corps, *Command and Control*.

²⁶⁹ U.S. Marine Corps, 43.

²⁷⁰ U.S. Marine Corps, 43.

²⁷¹ U.S. Marine Corps, 63.

²⁷² U.S. Marine Corps, 63.

²⁷³ U.S. Marine Corps, 63.

²⁷⁴ U.S. Marine Corps, 63.

²⁷⁵ U.S. Marine Corps, 64.

context, both the police commander and their subordinates will move through the OODA loop cycle while the terrorists carrying out an attack must also do the same. The aim then for law enforcement is to observe, orient, decide, and act faster than the terrorists.²⁷⁶ Most importantly, a principle of the OODA loop cycle in command and control theory is that “the aim is not merely rapid action, but also *meaningful action*.”²⁷⁷

A challenge with command and control for both the military and law enforcement commander is that the “higher the level of command, the more we depend on information from others and the less on our own observations.”²⁷⁸ Relying on others for information is challenging since everyone interprets and communicates information differently, which distorts the information passed along to the commander.²⁷⁹ The second challenge of relying on others for information is time. It takes time for information to be passed on to the commander, and this delay can result in an inaccurate and outdated sense of the situation at hand.²⁸⁰ To overcome these challenges, command and control theory proposes the commander needs to consider three different perspectives. The first perspective is a close view of the situation, also described as “a feel for the action gained best through personal observation and experience.”²⁸¹ This perspective affords the commander an awareness of the immediate challenges confronting subordinates.²⁸² The second perspective is the overall view of the situation, which is described as “top-sight.”²⁸³ A commander uses top-sight to evaluate the entire situation and how the different aspects are connected. The third perspective a commander must consider is one from the opponent’s

²⁷⁶ U.S. Marine Corps, 65.

²⁷⁷ U.S. Marine Corps, 65. Emphasis added.

²⁷⁸ U.S. Marine Corps, 73.

²⁷⁹ U.S. Marine Corps, 73.

²⁸⁰ U.S. Marine Corps, 74.

²⁸¹ U.S. Marine Corps, 74.

²⁸² U.S. Marine Corps, 74.

²⁸³ U.S. Marine Corps, 74.

point of view. With this perspective, the commander's goal is to "deduce possible enemy intentions and anticipate possible enemy moves."²⁸⁴

As previously noted, any system that is designed to pass along information will be challenged by distortion and delay.²⁸⁵ Moreover, due to the dispersed nature of conflict in both military and law enforcement operations, it is extremely difficult for the commander to be in a position for direct observation.²⁸⁶ To overcome this challenge, command and control theory recommends using the directed telescope technique in which a dedicated information collector observes events and reports them directly to the commander.²⁸⁷ In the law enforcement context, the dedicated information collector can be a subordinate who is closest to the conflict and communicates directly back to the commander. Alternatively, the dedicated information collector can be a form of technology, like a drone that is flying over the event and provides real-time information to the commander. The second technique to address the problems associated with information distortion and delay is through the use of decentralized decision-making.²⁸⁸ Decentralized decision-making allows the subordinate who is on-scene and has direct observation of the situation to make decisions about what should be done.²⁸⁹

Command and control theory accepts, and more importantly acknowledges, that human conflict is rife with uncertainty.²⁹⁰ So, just as the Marine Corps warfighting philosophy uses mission tactics to effectively deal with uncertainty, command and control theory uses a concept called mission command and control.²⁹¹ Mission command and control is a decentralized and flexible decision-making structure that pushes the authority

²⁸⁴ U.S. Marine Corps, 74.

²⁸⁵ U.S. Marine Corps, 75.

²⁸⁶ U.S. Marine Corps, 76.

²⁸⁷ U.S. Marine Corps, 76.

²⁸⁸ U.S. Marine Corps, 77.

²⁸⁹ U.S. Marine Corps, 77.

²⁹⁰ U.S. Marine Corps, 79.

²⁹¹ U.S. Marine Corps, *Warfighting*, 87; U.S. Marine Corps, *Command and Control*, 79.

for making decisions to subordinates and affords them freedom of action.²⁹² In contrast, a detailed command and control structure relies on precise orders that require exact obedience and disincentivizes subordinate initiative. A primary strength of mission command and control is that it does not rely on detailed plans and information flow, both of which are easily disrupted during human conflict. Mission command and control is best described as spontaneous unity of effort where commanders enact concise and simple plans, and subordinates make decisions based on “their knowledge of the requirements of the overall mission.”²⁹³ And while “mission command and control demands more of leaders at all levels and requires rigorous training and education,” the additional efforts help commanders and subordinates to increase the operational tempo and effectively deal with uncertainty.²⁹⁴ *Command and Control* recommends that leaders provide the necessary training and education through the use of a process called planning theory.

Planning theory is a method designed to develop “practical schemes for taking future actions.”²⁹⁵ Planning theory also helps to illuminate future threats and prepare for opportunities to mitigate those threats.²⁹⁶ Planning theory divides efforts into three different categories: conceptual planning, functional planning, and detailed planning. At the highest level of operations, conceptual planning develops tactical, operational, and strategic concepts.²⁹⁷ Functional planning focuses on the “areas necessary to support the overall concept.”²⁹⁸ Some examples include logistical support, deployment of subordinates, and the collection of intelligence.²⁹⁹ Last, detailed planning primarily deals with the technical requirements of an operation, such as calculating the type of equipment that will be needed to accomplish the mission. While all three levels of planning require

²⁹² U.S. Marine Corps, *Command and Control*, 79.

²⁹³ U.S. Marine Corps, 79.

²⁹⁴ U.S. Marine Corps, 79.

²⁹⁵ U.S. Marine Corps, 84.

²⁹⁶ U.S. Marine Corps, 84–85.

²⁹⁷ U.S. Marine Corps, 86.

²⁹⁸ U.S. Marine Corps, 86.

²⁹⁹ U.S. Marine Corps, 86.

different levels of attention, the overarching goal should be to “leave the subordinate broad latitude in the manner of functional or detailed execution.”³⁰⁰

The final theory critical to understanding and implementing mission command and control is decision-making theory. Decision-making theory recognizes that “all decisions must be made in the face of uncertainty.”³⁰¹ Moreover, decision-making theory does not focus on gathering massive amounts of information but emphasizes the importance of obtaining the “right elements of information available at the right time and place.”³⁰² Decision-making theory divides decisions into two different processes: analytical decision-making and intuitive decision-making. Analytical decision-making seeks to identify “several different options, comparing all the options according to some set of criteria, and identifying the best option.”³⁰³ Analytical decision-making is most appropriate for pre-event decision-making efforts regarding “mobilization or contingency planning when time is not a factor, and extensive information can be gathered.”³⁰⁴ Conversely, intuitive decision-making depends on the commander’s “ability to recognize the key elements of a particular problem and arrive at the proper decision.”³⁰⁵ The intuitive decision-making process, which is faster, accounts for the time-sensitive nature of human conflict and therefore focuses on identifying the first solution that will solve the problem.

In summary, *Command and Control* is based on “accepting uncertainty as an undeniable fact and being able to operate effectively despite it.”³⁰⁶ Therefore, mission command and control is used to decentralize authority and grants subordinates the freedom to take action in support of the overall mission. This, in turn, accelerates operational tempo and affords commanders and subordinates opportunities to exploit their opponents in

³⁰⁰ U.S. Marine Corps, 87.

³⁰¹ U.S. Marine Corps, 101.

³⁰² U.S. Marine Corps, 101.

³⁰³ U.S. Marine Corps, 101.

³⁰⁴ U.S. Marine Corps, 102–3.

³⁰⁵ U.S. Marine Corps, 102.

³⁰⁶ U.S. Marine Corps, 104.

pursuit of victory.³⁰⁷ Translated in the context of civil authority and law enforcement command and control, mission command and control would grant subordinates the autonomy to make decisions based on the circumstances in the field that are in alignment with the overarching goals as outlined by the commander. At the same time and in response to the changing circumstances, the law enforcement commander would make adjustments to operational efforts in order to capitalize on opportunities and stop the PTAs. The next section focuses on using the theories of command and control to create an effective command and control structure.

3. Creating Effective Command and Control

As previously mentioned, mission command and control helps the commander deal with uncertainty while offering flexibility in response to an opponent in the ever-changing environment of human conflict. The theory of mission command and control is applied through the use of mission tactics to achieve harmony of effort.³⁰⁸ With mission tactics, the commander assigns tasks to subordinates and explains the intent of the mission but grants subordinates the freedom to decide how the mission is to be accomplished.³⁰⁹ However, mission tactics do not give subordinates free rein to do whatever they want, which is why commanders should always include some type of restrictive control measures to ensure lateral cooperation among other teams/efforts.³¹⁰ Unity of effort through mission tactics is achieved through four different elements: low-level initiative, commander's intent, implicit understanding, and communication.³¹¹

Marine Corps' warfighting doctrine seeks to create an environment where commanders and subordinates can capitalize on fleeting opportunities, which is made possible through the use of low-level initiative.³¹² Low-level initiative gives subordinates

³⁰⁷ U.S. Marine Corps, 104.

³⁰⁸ U.S. Marine Corps, 109.

³⁰⁹ U.S. Marine Corps, 109.

³¹⁰ U.S. Marine Corps, 110.

³¹¹ U.S. Marine Corps, 111–15.

³¹² U.S. Marine Corps, 111.

the liberty to make their own decisions on how to accomplish a task while also remaining mindful of how their actions support the overall effort as described by the commander.³¹³ The overall efforts are known as the commander's intent.³¹⁴ Commander's intent articulates the overall vision for the mission and includes two distinct parts: the task and intent.³¹⁵ The task emphasizes the actions to be taken while the intent explains the goals. Furthermore, because human conflict is rife with uncertainty, the described intent is more important than the given goals.³¹⁶ Specifically, because it is very likely the situation confronting the subordinate will change, thereby making the task obsolete, the described intent will allow the subordinate to make choices that are in alignment with the commander's directives.³¹⁷

The last two components of mission tactics are implicit understanding and communication. Both implicit understanding and communication are aptitudes that can only be realized through a "common ethos and repeated practice."³¹⁸ The Marine Corps describes the process for achieving implicit understanding and communication as being similar to "members of a jazz band who can improvise freely without losing their cohesion."³¹⁹ Achieving a balance between freedom and cohesion is best accomplished through planning, training/education, and doctrine.³²⁰

Planning is a critical component of creating effective command and control and should not be thought of as a mechanical or scripted process where tasks need to be completed in a strict sequence.³²¹ The Marine Corps philosophy of command and control views planning as a learning process where the primary benefit is not "consuming the

³¹³ U.S. Marine Corps, *Warfighting*, 111.

³¹⁴ U.S. Marine Corps, *Command and Control*, 112.

³¹⁵ U.S. Marine Corps, 113.

³¹⁶ U.S. Marine Corps, 113.

³¹⁷ U.S. Marine Corps, 113.

³¹⁸ U.S. Marine Corps, 115.

³¹⁹ U.S. Marine Corps, 115.

³²⁰ U.S. Marine Corps, 130.

³²¹ U.S. Marine Corps, 123.

product but engaging in the process.”³²² Plans should be seen as a starting point for subordinates to freely adapt to situations, and directives should be minimized to only those that are required to achieve coordination.³²³ Furthermore, command and control is best created by implementing plans that provide subordinates with options and “facilitate effective action in the face of unforeseen events.”³²⁴

Training, education, and doctrine prepare subordinates for their areas of responsibility in the command and control structure and should focus on “fostering initiative and improving decision making.”³²⁵ Training scenarios should be created so that they introduce participants to uncertainty and disorder and provide them with opportunities to develop “pattern recognition skills that are essential to intuitive decision-making.”³²⁶ Similarly, education efforts ought to focus on teaching the “appropriate use of techniques and procedures ... [that optimize] flexibility, speed, and adaptability.”³²⁷ Most importantly, training, education, and doctrine should create a common view on how to best understand and deal with the challenges associated with command and control.³²⁸

Marine Corps command and control acknowledges that human conflict is a time-competitive event that is rife with uncertainty and therefore uses a model of command and control that decentralizes decision-making authority. Subordinates are granted the freedom to act in support of the commander’s intent, and those actions are communicated back to the commander in order to adjust cooperating efforts between other resources. Subordinates are given some restrictions, but only those kinds that protect unity of efforts. Unity of efforts in command and control is realized through the use of planning, training, education, and doctrine. The sum of these concepts helps to create a system of command and control that maintains a bias for action and works to generate swift and harmonious

³²² U.S. Marine Corps, 124.

³²³ U.S. Marine Corps, 125.

³²⁴ U.S. Marine Corps, 125.

³²⁵ U.S. Marine Corps, 131.

³²⁶ U.S. Marine Corps, 130.

³²⁷ U.S. Marine Corps, 131.

³²⁸ U.S. Marine Corps, 131.

efforts to prevail over an opposing force. For civil authorities, this means that the philosophy of Marine Corps' command and control can be used as a template to create new ways of organizing and deploying law enforcement resources to increase efficiency and effectiveness when responding to and stopping PTAs.

D. STRATEGY AND TACTICS

The Marine Corps warfighting philosophy establishes that human conflict is a clash of opposing wills in a dynamic environment rife with uncertainty and disorder.³²⁹ *Warfighting* offers strategies to attack an opponent's "mental and moral cohesion ... [to interrupt the opponent's ability to] think and respond effectively."³³⁰ *Command and Control* builds upon this warfighting philosophy and offers guidance on how to select and enact decisions faster than an opponent.³³¹ Marine Corps' *Strategy* and *Tactics* describes how to use available resources to achieve set goals and identifies methods to accomplish those objectives.³³²

1. Nature of Strategy and Tactics

The Marine Corps describes strategy as a process of identifying what needs to be achieved, determining the optimal means to use resources in pursuit of those goals, and then implementing the plan.³³³ A fundamental nature of strategy is that it is connected to policy and politics and, therefore, must operate within those constraints.³³⁴ For law enforcement, this means any strategies selected to address the threat at PTAs must be congruent with the authority and restrictions of department policies, established law, and collective will of the communities they serve. Strategies must also account for the challenges presented by the physical environment and exploit its strengths while evading

³²⁹ U.S. Marine Corps, *Warfighting*, 5.

³³⁰ Brown, *A New Conception of War*, xxv.

³³¹ U.S. Marine Corps, *Command and Control*, 2.

³³² U.S. Marine Corps, *Strategy*, 9; U.S. Marine Corps, *Tactics*, 3.

³³³ U.S. Marine Corps, *Strategy*, 9.

³³⁴ U.S. Marine Corps, 13.

its weaknesses.³³⁵ Concisely stated, strategy is “a specific way of using specified means to achieve distinct ends.”³³⁶

While strategy focuses on the goals to be achieved, tactics refer to the concepts and methods used to achieve those objectives.³³⁷ Tactics are the employment of resources in human conflict and are described by the Marine Corps as both an art and a science.³³⁸ The “art of tactics” refers to the imaginative and novel implementation of maneuver warfare concepts during human conflict, whereas the “science of tactics” refers to the skills involved with understanding and applying established techniques and procedures.³³⁹ The primary objective of tactics in maneuver warfare is to achieve decisive action.³⁴⁰ Decisive actions accomplish the assigned mission and “lead to achieving operational and strategic goals.”³⁴¹ And while strategy and tactics can appear to be two separate threads in the tapestry of maneuver warfare, they are so tightly entwined that to tug on one is to pull on the other. The theories used to select operational and strategic goals are explained in the next section.

2. Strategic and Tactical Theories

Strategy making is a problem-solving process that requires the strategist to assess the challenge they are facing.³⁴² The Marine Corps strategic assessment process starts with “observing and orienting to the strategic landscape.”³⁴³ This includes considering the physical environment’s geography, terrain, spatial relationships, and lines of

³³⁵ U.S. Marine Corps, 22.

³³⁶ U.S. Marine Corps, 37.

³³⁷ U.S. Marine Corps, *Tactics*, 3.

³³⁸ U.S. Marine Corps, 12.

³³⁹ U.S. Marine Corps, 12.

³⁴⁰ U.S. Marine Corps, 15.

³⁴¹ U.S. Marine Corps, 24.

³⁴² U.S. Marine Corps, *Strategy*, 80.

³⁴³ U.S. Marine Corps, 81.

communication.³⁴⁴ The next step is to assess the nature of the conflict by considering questions such as, “What values do both sides attach to the political objectives of war? What costs are both sides willing to pay? What material, economic, and human sacrifices will the participants endure? For how long? Under what circumstances? Will the societies expect regular, measurable progress? Will they patiently endure setbacks and frustrations?”³⁴⁵ The answers to these questions help to illuminate the desired ends of the conflict and the means both sides are willing to use to achieve those ends.³⁴⁶

After assessing the strategic landscape, the strategist must determine how each side of the conflict views its survival and victory.³⁴⁷ Survival is most commonly viewed as the “continuance of a way of life or the well-being of the population.”³⁴⁸ However, some ideological movements are willing to fight until death.³⁴⁹ For these groups, survival lies in “leaving behind a heroic legend to influence future generations or in making some other kind of lasting statement to humanity or god.”³⁵⁰ Victory is most often understood as achieving the desired result for which the group engaged in conflict.³⁵¹ In reality, victory most often means the conflict ends on “terms less unfavorable to oneself than to the enemy.”³⁵² Clearly identifying survival and victory is a challenging endeavor, which is why the strategist must account for numerous perspectives in each conflict.³⁵³

Next, the strategist must identify the political objectives for engaging in a conflict that can be unlimited or limited.³⁵⁴ Making this determination is an essential component

³⁴⁴ U.S. Marine Corps, 22.

³⁴⁵ U.S. Marine Corps, 81.

³⁴⁶ U.S. Marine Corps, 81.

³⁴⁷ U.S. Marine Corps, 83.

³⁴⁸ U.S. Marine Corps, 42.

³⁴⁹ U.S. Marine Corps, 43.

³⁵⁰ U.S. Marine Corps, 43.

³⁵¹ U.S. Marine Corps, 43.

³⁵² U.S. Marine Corps, 43.

³⁵³ U.S. Marine Corps, 43.

³⁵⁴ U.S. Marine Corps, 83.

to ensure the political and operational objectives match and support each other.³⁵⁵ Unlimited political objectives seek to eliminate an adversary through imprisonment or deadly force, whereas limited political objectives include anything other than imprisonment or deadly force.³⁵⁶ The political objects for law enforcement organizations responding to PTAs would be considered unlimited since the primary aims would be to apprehend the terrorist for imprisonment or stop their attacks through the use of deadly force. Once the political objectives are defined, the strategist moves on to identifying the operational objectives for using force that will support the political goals.

The Marine Corps has identified two specific strategies for using force: a strategy of annihilation and a strategy of erosion.³⁵⁷ A strategy of annihilation “seek[s] to eliminate the enemy’s ability to resist, thus leaving him helpless to oppose the imposition of our will.”³⁵⁸ In contrast, a strategy of erosion looks to “raise the enemy’s costs so high that he will find ending the war on our terms more attractive than continuing to fight.”³⁵⁹ Both strategies can be understood in the context of a law enforcement scenario where police officers respond to an active-shooter incident. A strategy of annihilation is when police officers shoot and kill the active shooter, thereby eliminating the threat and the attacker’s ability to continue fighting. A strategy of erosion would be when police officers surround the active shooter inside a building and the suspect surrenders instead of being killed by the larger police force that has a position of advantage.

The strategic development process moves on to consider centers of gravity and critical vulnerabilities. A center of gravity is described as a “key source of the enemy’s strength, providing either his physical or his psychological capacity to effectively resist.”³⁶⁰ Focusing on the opponent’s center of gravity forces the strategist to concentrate

³⁵⁵ U.S. Marine Corps, 83.

³⁵⁶ U.S. Marine Corps, 44–46.

³⁵⁷ U.S. Marine Corps, 54.

³⁵⁸ U.S. Marine Corps, 54.

³⁵⁹ U.S. Marine Corps, 54.

³⁶⁰ U.S. Marine Corps, 86.

on “as few key factors as possible.”³⁶¹ Whereas centers of gravity highlight an opponent’s strength, critical vulnerabilities seek to identify an opponent’s key weakness. Critical vulnerabilities can be identified and evaluated by using a two-step process.³⁶² The commander must first determine whether the vulnerability will undermine or destroy a center of gravity.³⁶³ If so, the commander must then determine whether the vulnerability is something he has the means to capture, destroy, or exploit.³⁶⁴ Once the opponent’s centers of gravity are identified, the strategist selects operational objectives that support the political objectives. Next, the strategist reviews the identified critical vulnerabilities and selects the most effective and efficient means of achieving those operational objectives.³⁶⁵ These concepts are then combined to create a strategic concept that guides the implementation of operational strategies.³⁶⁶ The strategic concept explains the next steps to take and is used as a reference for future plans and decisions.³⁶⁷

The last, but equally critical component of Marine Corps’ strategy is the theory of “just war.” Just war acknowledges that Western societies “demand two things of their strategic leaders” in human conflict.³⁶⁸ First, Western societies expect their strategic leaders to achieve success that “contributes to the security and societal well-being.”³⁶⁹ Secondly, strategic leaders are expected to be “in the right, a belief that the cause for which the people are called to sacrifice is a just one.”³⁷⁰ Just war theory identifies seven criteria

³⁶¹ U.S. Marine Corps, 86.

³⁶² U.S. Marine Corps, 87.

³⁶³ U.S. Marine Corps, 87.

³⁶⁴ U.S. Marine Corps, 87.

³⁶⁵ U.S. Marine Corps, 88.

³⁶⁶ U.S. Marine Corps, 89.

³⁶⁷ U.S. Marine Corps, 89.

³⁶⁸ U.S. Marine Corps, 93.

³⁶⁹ U.S. Marine Corps, 93.

³⁷⁰ U.S. Marine Corps, 93.

that assist the strategist with balancing “what is *necessary* and what is *just*.”³⁷¹ The seven just war criteria are as follows:

- **Just Cause.** A just cause involves the protection and preservation of value. There are three such causes: defense of self or of others against attack, retaking of something wrongly taken by force, and punishment of concrete wrongs done by an evil power.
- **Right Authority.** The person or body authorizing the war must be a responsible representative of a sovereign political entity.
- **Right Intention.** The intent in waging war must truly be just and not be a selfish aim masked as a just cause.
- **Proportionality of Ends.** The overall good achieved by the resort to war must not be outweighed by the harm it produces.
- **Last Resort.** We must show that there is no logical alternative to violence.
- **Reasonable Hope of Success.** There can be neither moral nor strategic justification for resorting to war when there is no hope of success.
- **The Aim of Peace.** Ends for which a war is fought must include the establishment of stability and peace.³⁷²

While law enforcement officers attempting to stop a PTA are not at war, many of the just war criteria can apply to police use of force. American society expects law enforcement officers to protect the community with respect for the dignity of life and in a manner consistent with the rules of law.³⁷³ Moreover, just war criteria can be as helpful for the law enforcement strategist as it is for the military strategist in that it establishes “objective measures from which to judge our motives.”³⁷⁴ The strategist needs to be able to articulate why the strategic concepts and chosen operational objectives are just.³⁷⁵ If unable to do so, it is likely the strategic concept and operational objectives are fatally flawed.³⁷⁶

³⁷¹ U.S. Marine Corps, 93.

³⁷² U.S. Marine Corps, 93–94.

³⁷³ “Code of Conduct for Law Enforcement Officials,” OHCHR, accessed November 23, 2019, <https://www.ohchr.org/EN/ProfessionalInterest/Pages/LawEnforcementOfficials.aspx>.

³⁷⁴ U.S. Marine Corps, *Strategy*, 95.

³⁷⁵ U.S. Marine Corps, 95.

³⁷⁶ U.S. Marine Corps, 95.

The development of a strategy that supports political objectives requires “discipline to study and understand the dynamics of a situation and think through the implications of potential actions.”³⁷⁷ However, it is important to note that strategy makers will never have a complete understanding of the situation at hand.³⁷⁸ Despite this disadvantage, “the strategist’s responsibility is to balance opportunity against risk and to balance both against uncertainty.”³⁷⁹

3. Applying Strategy and Tactics

Strategy guides the resources to a specific place and time and creates the framework for developing tactics that support the operational and political objectives.³⁸⁰ Identifying the optimal tactics to act on in pursuit of operational objectives is not an easy task. The tactical arena is a chaotic environment full of complexity and uncertainty around every corner.³⁸¹ Moreover, every conflict is unique and will have its own challenges, which means that the best course of action is not immediately apparent or predictable.³⁸² Despite these challenges, the aim of the commander is to pursue operational objectives and achieve success through decisive action.³⁸³ In *Strategy*, the Marine Corps describes the components of decisive action in the tactical arena as follows: “identifying enemy critical vulnerabilities, shaping the operating area to our advantage, designating a main effort to focus our combat power, and acting in a bold and ruthless manner.”³⁸⁴

As already mentioned, critical vulnerabilities are those “that if exploited, will do the most significant damage to the enemy’s ability to resist.”³⁸⁵ The challenge for the

³⁷⁷ U.S. Marine Corps, 101.

³⁷⁸ U.S. Marine Corps, 101.

³⁷⁹ U.S. Marine Corps, 102.

³⁸⁰ U.S. Marine Corps, *Tactics*, 5.

³⁸¹ U.S. Marine Corps, 6.

³⁸² U.S. Marine Corps, 24.

³⁸³ U.S. Marine Corps, 15.

³⁸⁴ U.S. Marine Corps, 29.

³⁸⁵ U.S. Marine Corps, *Warfighting*, 47.

commander is that an exact formula for determining critical vulnerabilities does not exist, and critical vulnerabilities are rarely obvious.³⁸⁶ Therefore, “the first requirement of a commander is to understand the situation [by developing a mental] picture of what is happening, how it got that way, and how it might further develop.”³⁸⁷ Next, the commander should consider the situation from the perspective of the opponent, which will help to uncover additional insight into how the opponent may be defeated.³⁸⁸ This mental process is skill best described as pattern recognition where “after seeing only a few pieces of the puzzle [the commander is able] to fill in the rest of the picture correctly.”³⁸⁹

Once critical vulnerabilities are identified, the commander must shape the operating area to their advantage.³⁹⁰ In the context of law enforcement responding to a PTA, the terrorist’s critical vulnerability will depend on numerous factors such as the location and method of the attack, the terrorist’s means of communication, or the resources used to move through the environment. For example, evacuating the public from an area where terrorists placed explosives will remove the terrorists’ intended targets. Or, roadblocks can disrupt the movement of terrorists who are shooting at people from a moving vehicle, thereby making the terrorists vulnerable to a direct assault from law enforcement. Whatever the critical vulnerability is determined to be, the commander “must be prepared to rapidly take advantage of it.”³⁹¹

The next two elements used for achieving decisive action are identifying the main effort and acting boldly. The main effort is the one action “most critical to success at that moment” and takes priority over all other actions.³⁹² Therefore, “the main effort becomes a harmonizing force for subordinate’s initiative.”³⁹³ Furthermore, the main effort must be

³⁸⁶ U.S. Marine Corps, *Tactics*, 31.

³⁸⁷ U.S. Marine Corps, 25.

³⁸⁸ U.S. Marine Corps, 25.

³⁸⁹ U.S. Marine Corps, 26.

³⁹⁰ U.S. Marine Corps, 31.

³⁹¹ U.S. Marine Corps, 31.

³⁹² U.S. Marine Corps, 32.

³⁹³ U.S. Marine Corps, 32.

pursued with boldness in order to achieve victory. The law enforcement strategy outlined by the Department of Homeland Security for stopping active shooters is an example of main effort and boldness. During an active-shooter situation, law enforcement officers are to “stop the active shooter as soon as possible ... [and] will not stop to help injured persons.”³⁹⁴ Therefore, during an active-shooter situation, police officers who bypass injured citizens to stop the shooter are supporting the main effort and acting with boldness in their attempt to stop the threat.

Marine Corps’ strategy and tactics also provide the commander with several other concepts for gaining the advantage in the tactical arena, namely surprise, trapping the enemy, developing an ambush mentality, and asymmetry. Achieving surprise can often prove to be a decisive factor in gaining an advantage over one’s opponent.³⁹⁵ Surprise can be achieved through deception, such as creating the illusion that the commander has more forces than the opponent.³⁹⁶ Surprise can also be gained through the use of stealth, where a portion of the commander’s forces sneak into a position of advantage against the enemy and attack at a critical moment.³⁹⁷ Surprise by stealth also offers forces a better chance of trapping the opponent and provides the commander with “a better opportunity to win decisively.”³⁹⁸ Specifically, trapping an opponent presents them with a new challenge where they must think through the dilemma, giving the commander an advantage since the opponent is forced to react to our actions.³⁹⁹

Developing an ambush mentality is an important concept for maneuver warfare, strategy, and tactics.⁴⁰⁰ The Marine Corps uses several sports analogies to explain the ambush mentality, such as the football player who tackles his opponent from the side or

³⁹⁴ Department of Homeland Security, *Active Shooter - How to Respond*, 5.

³⁹⁵ U.S. Marine Corps, *Tactics*, 47.

³⁹⁶ U.S. Marine Corps, 47.

³⁹⁷ U.S. Marine Corps, 48.

³⁹⁸ U.S. Marine Corps, 50.

³⁹⁹ U.S. Marine Corps, 50.

⁴⁰⁰ U.S. Marine Corps, 52.

the basketball player who blocks a defender so their teammate can score.⁴⁰¹ The critical point is that “the ambush mentality tries to turn every situation into an ambush.”⁴⁰² The commander is advised to look for every opportunity to use surprise and stealth to trap the opponent to gain the advantage.⁴⁰³ The ambush mentality complements the concept of fighting asymmetrically, which is when we fight “the enemy on our terms rather than on his.”⁴⁰⁴ The commander who is fighting asymmetrically does not need superior forces but focuses on exploiting the opponent’s vulnerabilities.⁴⁰⁵ For example, police officers with handguns confronting terrorists with handguns are fighting symmetrically. However, police officers with rifles, supplemented with SWAT officers in an armored vehicle against terrorists armed with handguns is fighting asymmetrically.

Once the commander gains an advantage over an opponent, that advantage should be used to create new opportunities through consolidation, exploitation, or pursuit.⁴⁰⁶ Consolidation is when the commander gathers their forces after securing a location with the intent to hold against an opponent.⁴⁰⁷ For example, if terrorists are attacking the southern end of a college campus, the commander may have law enforcement officers seize and secure buildings in the middle of the campus to protect students from the terrorists and hopefully stop the attack. Exploitation is another way for the commander to create new opportunities against an opponent. Whereas consolidation can be viewed as a defensive tactic, exploitation is offensive in that the commander seeks to disorganize the enemy by attacking important activities and functions.⁴⁰⁸ An example of exploitation would be law enforcement officers responding to a terrorist attack and capturing one of the terrorists. The commander could have subordinates take the terrorist’s radio communication device and

⁴⁰¹ U.S. Marine Corps, 52–53.

⁴⁰² U.S. Marine Corps, 53.

⁴⁰³ U.S. Marine Corps, 53–55.

⁴⁰⁴ U.S. Marine Corps, 55.

⁴⁰⁵ U.S. Marine Corps, 56.

⁴⁰⁶ U.S. Marine Corps, 101–2.

⁴⁰⁷ U.S. Marine Corps, 103.

⁴⁰⁸ U.S. Marine Corps, 103–4.

jam the signal so the other terrorists could no longer communicate. Alternatively, the commander could use the terrorist's radio to listen to their communications and then pursue the terrorists, which is the third way to gain an advantage.⁴⁰⁹ Pursuit is an offensive tactic where the primary aim is to "catch or cut off a hostile force that has lost cohesion and is attempting to escape in order to destroy it."⁴¹⁰

Another essential strategy is the use of reserve forces. A reserve is the portion of the commander's forces that are "withheld from action in order to influence future actions."⁴¹¹ A reserve force is important because it affords the commander flexibility to address unforeseen challenges and is another means for the commander to retain the initiative.⁴¹² For example, if law enforcement officers are slowed down from closing the distance to a team of terrorists, a reserve force can move in from a different direction and regain the momentum. A reserve force can also be used for an unforeseen crisis, which is why the commander should view the reserve as a tool for clinching the victory.⁴¹³ The importance of a reserve force was captured by Winston Churchill, who said, "It is in the use of withholding of their reserves that the great Commanders have generally excelled."⁴¹⁴

E. SUMMARY

This discussed the Marine Corps framework for understanding war and how this framework is used to develop a theory of war. The Marine Corps philosophy of maneuver warfare and how decision-making, mission tactics, and commander's intent are used to fight smartly is explained. The nature and theory of command and control is described and how the structure is used to create swift and harmonious efforts to defeat an opponent. The relationship between strategy and tactics was explained and strategy was shown to be a

⁴⁰⁹ U.S. Marine Corps, 104.

⁴¹⁰ U.S. Marine Corps, 104.

⁴¹¹ U.S. Marine Corps, 106.

⁴¹² U.S. Marine Corps, 106–7.

⁴¹³ U.S. Marine Corps, 108.

⁴¹⁴ U.S. Marine Corps, 107.

problem-solving process, which commanders can use to gain an advantage and defeat an opposing force. The next chapter examines how maneuver warfare, command and control, and strategy and tactics can be applied to improve law enforcement response to PTAs.

IV. ANALYSIS

A. INTRODUCTION

This chapter examines how the Marine Corps concepts of maneuver warfare, command and control, and strategy and tactics might be used to improve law enforcement command and control efforts for mutual aid during PTAs. The assessments starts with the Boston Marathon Bombing, moves on to the Paris terrorist attacks, and finishes with the San Bernardino terrorist attack. With each incident, I describe the law enforcement challenges identified in the case studies and derive elements from the Marine Corps strategic concepts that could be useful for addressing the law enforcement challenges. The information from this chapter is used to offer suggestions for improving law enforcement command and control efforts during PTAs, which is addressed in Chapter V.

B. BOSTON MARATHON BOMBING

1. Maneuver Warfare Strategy Applied

Maneuver warfare strategy reminds the reader that human conflict is rife with uncertainty and disorder where decisions are made “based on incomplete, inaccurate, or even contradictory information.”⁴¹⁵ Nowhere is this more apparent than the first contact Watertown police officers had with terrorists Tamerlan and Dzhokhar Tsarnaev. A Watertown police officer was driving behind what he thought was a stolen SUV, and as he followed the SUV onto a side street, he was immediately confronted with gunfire and improvised grenades.⁴¹⁶ As a gun battle ensued, officers from Watertown PD and four other police agencies responded and parked their police vehicles behind the first officer.⁴¹⁷ During the gun battle, terrorist Dzhokhar escaped in a vehicle, and police officers were unable to pursue because their own vehicles were parked in a disorganized manner.⁴¹⁸ This

⁴¹⁵ U.S. Marine Corps, *Warfighting*, 7.

⁴¹⁶ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 56.

⁴¹⁷ Massachusetts Emergency Management Agency et al., 56.

⁴¹⁸ Massachusetts Emergency Management Agency et al., 56.

incident highlights three important concepts of maneuver warfare: nonlinearity, warfare by maneuver, and speed and focus.⁴¹⁹

First, maneuver warfare describes nonlinearity as situations where “causes and effects are disproportionate [and] minor incidents or actions can have decisive effects.”⁴²⁰ An example of this is when the police officers responding to the gun battle left their vehicles in the roadway and then ran on foot toward gunfire and explosives. Choosing how and where to park a police vehicle may appear minor when fellow officers are being attacked with bullets and explosives. However, the manner in which the officers parked led to a decisive effect in favor of the terrorist, which is that the police officers could not pursue Dzhokhar when he escaped by driving away.

This leads to the second important concept, which is warfare by maneuver. Warfare by maneuver encourages commanders and their subordinates to “circumvent a problem and attack it from a position of advantage rather than meet it straight on.”⁴²¹ The officers who responded to the shootout between the Tsarnaev brothers and Watertown officers confronted the terrorists head-on. Warfare by maneuver suggests that confronting the terrorists from the side or rear would have placed officers in a position of advantage over the terrorists.

The third concept of maneuver warfare is speed and focus. Speed is “rapidity of action ... over distance, or space ... [and it] is relative speed that matters rather than absolute speed.”⁴²² For example, when the terrorists first shot at the Watertown officer, responding officers arrived to assist in less than four minutes.⁴²³ However, when Dzhokhar escaped, the police officers lacked a swift response, which is why maneuver warfare must combine speed with focus. The focus is placing resources at a decisive location to be used

⁴¹⁹ U.S. Marine Corps, *Warfighting*, 8,40.

⁴²⁰ U.S. Marine Corps, 8.

⁴²¹ U.S. Marine Corps, 37.

⁴²² U.S. Marine Corps, 40.

⁴²³ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 27.

at a decisive moment.⁴²⁴ Using the concept of speed and focus, responding officers could have taken positions that blocked Dzhokhar’s avenues of escape by being in a decisive location (blocking escape routes) at a decisive moment (during Dzhokhar’s attempted escape). This swift response, focused on limiting the movement of the terrorist, could have provided a greater advantage for the police officers on-scene. Table 10 identifies the law enforcement challenges and accompanying maneuver warfare strategies that could be used to improve performance.

Table 10. Boston Marathon Bombing Maneuver Warfare Strategy Applied

Law Enforcement Challenge	Maneuver Warfare Strategy
Police vehicles blocked ingress and egress routes	Nonlinearity: Commanders and subordinates should remain aware that “causes and effects are disproportionate [and] minor incidents or actions can have decisive effects.” ⁴²⁵
Uncoordinated police response	Warfare by Maneuver: Avoid an opponent’s strength and exploit the opponent’s weakness. ⁴²⁶
Police unable to pursue fleeing terrorist	Speed and Focus: Speed relative to an opponent is more important than absolute speed. ⁴²⁷ A commander should focus resources and efforts at a decisive location to be used at a “decisive moment.” ⁴²⁸

2. Command and Control Applied

A critical component of command and control is planning, which allows the commander to develop “practical schemes for taking future actions.”⁴²⁹ The value of planning under the command and control structure can be seen in law enforcement’s

⁴²⁴ U.S. Marine Corps, *Warfighting*, 41.

⁴²⁵ U.S. Marine Corps, 8.

⁴²⁶ U.S. Marine Corps, 37.

⁴²⁷ U.S. Marine Corps, 40.

⁴²⁸ U.S. Marine Corps, 41.

⁴²⁹ U.S. Marine Corps, *Command and Control*, 84.

preparation and response to the bombings at the Boston Marathon. Four months before the attack, law enforcement commanders, public safety partners such as fire and public health, and humanitarian organizations met to initiate planning efforts for the race.⁴³⁰ As a result, when the terrorist's bombs exploded near the finish line, avenues of ingress and egress for first responders were already established, and numerous radio broadcasts reminded officers to be mindful of where they parked their police cars.⁴³¹ The planning efforts combined with the established command and control structure resulted in the rapid evacuation of seriously injured victims within 22 minutes.⁴³² Because of the pre-planning efforts and assignment of police officers at critical locations, commanders had a keen awareness of operational priorities and subordinates acted in support of those objectives. The real test to law enforcement's command and control efforts occurred four days later when law enforcement finally located and attempted to capture the outstanding terrorists.

When a Watertown police officer and sergeant radioed their commander and dispatch center to advise they were in a gun battle, the dispatch center requested mutual aid from surrounding law enforcement agencies.⁴³³ Similar to what occurred in the Paris and San Bernardino terrorist attacks, the police response to the Watertown shooting was uncoordinated. *Command and Control* emphasizes the importance of mission tactics to pursue harmony of efforts.⁴³⁴ Using mission tactics, the commander issues "broad guidance rather than detailed directions or directives" and should include restrictive control measures but only to the level that protects the unity of efforts.⁴³⁵ For example, during the mutual aid response to the Watertown shootout, the commander could have advised responding units not to block routes of ingress and egress. This restrictive measure would help to protect the unity of efforts as police responded to the shooting, allow officers to

⁴³⁰ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 35.

⁴³¹ Massachusetts Emergency Management Agency et al., 79.

⁴³² Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 8.

⁴³³ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 56.

⁴³⁴ U.S. Marine Corps, *Command and Control*, 109.

⁴³⁵ U.S. Marine Corps, 109, 110.

redeploy in pursuit of the terrorist, and protect open routes for medical transportation. Moreover, the officers at the scene of the shooting could have used the *Command and Control* concept of low-level initiative. Low-level initiative is a critical component of mission command and control because it grants subordinates the freedom to make their own decisions while remaining mindful of how their actions support mission tactics.⁴³⁶ During the Watertown shootout, an officer demonstrating low-level initiative would have assessed the situation and, being mindful of the restrictive control measures, told responding officers which roadways to keep open similar, to what occurred during the bombing attacks at the Boston Marathon.⁴³⁷

Approximately 28 minutes after the police shootout with the Tsarnaev brothers, Watertown PD identified the Arsenal Mall as the command post staging area.⁴³⁸ Commanders from several different law enforcement organizations began to develop a plan to capture Dzhokhar by cordoning off an area 20 blocks wide. At 5:30 a.m., officers started a door-to-door search.⁴³⁹ As the tactical search was being conducted, “an overwhelming number of law enforcement officers arrived in Watertown from across Massachusetts, other New England states, and New York.”⁴⁴⁰ Many of those officers self-deployed when they heard the Boston Marathon Bombing suspects were possibly in Watertown.⁴⁴¹ The officers who self-deployed did not request permission from their supervisors or tell their agencies they were deploying.⁴⁴² As the tactical search progressed, “more than 2,500 officers from 116 federal, state, and local law enforcement agencies arrived at the [Arsenal Mall] staging area.”⁴⁴³ The commanders at the established unified command post did not

⁴³⁶ U.S. Marine Corps, 111.

⁴³⁷ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 79.

⁴³⁸ Massachusetts Emergency Management Agency et al., 27, 28.

⁴³⁹ Massachusetts Emergency Management Agency et al., 58.

⁴⁴⁰ Massachusetts Emergency Management Agency et al., 61.

⁴⁴¹ Massachusetts Emergency Management Agency et al., 61.

⁴⁴² Massachusetts Emergency Management Agency et al., 61.

⁴⁴³ Massachusetts Emergency Management Agency et al., 61.

identify a person or team to account for the self-deployed officers, nor did the commanders establish a system to track or “deny access to unnecessary mutual aid support.”⁴⁴⁴ This led to confusion about who had overall authority and resulted in a lack of oversight to the point that staged officers self-deployed based upon radio transmissions about the possible location of the outstanding terrorist, which compromised officer safety.⁴⁴⁵ *Command and Control* recommends two concepts that could have assisted commanders with addressing these challenges: topsight and directed telescope.⁴⁴⁶

Topsight shifts the commander’s focus from the details of the operation to the “overhead vantage point ... [that] reveals *the whole*—the big picture; how the parts fit together.”⁴⁴⁷ Directed telescope is a technique where the commander identifies a dedicated information collector to monitor specific situations and then report back.⁴⁴⁸ During the unified command post operations at the Arsenal Mall, the use of topsight could have assisted the commander with perceiving the unfolding situation of self-deployed officers at the staging area as it increased to more than 2,500 officers. The commander could have then used the directed telescope technique by designating a subordinate to monitor the influx of officers and report back. As the commander is updated about the increasing number of arriving officers, they could have tasked subordinates to have the unneeded self-deployed officers return to their jurisdictions or have them remain in place until directed to deploy.

As the influx of self-deployed officers continued to cause disorder at the Arsenal Mall staging area, officers tasked with searching for the outstanding terrorist also experienced their own unique challenges. While the unified command had designated specific areas to be searched and assigned teams a specific grid to search for the outstanding terrorist, the search strategy did not go as planned. Specifically, as teams were searching

⁴⁴⁴ Massachusetts Emergency Management Agency et al., 61.

⁴⁴⁵ Massachusetts Emergency Management Agency et al., 62.

⁴⁴⁶ U.S. Marine Corps, *Command and Control*, 74, 76.

⁴⁴⁷ U.S. Marine Corps, 74.

⁴⁴⁸ U.S. Marine Corps, 76.

their area of responsibility, there was no way for them to “hold the ground they had already searched,” which meant the terrorist could have moved from an unsearched area to a location that was already searched.⁴⁴⁹ Marine Corps doctrine recommends a dynamic form of command and control that views “command as the exercise of authority and control as feedback about the effects of the action taken.”⁴⁵⁰ In regard to the search operation, the unified command exercised authority by designating search areas and identifying teams to search each grid. However, the teams did not provide feedback on their inability to secure the zones they already searched.⁴⁵¹ Therefore, the unified command did not make any adjustments to the search strategy because they were unaware of this challenge confronting the search teams. *Command and Control* recognizes that “it is unreasonable to expect command and control to provide precise, predictable, and mechanistic order to a complex undertaking,”⁴⁵² which is why feedback from subordinates is so important.

Over two hours after the search efforts for the outstanding terrorist was called off, a Watertown resident called 911 and told authorities that a person covered in blood was hiding in his boat.⁴⁵³ When the information was broadcasted over police radios, officers self-deployed, and “within moments, more than 100 officers had gathered in front of and behind the home.”⁴⁵⁴ The uncoordinated response and large amount of self-deployed officers led to more confusion as it was “unclear who was responsible for the inner and outer perimeters.”⁴⁵⁵ Twelve minutes after the resident first reported the suspicious person in his boat, a police officer “without appropriate authority, fired his weapon” at the boat.⁴⁵⁶ Adding to the chaos, numerous other police officers also began shooting at the boat

⁴⁴⁹ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 25.

⁴⁵⁰ U.S. Marine Corps, *Command and Control*, 40.

⁴⁵¹ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 25.

⁴⁵² U.S. Marine Corps, *Command and Control*, 47.

⁴⁵³ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 64.

⁴⁵⁴ Massachusetts Emergency Management Agency et al., 64.

⁴⁵⁵ Massachusetts Emergency Management Agency et al., 64.

⁴⁵⁶ Massachusetts Emergency Management Agency et al., 64.

resulting in “hundreds of rounds being fired,” which only stopped approximately 10 seconds after an on-scene supervisor ordered a ceasefire.⁴⁵⁷

The police response to the boat where the outstanding terrorist was hiding is an example of how situations can gravitate toward disorder and highlights the need for restrictive measures to ensure cooperation among first responders. Specifically, using the concept of mission command and control, the commander would identify a group of officers as a quick reactionary force should an emergency arise. When the 911 call was received about the person hiding in the boat, the reactionary force would then respond, and the remaining resources would hold their positions until further orders. This approach gives the reactionary force the freedom and flexibility to choose how they respond and the strategies and tactics they use once on scene. Moreover, the restrictionary measure of holding the remaining officers until further notice contributes to a coordinated response and reduces uncertainty about who is in control and what actions are to be pursued in support of the mission.

Training and education is a critical component of command and control since it helps to foster initiative and improve decision-making.⁴⁵⁸ *Command and Control* recommends that training scenarios should be used to introduce subordinates to uncertainty and disorder while reinforcing the appropriate use of techniques and procedures.⁴⁵⁹ For example, commanders could create a training scenario similar to the incident when officers surrounded the boat with the terrorist hiding inside. The training could be designed to reinforce the importance of identifying a clear target before shooting a firearm and emphasize the importance of only using deadly force in the immediate defense of life. Training scenarios could also include circumstances where officers need to choose how and where to park their vehicles, which could be used to address the problem of police vehicles blocking avenues of ingress and egress. Table 11 identifies the law enforcement

⁴⁵⁷ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 28; Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 64.

⁴⁵⁸ U.S. Marine Corps, *Command and Control*, 130.

⁴⁵⁹ U.S. Marine Corps, 130, 131.

challenges and accompanying command and control strategies that could be used to improve performance.

Table 11. Boston Marathon Bombing Command and Control Applied

Law Enforcement Challenge	Command and Control
Uncoordinated police response	<p>Mission Tactics: Commanders explain the intent of missions and include restrictive control measures to ensure lateral cooperation among other teams and efforts.⁴⁶⁰</p> <p>Topsight: The commander shifts focus from the details of the operation to the overhead vantage point.⁴⁶¹</p> <p>Directed Telescope: The commander identifies a dedicated information collector to monitor specific situations and then report back.⁴⁶²</p> <p>Command and Control: “The action-feedback loop makes command and control a continuous, cyclic process and not a sequence of discrete actions.”⁴⁶³</p> <p>Training & Education: “Prepare people for the roles they play in command and control.”⁴⁶⁴</p>
Police officers self-deployed	<p>Mission Tactics: Commanders explain the intent of missions and include restrictive control measures to ensure lateral cooperation among other teams and efforts.⁴⁶⁵</p> <p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁴⁶⁶</p>

⁴⁶⁰ U.S. Marine Corps, 109, 110.

⁴⁶¹ U.S. Marine Corps, 74.

⁴⁶² U.S. Marine Corps, 76.

⁴⁶³ U.S. Marine Corps, 46.

⁴⁶⁴ U.S. Marine Corps, 130.

⁴⁶⁵ U.S. Marine Corps, 109, 110.

⁴⁶⁶ U.S. Marine Corps, 111.

Law Enforcement Challenge	Command and Control
Police vehicles blocked ingress and egress routes.	<p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁴⁶⁷</p> <p>Training: Introduce subordinates to uncertainty and disorder while reinforcing the “appropriate use of techniques and procedures.”⁴⁶⁸</p>
Lack of weapons discipline	<p>Training: Introduce subordinates to uncertainty and disorder while reinforcing the “appropriate use of techniques and procedures.”⁴⁶⁹</p>

3. Strategy and Tactics Applied

Strategy is a problem solving process, and the public safety committee for the Boston Marathon placed significant effort into planning and training for everything on the racecourse, from medical emergencies to terrorist attacks.⁴⁷⁰ Therefore, when the bombing attacks occurred on the day of the race, the strategy put in place by the public safety committee created the “framework for developing tactics that support the operational and political objectives.”⁴⁷¹ For example, medical personnel who were assigned to the key locations on the route immediately began providing medical care.⁴⁷² On-scene police officers coordinated the response of additional resources and reminded those assets to keep avenues of ingress and egress open and clear.⁴⁷³ Furthermore, police explosive ordinance teams who were stationed at the finish line immediately began searching for other explosive devices while also evacuating people from the area.⁴⁷⁴ The preplanning efforts

⁴⁶⁷ U.S. Marine Corps, 111.

⁴⁶⁸ U.S. Marine Corps, 130, 131.

⁴⁶⁹ U.S. Marine Corps, 130, 131.

⁴⁷⁰ U.S. Marine Corps, *Strategy*, 80; Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 35.

⁴⁷¹ U.S. Marine Corps, *Tactics*, 5.

⁴⁷² Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 7.

⁴⁷³ Cole, Howitt, and Heymann, 8.

⁴⁷⁴ Cole, Howitt, and Heymann, 11.

put in place by the Boston Marathon Public Safety Committee were instrumental in achieving decisive action when the bombings occurred. Specifically, the committee shaped the environment/racecourse to their advantage; they placed vital resources in critical locations and identified the main efforts for different contingencies, including a terrorist attack. It is important to note that the public safety response to the Boston bombings benefited from the fact that it was a preplanned event where the public safety committee had months to plan, prepare, and train.⁴⁷⁵ In contrast, the police response to the shootout in Watertown, Massachusetts, was unplanned and unrehearsed.

The initial police response to the shootout in Watertown lacked a clear and coordinated main effort. *Strategy* and *Tactics* establishes that recognizing an opponent's center of gravity, focusing efforts on their critical vulnerability, and shaping the environment to one's advantage are critical concepts for achieving decisive action and defeating an opponent.⁴⁷⁶ For example, the Boston terrorists' key strength (center of gravity) was their freedom of movement, which allowed them to avoid capture from the police. Therefore, restricting the movement of the terrorists would exploit their critical vulnerability and could have been achieved by shaping the environment during the initial police response to the shootout in Watertown.⁴⁷⁷ Specifically, *Tactics* points out that trapping an opponent can assist the commander in shaping the environment to gain an advantage.⁴⁷⁸ If a commander had taken control by organizing the police response to the Watertown shootout, they could have directed police officers to deploy in positions that trapped the terrorists by blocking their avenues of escape. This main effort would have become a "harmonizing force for subordinate's initiative."⁴⁷⁹ The terrorist would have

⁴⁷⁵ Massachusetts Emergency Management Agency et al., *After Action Report for the Response to the 2013 Boston Marathon Bombings*, 35.

⁴⁷⁶ U.S. Marine Corps, *Strategy*, 86,87; U.S. Marine Corps, *Tactics*, 29.

⁴⁷⁷ U.S. Marine Corps, *Tactics*, 29.

⁴⁷⁸ U.S. Marine Corps, 50.

⁴⁷⁹ U.S. Marine Corps, 32.

then been confronted with a change in their circumstances while the police officers continued to press their advantage.⁴⁸⁰

Tactics and *Strategy* emphasize the importance of guiding resources to a “particular place at a particular time” in order to “balance opportunity against risk and to balance both against uncertainty.”⁴⁸¹ This can be achieved by fighting asymmetrically. Fighting asymmetrically is when a commander uses “dissimilar techniques and capabilities to maximize our own strengths while exploiting enemy weaknesses.”⁴⁸² For example, one of the first officers to arrive at the location where the outstanding terrorist was hiding inside of a boat decided to request a tactical team.⁴⁸³ Using a tactical team to confront threats posed by a terrorist is an example of fighting asymmetrically. Specifically, a tactical team possesses more equipment, tools, and training than a standard police officer, which gives them an advantage over the terrorists and allows the commander to exploit the terrorist’s weakness.

Before tactical teams arrived at the location of the boat, officers started shooting at the boat until the on-scene commander yelled for everyone to stop firing.⁴⁸⁴ *Strategy* explicitly states that commander and subordinate actions are connected to policy and “must operate within those constraints.”⁴⁸⁵ The police officers who shot at the boat did so based on no clear threat, and an after-action report shows that there was “no indication that the suspect in the boat had a weapon or fired upon police.”⁴⁸⁶ *Strategy* also offers just war theory to assist the commander and subordinates with criteria to balance decision-making when using force. The police shooting at the boat is an example of how quickly situations

⁴⁸⁰ U.S. Marine Corps, 50.

⁴⁸¹ U.S. Marine Corps, 5; U.S. Marine Corps, *Strategy*, 102.

⁴⁸² U.S. Marine Corps, *Tactics*, 55.

⁴⁸³ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 27.

⁴⁸⁴ Massachusetts Emergency Management Agency et al., *After-Action Report*, 64; Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 28.

⁴⁸⁵ U.S. Marine Corps, *Strategy*, 13.

⁴⁸⁶ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 28.

can gravitate toward disorder and highlights the importance for commanders to rapidly enact strategies and tactics to achieve decisive action.⁴⁸⁷

The commander at the scene where officers had surrounded the boat finally gained control by moving officers out of each other’s line of fire and establishing containment around the terrorist’s hiding location.⁴⁸⁸ Once the scene was less chaotic, the commander used highly trained tactical teams, coupled with air support, infrared technology, and robots, to safely take the outstanding terrorist into custody. The establishment of a sound containment with the blend of skilled personnel and technology is a good example of fighting asymmetrically and using a strategy of erosion. Specifically, the commander fought asymmetrically by using the advantages of tactical teams and specialized equipment to exploit the terrorist’s weaknesses. Next, the commander implemented a strategy of erosion by placing the terrorist at such a disadvantage that surrendering to authorities was “more attractive than continuing to fight.”⁴⁸⁹ In closing, the police actions during the Boston terrorist attacks demonstrate an important concept from *Strategy and Tactics*: success relies on the judgment, experience, and education of subordinates.⁴⁹⁰ Table 12 identifies the law enforcement challenges and accompanying strategies and tactics that could be used to improve performance.

Table 12. Boston Marathon Bombing Strategy and Tactics Applied

Law Enforcement Challenge	Strategy and Tactics
Uncoordinated police response	Shaping the Environment: Shaping the environment helps to “gain the initiative, preserve momentum, and control the tempo” of the operation ⁴⁹¹

⁴⁸⁷ U.S. Marine Corps, *Tactics*, 15.

⁴⁸⁸ Cole, Howitt, and Heymann, *Lessons from the Boston Marathon Bombing*, 28.

⁴⁸⁹ U.S. Marine Corps, *Strategy*, 54.

⁴⁹⁰ U.S. Marine Corps, 107.

⁴⁹¹ U.S. Marine Corps, *Tactics*, 32.

Law Enforcement Challenge	Strategy and Tactics
	Trapping: “Trapping allows us to gain and maintain the initiative as the enemy is forced to react to our actions.” ⁴⁹²
Police officers self-deployed	Main Effort: The one action is most critical to success, which takes priority over all other actions and “becomes a harmonizing force for a subordinate’s initiative.” ⁴⁹³
Police vehicles blocked ingress and egress routes.	Shaping the Environment: Shaping the environment helps to “gain the initiative, preserve momentum, and control the tempo” of the operation ⁴⁹⁴
Lack of weapons discipline	Strategy: A fundamental nature of strategy is that it is connected to policy and politics and, therefore, must operate within those constraints. ⁴⁹⁵

C. PARIS ATTACKS

1. Maneuver Warfare Strategy Applied

When the first bomb exploded outside the Stade de France, law enforcement authorities expected a second wave of attacks. Therefore, they decided it was best to not evacuate the stadium or flood the area with additional resources.⁴⁹⁶ Unknown to authorities at the time was that two additional suicide bombers were lying in wait to harm more people.⁴⁹⁷ The decision to lock down the stadium instead of evacuating most likely saved lives. However, while authorities were prepared to counter a second terrorist attack near the stadium, they were not prepared for where the second waves of attacks actually

⁴⁹² U.S. Marine Corps, 50.

⁴⁹³ U.S. Marine Corps, 32.

⁴⁹⁴ U.S. Marine Corps, 32.

⁴⁹⁵ U.S. Marine Corps, *Strategy*, 13.

⁴⁹⁶ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 23.

⁴⁹⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, 15.

took place in the 10th and 11th arrondissements.⁴⁹⁸ *Warfighting* takes the general concept of maneuver, which is spatial, and expands it to include other dimensions such as psychological, technological, or temporal.⁴⁹⁹ Therefore, a goal of maneuver warfare “is to attack the enemy ‘system’” so they are confronted with “dilemmas in which events happen unexpectedly and more quickly” than they can adjust.⁵⁰⁰ For example, when French authorities decided to lock down the stadium after the initial terrorist attack, they also decided not to inform the stadium attendees or public at large.⁵⁰¹ If the authorities had used a mass notification system to alert the public about the terrorist attack, those who were in the 10th and 11th arrondissements might have been more alert to the pending attacks in those districts. However, there is always the chance that a mass notification alert about an active terrorist attack could also result in widespread panic where large amounts of people flood roadways in an attempt to flee the area. While it is impossible to prove a mass notification would have saved lives and removed the element of surprise from the terrorists, it is an example of how using technology to attack an opponent’s system could prove advantageous.

The second wave of attacks in the 10th and 11th arrondissements were conducted by a team of terrorists who used firearms with hit-and-run tactics. Specifically, the terrorists carried out their attacks at intersections with large crowds, which also afforded them multiple avenues of escape to carry out more attacks.⁵⁰² The police response to these attacks was unorganized, and similar to what happened in Watertown, French police officers left their vehicles parked in a manner that blocked ingress and egress routes, which prevented more resources from being deployed in the area.⁵⁰³ This is yet another example where the *Warfighting* concepts of nonlinearity and speed and focus are illuminated.

⁴⁹⁸ Homeland Security Advisory Council and Paris Public Safety Delegation, 15.

⁴⁹⁹ U.S. Marine Corps, *Warfighting*, 72.

⁵⁰⁰ U.S. Marine Corps, 37,74.

⁵⁰¹ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 23.

⁵⁰² Homeland Security Advisory Council and Paris Public Safety Delegation, 18.

⁵⁰³ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

Nonlinearity explains that “minor incidents or actions can have decisive effects,” and the police vehicles blocking roadways inhibited other police officers from achieving a timely response.⁵⁰⁴ Moreover, it took the French anti-terrorist unit, BRI, more than 20 minutes to arrive in the area, and by that time, the terrorists had already escaped.⁵⁰⁵ *Warfighting* points out that speed relative to an opponent is more important than absolute speed, and in this case, the terrorists moved faster than responding police officers and the BRI.⁵⁰⁶

As the BRI searched for the terrorists who were already gone, the third group of terrorists arrived at the Bataclan concert hall. As soon as the terrorists exited their vehicle, they shot and killed the security guard outside and then stormed the location, shooting at the crowd inside for over seven minutes.⁵⁰⁷ Fifteen minutes after the attack started, a lone police officer armed with only a handgun entered the concert hall and shot at one of the terrorists, which killed the terrorist when the explosive vest he was wearing detonated.⁵⁰⁸ Although the officer was ordered to disengage, his actions are a good example of how tempo, surprise, and boldness, which are components of warfare by maneuver, can lead to positive outcomes

Warfare by maneuver states that tempo is itself a weapon and that both the commander and subordinates must use the time-competitive rhythm of human conflict to gain an advantage over an opponent.⁵⁰⁹ Increasing tempo to one’s advantage can occur with the use of surprise and boldness.⁵¹⁰ Law enforcement achieves surprise by intercepting an opponent at an unanticipated location or by using methods that are unexpected.⁵¹¹ To achieve surprise, the commander or subordinate must act boldly and “pursue major results

⁵⁰⁴ U.S. Marine Corps, *Warfighting*, 8.

⁵⁰⁵ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

⁵⁰⁶ U.S. Marine Corps, *Warfighting*, 41; Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

⁵⁰⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 22.

⁵⁰⁸ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

⁵⁰⁹ U.S. Marine Corps, *Warfighting*, 38, 71.

⁵¹⁰ U.S. Marine Corps, 42.

⁵¹¹ U.S. Marine Corps, 42.

rather than marginal ones.”⁵¹² *Warfighting* also cautions the reader that “boldness is based on strong situational awareness ... [and] must be tempered with judgment lest it border on recklessness.”⁵¹³ Table 13 identifies the law enforcement challenges and accompanying maneuver warfare strategies that could be used to improve performance.

Table 13. Paris Attacks Maneuver Warfare Strategy Applied

Law Enforcement Challenge	Maneuver Warfare Strategy
Not prepared for second wave of attacks	Maneuver Warfare: Generate and exploit a psychological, technological, temporal, or spatial advantage over an opponent. ⁵¹⁴
Police vehicles blocked ingress and egress routes	Nonlinearity: Commanders and subordinates should remain aware that “causes and effects are disproportionate [and] minor incidents or actions can have decisive effects.” ⁵¹⁵
Delayed response to attack	Speed and Focus: Speed relative to an opponent is more important than absolute speed. ⁵¹⁶ A commander should focus resources and effects at a decisive location to be used at a decisive moment. ⁵¹⁷
Police officer ordered to disengage from terrorists	Maneuver Warfare: Tempo is itself a weapon and increased tempo can occur with the use of surprise and boldness. ⁵¹⁸ Surprise is achieved by being bold and attacking an enemy in a manner they do not expect. To avoid recklessness, boldness must be tempered with judgement. ⁵¹⁹

⁵¹² U.S. Marine Corps, 44.

⁵¹³ U.S. Marine Corps, 44.

⁵¹⁴ U.S. Marine Corps, 72.

⁵¹⁵ U.S. Marine Corps, 8.

⁵¹⁶ U.S. Marine Corps, 40.

⁵¹⁷ U.S. Marine Corps, 41.

⁵¹⁸ U.S. Marine Corps, 42.

⁵¹⁹ U.S. Marine Corps, 42, 44.

2. Command and Control Applied

As previously mentioned, French commanders were not prepared for the second wave of terrorist attacks that took place in the 10th and 11th arrondissements.⁵²⁰ *Command and Control* recommends that commanders use a technique known as topsight to obtain an overall view of the challenges they are facing.⁵²¹ Using topsight, the commander should evaluate the entire situation beyond the immediate crisis to obtain a grasp of the big picture.⁵²² *Command and Control* also recommends the commander views the situation “through the eyes of the enemy commander ... to deduce possible enemy intentions and anticipate possible enemy moves.”⁵²³ While it is not possible to prove these techniques would have helped the French commanders anticipate the attacks in the 10th and 11th arrondissements, these techniques, coupled with the lessons learned in Paris, could be useful with assisting future commanders. Moreover, these two perspectives highlight the importance of commanders anticipating other methods of attack besides the one with which they are currently confronted.

As the terrorists carried out more attacks throughout Paris, the police response “suffered from a lack of an incident command system.”⁵²⁴ Per established protocol, if a terrorist attack occurs in France, “BRI and RAID are supposed to jointly mobilize under a unified command system.”⁵²⁵ However, both BRI and RAID operated independently from each other, which led to more confusion.⁵²⁶ Furthermore, the lack of unity resulted in “three separate command posts that were operating independently, exacerbating police attempts to get accurate information in real-time.”⁵²⁷ *Command and Control* emphasizes

⁵²⁰ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 18.

⁵²¹ U.S. Marine Corps, *Command and Control*, 74.

⁵²² U.S. Marine Corps, 74.

⁵²³ U.S. Marine Corps, 74.

⁵²⁴ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 23.

⁵²⁵ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

⁵²⁶ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

⁵²⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, 23.

unity of command, where “any given mission falls within the authority and responsibility of a single commander.”⁵²⁸ This interactive system of command and control views command as the initiation of action and control as “the feedback about the effects of the action taken.”⁵²⁹ Additionally, unity of command assists the commander with generating “swift, appropriate, decisive, harmonious, and secure action” to defeat an opponent.⁵³⁰ The French protocol for BRI and RAID to jointly mobilize in a unified command during a terrorist attack is consistent with the recommendations in *Command and Control*, but its response structure uses a centralized rather than decentralized command and control structure.⁵³¹ According to the doctrine, such a centralized command and control process “tends to move slowly: information must be fed up to the top of the chain where sole decisionmaking authority resides, and orders must filter to the bottom to be executed.”⁵³² In contrast, a decentralized command and control structure grants subordinates freedom of action and flexibility to make decisions based on the situation at hand.⁵³³

Several French police experts who reviewed the Paris terrorist attacks suggest that “the delayed response points to weaknesses in the highly centralized French police structure [where] everything has to filter up to the central organization at the prefecture.”⁵³⁴

Command and Control recommends using a system of command and control that is “designed for simplicity and speed.⁵³⁵ Simple plan are easier to enact and speed shortens “the time needed to make decisions, plan, coordinate and communicate.”⁵³⁶ This can be achieved by using a command and control structure that grants commanders the “flexibility

⁵²⁸ U.S. Marine Corps, *Command and Control*, 88.

⁵²⁹ U.S. Marine Corps, 40.

⁵³⁰ U.S. Marine Corps, 54.

⁵³¹ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

⁵³² U.S. Marine Corps, *Command and Control*, 78.

⁵³³ U.S. Marine Corps, 79.

⁵³⁴ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

⁵³⁵ U.S. Marine Corps, *Command and Control*, 132.

⁵³⁶ U.S. Marine Corps, 65, 132.

to eliminate or bypass selected echelons of command or staff as appropriate in order to improve operational tempo.”⁵³⁷ Again, mission tactics and low-level initiative are important concepts used to create a nimble and responsive command and control structure. Using mission tactics, French commanders would explain their intent for the response to the terrorist attacks and identify restrictions that would protect lateral cooperation among other teams and efforts.⁵³⁸ The French police officers would be granted the freedom to make their own decisions based on the circumstances in the field.⁵³⁹ However, this freedom “places a special burden on subordinates, requiring that they always keep the larger situation in mind and act in consonance with their senior’s intent.”⁵⁴⁰

Command and Control asserts that establishing an understanding of the fine balance between mission tactics and low-level initiative can be pursued through training.⁵⁴¹ First, scenario-based training could be used to prepare commanders and subordinates for the positions they hold in the command and control structure and seek to cultivate “pattern-recognition skills that are essential to intuitive decisionmaking.”⁵⁴² Second, the training scenarios should mirror real-life events by including surprises, last-minute mission changes, and “purposely include disruption of command and control.”⁵⁴³ Last, the training scenarios should be debriefed to “teach the appropriate use of techniques and procedures” and establish a common perspective for approaching the challenges associated with command and control such as uncertainty, disorder, and time.⁵⁴⁴ Table 14 identifies the law enforcement challenges and accompanying command and control strategies that could be used to improve performance.

⁵³⁷ U.S. Marine Corps, 134.

⁵³⁸ U.S. Marine Corps, 109, 110.

⁵³⁹ U.S. Marine Corps, 111.

⁵⁴⁰ U.S. Marine Corps, 111.

⁵⁴¹ U.S. Marine Corps, 130.

⁵⁴² U.S. Marine Corps, 130.

⁵⁴³ U.S. Marine Corps, 130.

⁵⁴⁴ U.S. Marine Corps, 131.

Table 14. Paris Attacks Command and Control Applied

Law Enforcement Challenge	Command and Control
Not prepared for second wave of attacks	<p>Topsight: The commander shifts focus from the details of the operation to the overhead vantage point.⁵⁴⁵</p> <p>Enemy Perspective: The commander views the situation “through the eyes of the enemy commander ... [to] deduce possible enemy intentions and anticipate possible enemy moves.”⁵⁴⁶</p>
Lack of unified command	<p>Command and Control: “The action-feedback loop makes command and control a continuous, cyclic process and not a sequence of discrete actions.”⁵⁴⁷</p> <p>Unity of Command: Unity of command assists the commander with generating “swift, appropriate, decisive, harmonious, and secure action” to defeat an opponent.⁵⁴⁸</p>
Delayed response to attack	<p>Mission Tactics: Commanders explain the intent of missions and include restrictive control measures to ensure lateral cooperation amongst other teams and efforts.⁵⁴⁹</p> <p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁵⁵⁰</p> <p>Speed: Utilize a command and control structure that affords flexibility and improves operational tempo.⁵⁵¹</p>

⁵⁴⁵ U.S. Marine Corps, 74.

⁵⁴⁶ U.S. Marine Corps, 74.

⁵⁴⁷ U.S. Marine Corps, 46.

⁵⁴⁸ U.S. Marine Corps, 54.

⁵⁴⁹ U.S. Marine Corps, 109, 110.

⁵⁵⁰ U.S. Marine Corps, 111.

⁵⁵¹ U.S. Marine Corps, 134.

Law Enforcement Challenge	Command and Control
	<p>Bias for Action: Command and control must be biased toward decision and action at all levels.⁵⁵²</p> <p>Training & Education: “Prepare people for the roles they play in command and control.”⁵⁵³</p>
Police vehicles blocked ingress and egress routes	<p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁵⁵⁴</p> <p>Training: Introduce subordinates to uncertainty and disorder while reinforcing the “appropriate use of techniques and procedures.”⁵⁵⁵</p>
Police officer ordered to disengage from terrorists	<p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁵⁵⁶</p> <p>Training: Introduce subordinates to uncertainty and disorder while reinforcing the “appropriate use of techniques and procedures.”⁵⁵⁷</p>

3. Strategy and Tactics Applied

The French policing structure is highly centralized and relies on specialized units rather than police officers in the field to deal with dynamic situations such as the Paris terrorist attacks.⁵⁵⁸ The challenge with this type of response strategy is that it takes time for information to travel up to the commander and then from the commander out to the specialized units for a response. For example, the killings in the 10th and 11th arrondissements had ended

⁵⁵² U.S. Marine Corps, 111.

⁵⁵³ U.S. Marine Corps, 130.

⁵⁵⁴ U.S. Marine Corps, 111.

⁵⁵⁵ U.S. Marine Corps, 130, 131.

⁵⁵⁶ U.S. Marine Corps, 111.

⁵⁵⁷ U.S. Marine Corps, 130, 131.

⁵⁵⁸ Nossiter, “Response to Paris Attacks Points to Weaknesses in French Police Structure.”

20 minutes before police commanders finally deployed BRI to deal with the situation.⁵⁵⁹ The slow sharing of information reduces the commander's ability to understand the situation and achieve decisive action, both of which are core tenets of *Strategy* and *Tactics*.⁵⁶⁰ To understand the situation, the commander should "develop in his mind a clear picture of what is happening, how it got that way, and how it might further develop."⁵⁶¹ Next, the commander should view the situation from the perspective of the opponent, identify what the opponent's strengths are and how to best overcome those strengths.⁵⁶² Once the commander has an understanding of the situation, they should pursue the identified operational objectives through decisive action.⁵⁶³

As BRI deployed to the 10th and 11th arrondissements, they were further delayed by the unorganized manner in which police vehicles were blocking roadways. *Tactics* emphasizes that commanders and subordinates should seek to shape the environment to "gain the initiative, preserve momentum, and control the tempo" of the operation.⁵⁶⁴ Shaping the environment includes actions such as placing subordinates in positions of advantage with the goal of surprising or trapping the opponent.⁵⁶⁵ The abandoned police vehicles created an environment that negatively impacted BRI's response and highlights the importance of shaping the environment in a manner that improves police effectiveness.

Using surprise and having an ambush mentality are key concepts that can assist commanders and subordinates with gaining strategic and tactical advantages.⁵⁶⁶ A good example of surprise coupled with an ambush mentality occurred within the first 15 minutes of the terrorist attack at the Bataclan concert hall: The terrorists had stormed the concert

⁵⁵⁹ Nossiter.

⁵⁶⁰ U.S. Marine Corps, *Strategy*, 101; U.S. Marine Corps, *Tactics*, 29.

⁵⁶¹ U.S. Marine Corps, *Tactics*, 25.

⁵⁶² U.S. Marine Corps, 25.

⁵⁶³ U.S. Marine Corps, 15.

⁵⁶⁴ U.S. Marine Corps, 32.

⁵⁶⁵ U.S. Marine Corps, 31.

⁵⁶⁶ U.S. Marine Corps, 47, 52.

hall and were killing the attendees when a lone police officer decided to enter.⁵⁶⁷ Using the element of surprise, the police officer ambushed one of the terrorists by shooting at him, which killed the terrorist when the suicide belt he was wearing exploded.⁵⁶⁸ As a result of the officer's actions, the other two terrorists stopped killing the concert-goers and retreated to the second floor of the building with hostages.⁵⁶⁹ The officer was subsequently ordered to retreat and wait for BRI to respond.⁵⁷⁰

When BRI finally arrived, they stealthily entered the Bataclan concert hall to locate the terrorists. During their search, one of the hostages yelled to the police that the terrorists wanted to negotiate. BRI subsequently negotiated with the terrorists for over an hour, which is an example of a strategy of erosion. A strategy of erosion is when a commander attempts "to raise the [opponent's] costs so high that he will find ending the [conflict] more attractive than continuing to fight."⁵⁷¹ As the negotiations continued, the terrorists appeared to become more agitated and threatened to explode their suicide vests.⁵⁷² The commander subsequently decided to have subordinates storm the location, at which time a shootout between BRI and the terrorist occurred.⁵⁷³ Seconds later, the shooting ended with both terrorists dead, and none of the hostages killed.⁵⁷⁴ The commander's decision to have subordinates confront the terrorists is an example of shifting from a strategy of erosion to a strategy of annihilation. A commander should use a strategy of annihilation when the goal is to destroy the enemy's ability to resist by attacking their physical means to offer opposition.⁵⁷⁵ A commander can best decide between a strategy of erosion or annihilation

⁵⁶⁷ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 26.

⁵⁶⁸ Homeland Security Advisory Council and Paris Public Safety Delegation, 26.

⁵⁶⁹ Nossiter, "Response to Paris Attacks Points to Weaknesses in French Police Structure."

⁵⁷⁰ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 26.

⁵⁷¹ U.S. Marine Corps, *Strategy*, 54.

⁵⁷² Nossiter, "Response to Paris Attacks Points to Weaknesses in French Police Structure."

⁵⁷³ Nossiter.

⁵⁷⁴ Homeland Security Advisory Council and Paris Public Safety Delegation, *The Attack on Paris: Lessons Learned*, 15.

⁵⁷⁵ U.S. Marine Corps, *Strategy*, 54.

by having a good grasp of the situation and determining which effort will best align with operational objectives.⁵⁷⁶ Table 15 identifies the law enforcement challenges and accompanying strategies and tactics that could be used to improve performance.

Table 15. Paris Attacks Strategy and Tactics Applied

Law Enforcement Challenge	Strategy and Tactics
Not prepared for second wave of attacks	Situational Understanding: The commander must develop an understanding of what is happening, how the situation might develop, and what efforts will be decisive. ⁵⁷⁷
Delayed response to attack	Decisive Action: Operational objectives should be pursued through decisive actions. ⁵⁷⁸
Police vehicles blocked ingress and egress routes	Shaping the Environment: Shaping the environment helps to “gain the initiative, preserve momentum, and control the tempo” of the operation ⁵⁷⁹
Police officer ordered to disengage from terrorists	Surprise: Using surprise increases leverage and can often prove decisive. ⁵⁸⁰ Ambush Mentality: “The ambush mentality tries to turn every situation into an ambush.” ⁵⁸¹

D. SAN BERNARDINO ATTACK

1. Maneuver Warfare Strategy Applied

Warfighting reminds the reader that the clash between opposing wills creates friction that can be experienced in many different forms, such as mental, physical, external

⁵⁷⁶ U.S. Marine Corps, 60.

⁵⁷⁷ U.S. Marine Corps, *Tactics*, 25.

⁵⁷⁸ U.S. Marine Corps, 15.

⁵⁷⁹ U.S. Marine Corps, 32.

⁵⁸⁰ U.S. Marine Corps, *Strategy*, 47.

⁵⁸¹ U.S. Marine Corps, *Tactics*, 53.

and even self-induced.⁵⁸² The police officers responding to the terrorist attack at the Inland Regional Center (IRC) experienced self-induced friction with their uncoordinated response. For example, San Bernardino Police Chief Jarrod Burguan described the police response as “total chaos” and San Bernardino Police Department (SBPD) SWAT lieutenant said that “the initial problem was you had a ton of units coming from every agency, all these different uniforms, and everyone was running into the building.”⁵⁸³ Chief Burguan further stated, “Having so many emergency vehicles eventually would create problems. Vehicles were parked randomly as officers sprinted to the IRC while fire engines and ambulances staged as close as possible. As the incident continued to unfold, this disorganization became more and more problematic as entry and exit lanes were blocked.”⁵⁸⁴ Warfighting recommends that commanders and subordinates continually think about the larger situation and how their actions may impact overarching goals.⁵⁸⁵ As already noted in the Boston Marathon Bombing and Paris attacks, commanders and subordinates should develop simple, flexible plans and standard operating procedures to avoid this type of self-induced friction.⁵⁸⁶

The self-induced friction experienced at the IRC also occurred later in the day when a police detective had finally located the outstanding terrorists. A Redlands police sergeant positioned his police car behind the terrorists, and less than 30 seconds later, the terrorists started shooting.⁵⁸⁷ After an intense shootout that lasted five minutes, the police on the scene requested an armored vehicle so they could safely approach the terrorists’ car and confirm the terrorists were, in fact, dead.⁵⁸⁸ However, the armored vehicle had a delayed response time because more than 175 police officers from different agencies blocked access to the area by the unorganized manner in which they responded and parked their

⁵⁸² U.S. Marine Corps, *Warfighting*, 5.

⁵⁸³ Braziel et al., *Bringing Calm to Chaos*, 33.

⁵⁸⁴ Braziel et al., 31.

⁵⁸⁵ U.S. Marine Corps, *Warfighting*, 76.

⁵⁸⁶ U.S. Marine Corps, 8.

⁵⁸⁷ Braziel et al., *Bringing Calm to Chaos*, 37.

⁵⁸⁸ Braziel et al., 50.

cars.⁵⁸⁹ This is yet another example where *Warfighting* suggests that commanders and subordinates should remain aware of how “minor incidents or actions can have decisive effects” (nonlinearity), and how more care should be given when selecting where resources are placed (speed and focus).⁵⁹⁰ Table 16 identifies the law enforcement challenges and accompanying maneuver warfare strategies that could be used to improve performance.

Table 16. San Bernardino Attack Maneuver Warfare Strategy Applied

Law Enforcement Challenge	Maneuver Warfare Strategy
Uncoordinated police response	Maneuver Warfare: Commanders and subordinates should think above their own level and “act in a way that is in consonance with the requirements of the larger situation.” ⁵⁹¹
Police vehicles blocked ingress and egress routes	Nonlinearity: Commanders and subordinates should remain aware that “causes and effects are disproportionate [and] minor incidents or actions can have decisive effects.” ⁵⁹²
Police officers self-deployed	Speed and Focus: Speed relative to an opponent is more important than absolute speed. ⁵⁹³ A commander should focus resources and effects at a decisive location to be used at a decisive moment. ⁵⁹⁴

2. Command and Control Applied

A primary aim of command and control is to create a system that “provides the necessary guidance in an uncertain, disorderly, time-competitive environment without stifling the initiative of subordinates.”⁵⁹⁵ The police response to the IRC demonstrates the

⁵⁸⁹ Braziel et al., 40.

⁵⁹⁰ U.S. Marine Corps, *Warfighting*, 8, 41.

⁵⁹¹ U.S. Marine Corps, 76.

⁵⁹² U.S. Marine Corps, 8.

⁵⁹³ U.S. Marine Corps, 40.

⁵⁹⁴ U.S. Marine Corps, 41.

⁵⁹⁵ U.S. Marine Corps, *Command and Control*, 43.

challenges that can arise when a command and control structure is not used. For example, it took commanders an hour and forty minutes to establish a unified command post.⁵⁹⁶ Prior to the command post's formation, officers were confronted with several challenges that were amplified by the lack of a command and control structure. Specifically, some teams of police officers did not know where to take wounded victims; others did not have a system in place to keep track of which rooms had been checked; and none of the teams had access to breaching equipment to overcome locked doors.

A dynamic model of command and control could have added more stability to police operations at the IRC. The commander would have been able to designate an area for officers to take injured victims and establish a system for keeping track of rooms that had been checked for the outstanding terrorists. Furthermore, the search teams would have been able to provide the unified command with feedback about their need for breaching equipment, and the unified command could then act to secure the equipment and deliver it to the search teams. The action and feedback loop of command and control helps to establish a unity of command to generate swift and harmonious action.⁵⁹⁷ At the same time, allowing subordinates to make decisions that are in alignment with their assigned mission grants officers the ability to rapidly exploit fleeting opportunities.⁵⁹⁸

As investigative activities were taking place to identify and locate the outstanding terrorists, a team of SBPD detectives deployed to the possible residence of the outstanding terrorists without notifying the unified command.⁵⁹⁹ The unified command remained blind to the team's actions until the detectives notified the unified command that they had found and were driving behind the outstanding terrorists.⁶⁰⁰ A few moments later, the terrorists began shooting at the detectives, and police officers who were assigned to positions around the IRC abandoned their positions and responded to the shooting without notifying the

⁵⁹⁶ U.S. Marine Corps, 50.

⁵⁹⁷ U.S. Marine Corps, 54.

⁵⁹⁸ U.S. Marine Corps, 111.

⁵⁹⁹ U.S. Marine Corps, 37.

⁶⁰⁰ U.S. Marine Corps, 37.

unified command.⁶⁰¹ More than 175 police officers from numerous agencies arrived at the scene of the shooting, and their unorganized response resulted in roadways being blocked, which made it difficult for armored vehicles to arrive on-scene.⁶⁰² Adding even more difficulty to an already tense situation was the fact that the responding officers were overwhelming the radio frequencies so that those in the shootout with the terrorists were unable to communicate and coordinate efforts.⁶⁰³

Command and Control recommends the concept of mission tactics to achieve harmony of effort.⁶⁰⁴ Using mission tactics, the commander explains the intent of the mission while giving subordinates the freedom to decide how the mission is best accomplished.⁶⁰⁵ However, while mission tactics grants subordinates the liberty to act, mission tactics do not give subordinates the authority to act alone and without concern for the greater effort.⁶⁰⁶ Specifically, mission tactics “relies on lateral coordination between units as well as communications up and down the chain.”⁶⁰⁷ For example, the SBPD detectives who deployed to the terrorists’ home should have notified the unified command. The commander could then have used that information to update their own situational awareness, revise resource management if appropriate, and influence future decisions.⁶⁰⁸ Similarly, the officers who abandoned their assignments when the shootout with the terrorists occurred placed the commander at a disadvantage when they failed to share that information. This, in turn, left the commander unaware of the missing officers at the IRC and oblivious to the fact that more officers were deploying to the scene of the shooting. *Command and Control* emphasizes the importance of information sharing since “information is a control parameter ... [that] creates situational awareness ... [and assists

⁶⁰¹ U.S. Marine Corps, 61.

⁶⁰² U.S. Marine Corps, 140.

⁶⁰³ U.S. Marine Corps, 81.

⁶⁰⁴ U.S. Marine Corps, 109.

⁶⁰⁵ U.S. Marine Corps, 109.

⁶⁰⁶ U.S. Marine Corps, 110.

⁶⁰⁷ U.S. Marine Corps, 110.

⁶⁰⁸ U.S. Marine Corps, 49.

the commander with directing and coordinating] actions in the execution of the decision.”⁶⁰⁹ Table 17 identifies the law enforcement challenges and accompanying command and control strategies that could be used to improve performance.

Table 17. San Bernardino Attack Command and Control Applied

Law Enforcement Challenge	Command and Control
Uncoordinated police response	<p>Mission Tactics: commander assigns tasks to subordinates who are given the freedom to decide how the mission is to be accomplished.⁶¹⁰</p> <p>Command and Control: “The action-feedback loop makes command and control a continuous, cyclic process and not a sequence of discrete actions.”⁶¹¹</p> <p>Unity of Command: Assist the commander with generating “swift, appropriate, decisive, harmonious, and secure action” to defeat an opponent.⁶¹²</p>
Police officers self-deployed	<p>Mission Tactics: Commanders explain the intent of missions and include restrictive control measures to ensure lateral cooperation among other teams and efforts.⁶¹³</p> <p>Command and Control: “The action-feedback loop makes command and control a continuous, cyclic process and not a sequence of discrete actions.”⁶¹⁴</p> <p>Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent.⁶¹⁵</p>

⁶⁰⁹ U.S. Marine Corps, 49.

⁶¹⁰ U.S. Marine Corps, 109.

⁶¹¹ U.S. Marine Corps, 46.

⁶¹² U.S. Marine Corps, 54.

⁶¹³ U.S. Marine Corps, 109, 110.

⁶¹⁴ U.S. Marine Corps, 46.

⁶¹⁵ U.S. Marine Corps, 111.

Law Enforcement Challenge	Command and Control
	Information Sharing: Information sharing provides situational awareness, and helps to direct and coordinate actions. ⁶¹⁶
Police vehicles blocked ingress and egress routes	Mission Tactics: Commanders explain the intent of missions and include restrictive control measures to ensure lateral cooperation among other teams and efforts. ⁶¹⁷ Low-level Initiative: Subordinates given the liberty to make their own decisions that are in alignment with mission tactics/ commander’s intent. ⁶¹⁸

3. Strategy and Tactics Applied

The SBPD SWAT team was conducting active shooter training when SBPD dispatch advised of a real-life active shooter incident at the IRC.⁶¹⁹ The SWAT commander arrived at the IRC within 11 minutes and saw “cops, sheriff’s deputies, and what seemed like dozens of probation officers all doing something but not necessarily working cohesively.”⁶²⁰ Identifying the main effort is a concept central to maneuver warfare that commanders can implement to harmonize subordinate actions.⁶²¹ For example, during the police response to the IRC, the commander could have identified the main effort to be the apprehension of the terrorist attackers. The responding police officers would then ask themselves, “How can I best support the main effort?,” and then act accordingly.⁶²²

As the SBPD SWAT team and other officers searched the IRC for the outstanding terrorists, they were met with confusion, as they did not have a standardized system for

⁶¹⁶ U.S. Marine Corps, 49.

⁶¹⁷ U.S. Marine Corps, 109, 110.

⁶¹⁸ U.S. Marine Corps, 111.

⁶¹⁹ Braziel et al., *Bringing Calm to Chaos*, 32.

⁶²⁰ Braziel et al., 33.

⁶²¹ U.S. Marine Corps, *Warfighting*, 91.

⁶²² U.S. Marine Corps, *Tactics*, 32.

keeping track of which rooms had been searched.⁶²³ The situation outside the IRC was just as chaotic due to the fact that responding officers parked their vehicles in an unorganized manner, which blocked ingress and egress for medical personnel.⁶²⁴ Shaping the environment is a critical strategy that commanders can use to gain the initiative and facilitate the maneuver of friendly forces.⁶²⁵ For example, instituting a standardized marking system to keep track of rooms that have been searched would have shaped the interior environment of IRC so that teams of officers could have operated more expeditiously. Similarly, implementing a strategy for directing responding resources on avenues of approach while protecting lanes of access for medical personnel is an example of shaping the exterior environment in one's favor. The main effort for responding officers would still be to locate and apprehend the terrorists, but the manner in which they approach and disembark their vehicles would support secondary efforts. Establishing the main effort and shaping the environment are essential concepts that commanders should use to gain the initiative and fight smart.⁶²⁶

The main effort can always shift as events unfold and commanders can also assign subordinates to efforts that support the main effort indirectly.⁶²⁷ For example, during the terrorist attack in San Bernardino, law enforcement's main effort was taking place at the IRC building. Having an analyst search for the identity of the outstanding terrorists and sending detectives to the terrorists' residence is an example of supporting efforts. When the terrorists were finally located, the main effort was redesignated to support those officers who were being shot at by the terrorists. Those officers who were searching the IRC building should not have abandoned their assignments on their own volition but should have continued with their assigned tasks until reassigned by the commander.⁶²⁸ The commander's decision to pursue the outstanding terrorists is consistent with

⁶²³ Braziel et al., *Bringing Calm to Chaos*, 33.

⁶²⁴ Braziel et al., 31.

⁶²⁵ U.S. Marine Corps, *Tactics*, 31.

⁶²⁶ U.S. Marine Corps, *Strategy*, 108.

⁶²⁷ U.S. Marine Corps, *Tactics*, 32.

⁶²⁸ U.S. Marine Corps, 33.

recommendations in *Tactics*. Specifically, pursuing an opponent is a strategy used to exploit advantage by catching or cutting off an opposing force.⁶²⁹ Table 18 identifies the law enforcement challenges and accompanying strategies and tactics that could be used to improve performance.

Table 18. San Bernardino Attack Strategy and Tactics Applied

Law Enforcement Challenge	Strategy and Tactics
Uncoordinated police response	<p>Main Effort: The one action is most critical to success, which takes priority over all other actions and “becomes a harmonizing force for a subordinate’s initiative.”⁶³⁰</p> <p>Shaping the Environment: Shaping the environment helps to “gain the initiative, preserve momentum, and control the tempo” of the operation⁶³¹</p>
Police officers self-deployed	<p>Main Effort: The one action is most critical to success, which takes priority over all other actions and “becomes a harmonizing force for a subordinate’s initiative.”⁶³²</p>
Police vehicles blocked ingress and egress routes	<p>Shaping the Environment: Shaping the environment helps to “gain the initiative, preserve momentum, and control the tempo” of the operation⁶³³</p>

E. SUMMARY

This chapter examined the Marine Corps concepts of maneuver warfare, command and control, and strategy and tactics as well as how they can be applied in a local civil municipality context to address the law enforcement challenges during the terrorist attacks in Boston, Paris, and San Bernardino. Highlighted are the critical aspects of Marine Corps

⁶²⁹ Braziel et al., *Bringing Calm to Chaos*, 104.

⁶³⁰ U.S. Marine Corps, *Tactics*, 32.

⁶³¹ U.S. Marine Corps, 32.

⁶³² U.S. Marine Corps, 32.

⁶³³ U.S. Marine Corps, 32.

doctrine and explained how these military principles could be used by law enforcement in support of public safety efforts during terrorist attacks. The next chapter takes the integration of military doctrine, case studies, and lessons learned to offer recommendations for improving law enforcement command and control efforts for mutual aid during active PTAs.

V. RECOMMENDATIONS AND CONCLUSION

A. INTRODUCTION

The goal of this research was to determine if military doctrine and warfare maneuver strategy can be used to improve law enforcement command and control efforts for mutual aid during PTAs. The thesis began with a comparative case study examining PTAs in Boston, Paris, and San Bernardino. The law enforcement response challenges common in all three attacks were uncoordinated police responses, police self-deployment, and police vehicles blocking ingress and egress to the location of attacks. A review of the United States Marine Corps *Warfighting, Command and Control, Strategy, and Tactics* doctrines revealed solutions for improving law enforcement command and control efforts for mutual aid during active PTAs. The following recommendations are based on the aspects of Marine Corps doctrine that demonstrate usefulness for mitigating the challenges in each case study. Moreover, these recommendations focus on further actions to be carried out by police executives/commanders at municipal, county, and state law enforcement organizations.

B. RECOMMENDATIONS

- (1) Police executives should implement a reciprocal model of command and control to improve mutual aid efforts during PTAs.

All three case studies examined in this thesis demonstrate that police response to active PTAs gravitate toward disorder. A reciprocal model of command and control can assist law enforcement commanders and subordinates with capitalizing on rapidly emerging opportunities to exploit terrorist vulnerabilities when responding to PTAs. A reciprocal model of command and control, where commanders employ simple plans and subordinates take actions based on the requirements of the mission, can help law enforcement organizations better mitigate the challenges of uncertainty, which is ever-present during PTAs. Furthermore, a reciprocal model of command and control would be useful for the commander in charge of the primary response to a PTA and also useful for the law enforcement commander from jurisdictions that are providing resources to support

response efforts. Specifically, the law enforcement commander in charge of efforts to defeat a PTA can use a reciprocal model of command and control to issue orders and make swift adjustments based on feedback from the police officers on the front lines of response. Similarly, commanders who release their law enforcement resources to support mutual aid efforts can use a reciprocal model of command and control to monitor the progress of their resources providing mutual aid while at the same time monitoring their own jurisdictions for secondary attacks.

- (2) Police leadership should establish a strategy for providing mutual aid resources during PTAs while maintaining response capabilities within their own jurisdictions.

A continual challenge in all three case studies was the self-deployment of officers. Self-deployment occurs outside the structure of command and control since the officers who are self-deploying do so without the permission or acknowledgement from their chain of command and without notifying the agency they are responding to help. Moreover, in all three case studies the self-deployed officers caused more challenges for the law enforcement agency responsible for addressing the terrorist attack. For example, the self-deployed officers who responded to the area of the terrorist attack did so without coordinating with the responsible agency. This resulted in self-deployed officers leaving their vehicles in locations that blocked critical routes of ingress and egress and officers injecting themselves into police operations that added to the chaos of the situation instead of increasing law enforcement's control. Moreover, in some situations, self-deployed officers became frustrated with a lack of assignment and would then take action based on their own limited understanding of the situation and without the approval or acknowledgment of the incident command.

Law enforcement executives should establish a command and control strategy for mutual aid that balances the concepts of pursuit and consolidation. First, law enforcement executives should create a process for identifying and dispatching their police officers to neighboring jurisdictions that are confronted with a PTA (pursuit). At the same time, the law enforcement organization providing mutual aid should retain adequate resources

within their own jurisdiction so they have the appropriate resources to respond to a secondary PTA in their area of responsibility (consolidation).

- (3) Police executives should implement training that reinforces the importance of mission tactics, low-level initiative, and shaping the environment to improve law enforcement response to PTAs.

Law enforcement executives should ensure subordinates receive training that emphasizes low-level initiative while reinforcing the importance of restrictive control measures. For example, PTA scenario-based training could be designed so that officers need to choose the route they drive to the PTA scenario, where/how they park their vehicle, and the actions to carry out once on-scene. The training would then be debriefed to highlight best practices, improve pattern recognition skills, reinforce optimal response strategies, and ensure subordinate decision-making is congruent with restrictive control measures. Furthermore, commanders should also be provided with training that exposes them to the common challenges associated with the positions they hold in the command and control structure. The commanders undergoing training should be exposed to uncertainty and surprise injections to mirror real-life incidents. The training should then be debriefed to reinforce learning, enhance the commander's decision-making skills, and ensure actions taken are consistent with policy and the law.

- (4) Create, develop, and deliver a formalized training program to improve law enforcement command and control efforts during PTAs and other acts of terrorism.

This recommendation is directed toward the Center for Homeland Defense and Security at the Naval Postgraduate School. Unlike the military, the law enforcement profession does not have a formalized education institution to instruct law enforcement commanders in the theoretical framework of maneuver, strategy, and command and control efforts to effectively mitigate the challenges associated with PTAs. The Center for Homeland Defense and Security at the Naval Postgraduate School is in the ideal position to bring together experts and develop such a course. The course should focus on the theoretical framework for analyzing law enforcement preparedness, decision-making, and response strategies to PTAs. Similar to the approach taken by the Marine Corps after the

Vietnam War, the Center for Homeland Defense and Security at the Naval Postgraduate School is in the best position to lead a new intellectual renaissance for how the law enforcement profession thinks about, prepares for and responds to PTAs.

C. CONCLUSION

The focus of this research was to determine if Marine Corps warfare maneuver strategy and military doctrine can be used to improve law enforcement command and control efforts for mutual aid during PTAs. In all three case studies, this research uncovered two fatal flaws that prevented law enforcement from achieving effective command and control. First, the longer it takes for subordinates and commanders to establish analogous situational awareness and initiate a cycle of lateral cooperation (mission tactics), the longer the tactical advantage remains with the terrorists carrying out the attack. Second, unrequested and unorganized responding law enforcement resources amplified confusion and disorder during the terrorist attacks, making it more difficult for commanders to assert authority and gain control. The research shows that many tenets of warfare maneuver strategy and military doctrine can be used to illuminate new paths for the law enforcement profession to think about, plan for, and mitigate many of the challenges associated with PTAs. Warfare maneuver showed that human conflict is rife with uncertainty where the law enforcement commander and subordinates must make decisions faster and better than the terrorists. Command and Control demonstrated that a fast, flexible, and decentralized decision-making structure, focusing on harmony of efforts, allows subordinates to capitalize on fleeting opportunities and enables the commander to make adjustments based on feedback from the field. Strategy and tactics revealed that commander and subordinate actions must be congruent with the rule of law and with respect for the dignity of life. Furthermore, strategy and tactics highlighted the importance of exploiting terrorists' critical vulnerabilities while shaping the environment to be advantageous for law enforcement efforts. The reality is that it is the men and women of law enforcement, not the military, who will be responsible for stopping the next PTA on U.S. soil. The principles identified in this research can be used to improve law enforcement response to PTAs without reshaping law enforcement to mirror the military. To summarize, this is a SMART approach, a Strategic Mutual Aid Response to Terrorism.

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