FM 6-0

Mission Command: Command and Control of Army Forces

AUGUST 2003

DISTRIBUTION RESTRICTION:
Approved for public release, distribution is unlimited

HEADQUARTERS
DEPARTMENT OF THE ARMY

Field Manual
No. 6-0

Headquarters
Department of the Army
Washington, DC, 11August 2003

Mission Command: Command and Control of Army Forces

Contents

Page

FIGURES v
VIGNETTES vii
MAPS vii
PREFACE viii
INTRODUCTION x

Chapter 1 **COMMAND AND CONTROL**
Nature of Command and Control 1-1
Environment of Command and Control 1-8
Concept of Command and Control 1-14
Historical Vignette—Chancellorsville 1-21
Conclusion 1-24

Chapter 2 **COMMAND** 2-1
Nature of Command 2-1
Art of Command 2-13
Historical Vignette—The Ruhr Encirclement 2-30
Conclusion 2-32

Chapter 3 **CONTROL** 3-1
Nature of Control 3-1
Science of Control 3-9
Historical Vignette—The Battle of Austerlitz 3-24
Conclusion 3-27

Chapter 4 **THE ROLE OF THE COMMANDER** 4-0
Combining the Art of Command and Science of Control 4-0

Distribution Restriction: Approved for public release; distribution is unlimited.

*This publication replaces the following portions of FM 101-5, 31 May 1997: Chapters 1–4 and 6, and Appendixes G and I through L.

Creating a Positive Command Climate 4-15
Training Subordinates in Command and Control 4-20
Battle Command 4-24
Conclusion 4-30
Chapter 5 **THE COMMAND AND CONTROL SYSTEM** 5-1
General 5-1
Personnel 5-5
Information Management 5-10
Procedures 5-19
Equipment and Facilities 5-21
Organization for Command and Control 5-22
Command Post 5-27
Continuity of Command and Control 5-28
Conclusion 5-29
Chapter 6 **EXERCISING COMMAND AND CONTROL** 6-1
Section I – General 6-1
Section II – Assessment 6-4
Monitoring 6-4
Evaluating 6-5
Section III – Planning 6-9
Planning Fundamentals 6-9
Assessment During Planning 6-11
Planning Procedures 6-11
Orders and Plans 6-11
Section IV – Preparation 6-12
Assessment During Preparation 6-13
Reconnaissance Operations 6-13
Security Operations 6-14
Force Protection 6-14
Revising and Refining the Plan 6-14
Coordination and Liaison 6-15
Rehearsals 6-16
Task Organizing 6-17
Training 6-17
Troop Movement 6-17
Preoperation Checks and Inspections 6-18
Logistic Preparation 6-18

	Integrating New Soldiers and Units	6-18
	Section V – Execution	6-18
	Execution Fundamentals	6-19
	Assessment During Execution	6-20
	Decide	6-23
	Direct	6-29
	Section VI – Conclusion	6-32
Appendix A	**THE OBSERVE-ORIENT-DECIDE-ACT CYCLE**	A-1
Appendix B	**INFORMATION**	B-0
	Cognitive Hierarchy	B-0
	Relevant Information Subject Categories—METT-TC	B-2
	Relevant Information Usage Categories	B-12
	Information Management Categories	B-14
	Relevant Information Quality Criteria	B-17
Appendix C	**STAFF ORGANIZATION AND STAFF OFFICERS**	C-0
	Basis for Staff Organizations	C-0
	Factors Affecting Staff Organizations	C-1
	Authorization for Staff Organizations	C-1
	Basic Staff Structure	C-2
	Staff Models	C-5
	Characteristics of a Staff Officer	C-6
Appendix D	**STAFF RESPONSIBILITIES AND DUTIES**	D-1
	Common Staff Activities, Responsibilities, and Duties	D-2
	Specific Staff Responsibilities and Duties	D-8
Appendix E	**LIAISON**	E-0
	Liaison Fundamentals	E-0
	The Liaison Officer	E-1
	Liaison Elements	E-2
	Liaison Practices	E-2
	Liaison Responsibilities	E-2
	Liaison in During Unified Action	E-7
Appendix F	**REHEARSALS**	F-1
	General	F-1
	Rehearsal Types	F-2
	Rehearsal Techniques	F-3
	Rehearsal Responsibilities	F-8
	Conducting a Rehearsal	F-12

SOURCE NOTES ..... Source Notes-0
GLOSSARY Glossary-1
BIBLIOGRAPHY Bibliography-1
INDEX Index-1

Figures

Figure **Page**

1-1. Command and Control 1-2
1-2. The Operations Process 1-8
1-3. The Thought Process 1-9
1-4. Concepts of Command and Control 1-15
2-1. Command 2-7
2-2. Commander's Visualization 2-16
3-1. Control 3-3
3-2. Functions of the Command and Control System 3-4
3-3. Processing Information 3-14
4-1. Visualize, Describe, Direct, Lead 4-1
4-2. Situational Understanding Over Time (Ideal) 4-3
4-3. Developing Situational Understanding 4-5
4-4. Visualization in Operations 4-6
4-5. Visualization and Describing 4-7
4-6. Visualization in Execution 4-13
4-7. Adjustments During Execution 4-14
5-1. Elements of the Command and Control System 5-2
5-2. Information and the Command and Control System 5-3
6-1. Distribution of Operations Process Activities 6-2
6-2. Operations Process Supporting Topics 6-3
6-3. Recognition of Variances 6-6
6-4. Restoring the Common Operational Picture 6-7
6-5. Decisionmaking During Execution 6-20
6-6. Adjustment Decision Methods 6-28
6-7. Decision Types and Related Actions 6-30
6-8. Planning Future Operations 6-32
A-1. The OODA Cycle A-1
B-1. Cognitive Hierarchy B-0
B-2. Relevant Information Production and Flow B-16
B-3. Information Requirements and the Cognitive Hierarchy B-17
C-1. Basic Staff Structure C-2
C-2. Basic Corps or Division Staff Structure C-4
C-3. Basic Smaller-unit Staff Structure (Brigade and Battalion) C-5

D-1. Coordinating Staff Responsibility for Special Staff Officers D-26
E-1. Senior Liaison Officer Rank by Echelon E-1
E-2. Example Outline of a Liaison Officer Handbook E-3
E-3. Liaison Checklist—Before Departing the Sending Unit E-5
E-4. Liaison Duties—During the Liaison Tour E-6
E-5. Liaison Duties—After the Liaison Tour E-7
F-1. Rehearsal Techniques Relative to Time, Resources, OPSEC, Participation, and Understanding F-4
F-2. Example CS and CSS Actions for Rehearsals F-14

Historical Vignettes

Page

The Battle Of Arbela (331 BC) vii
Von Moltke and *Auftragstaktik* 1-15
Command and Control at Chancellorsville 1-21
Command Based on Trust and Mutual Understanding—Grant's Orders to Sherman, 1864 2-11
Calculated Risk or Military Gamble? Operation HAWTHORNE, Dak To, Vietnam 2-24
Resolve—Mustafa Kemal at Gallipoli 2-25
Obstinacy—Frederick the Great at Kunersdorf 2-27
Establishing and Using Commander's Intent—VII Corps and the Ruhr Encirclement 2-30
Crosstalk in the Desert—VII Corps in the Gulf War 3-19
Control in Command and Control—Austerlitz 3-24
"Magnificent, But Not War"—Misunderstood Orders and the Charge of the Light Brigade 4-18
Command Forward—LTG Eichelberger At Buna 4-28

Maps

Map **Page**

Introduction-1. Arbela—Initial Action vii
Introduction-2. Arbela—Alexander's Attack viii
1-1. Chancellorsville—Hooker's Envelopment 1-22
1-2. Chancellorsville—Lee's Counter 1-23
2-1. Gallipoli 2-26
2-2. Kunersdorf 2-28
2-3. Ruhr Encirclement 2-31
3-1. Austerlitz—Initial Situation 3-25
3-2. Austerlitz—Operations 3-26
4-1. Buna 4-29

Preface

Doctrine provides military organizations with a common philosophy and language. It enhances unity of effort. FM 6-0 establishes and explains the Army's command and control (C2) doctrine principles.

PURPOSE

FM 6-0 is the Army's key integrating manual for C2. It provides the basis for C2 doctrine, tactics, techniques, and procedures in all Army publications. It promotes common understanding of the fundamentals and concepts of C2 in Army operations, and supports joint and Army doctrine. It supercedes chapters 1 through 4, chapter 6, and appendixes G, I, K, and L of FM 101-5.

SCOPE

FM 6-0 provides doctrine on C2 for tactical Army echelons (corps and below). FM 6-0 establishes mission command as the C2 concept for the Army. It focuses on the premise that commanders exercise C2 over forces to accomplish missions. It emphasizes fundamentals and concepts rather than specific equipment or systems, although it discusses the role of equipment and systems in supporting C2. It includes insights from Force XXI initiatives and digitization. Supporting and extending leadership doctrine found in FM 22-100, it defines control within command and control, and covers decisionmaking during execution. FM 6-0 provides doctrine for information management, a contributor to information superiority. (See FM 3-13.) While intelligence is an information product essential in C2, the doctrine addressing information and information management is not intended to change or replace intelligence doctrine in the FM 2 (formerly FM 34) series of field manuals.

APPLICABILITY

FM 6-0 applies to commanders of all Army organizations. However, it focuses on tactical commanders and leaders at corps-level and below. With appropriate modifications, it can apply to other Army commands and to Army elements of joint and multinational headquarters. It applies to digitized, analog, and hybrid (combination digitized/analog) units and organizations. The doctrine in FM 6-0 forms the foundation for Army Education System instruction in C2.

ADMINISTRATIVE INFORMATION

Headquarters, US Army Training and Doctrine Command is the proponent for this publication. The preparing agency is the Combined Arms Doctrine Directorate, US Army Combined Arms Center. Send written comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Combined Arms Center and Fort Leavenworth, ATTN: ATZL-FD-CD (FM 6-0), 1 Reynolds Avenue (Building 111), Fort Leavenworth, KS 66027-1352. Send comments and recommendations by e-mail to

web-cadd@leavenworth.army.mil. Follow the DA Form 2028 format or submit an electronic DA Form 2028.

The glossary contains referents of acronyms and definitions of terms not defined in JP 1-02 and FM 101-5-1 (1-02). It does not list acronyms and abbreviations that are included for clarity only and appear one time, nor those that appear only in a figure and are listed in the legend for that figure. Some common abbreviations and acronyms are not spelled out; refer to the glossary. Since *ARFOR* is a defined term as well as an acronym, it is not spelled out.

Terms that have joint or Army definitions are identified in both the glossary and the text. *Glossary references*: The glossary lists most terms used in FM 6-0 that have joint or Army definitions. Terms for which FM 6-0 is the proponent manual (the authority) are indicated with an asterisk. *Text references*: Definitions for which FM 6-0 is the proponent manual are printed in boldface in the text. These terms and their definitions will be incorporated into the next revision of FM 101-5-1 (1-02). For other definitions in the text, the term is italicized and the number of the proponent manual follows the definition.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

This publication contains copyrighted material.

The historical examples used in FM 6-0 were deliberately chosen to illustrate the fact that American tacticians should widen their areas of study of the military profession to include other armies and other times.

ACKNOWLEDGMENTS

The copyright owners listed here have granted permission to reproduce material from their works. Other sources of quotations and material use in examples are listed in the Source Notes.

Quotations from *On War*, by Carl von Clausewitz, ed. and trans. Michael Howard and Peter Paret, copyright © 1976 by Princeton Univ. Press. All rights reserved.

Extract from *The Challenge of Command*, by Roger H. Nye, copyright © 1986 by Roger H. Nye. Used by permission of Avery Publishing, an imprint of Penguin Group (USA) Inc. Used by permission.

Quotations from *Defeat into Victory* by William Slim, copyright © 1972 Aileen, Viscountess Slim. Used by permission of D. McKay.

Quotation from *Panzer Battles: A Study of the Employment of Armor in the Second World War*, by F.W., von Mellenthin, copyright © 1956 by the Univ. of Oklahoma Press. Used by permission.

Introduction

Command and control (C2) is an essential element of the art and science of warfare. No single specialized function, either by itself or combined with others, has a purpose without it. Commanders are responsible for C2. However, C2 is also of great concern to staff officers and some staff specialists.

Some understand C2 to be a distinct, specialized function—similar to logistics, intelligence, and information operations. C2 does have its own procedures, considerations, and vocabulary. It operates separately from other functions, yet in coordination with them. Through C2, commanders initiate and integrate all military functions and operations toward a common goal—mission accomplishment.

How one understands C2 depends on the perspective from which one approaches its study. Some study and discuss C2 as technological means and resources. Others see C2 as people only. Still others focus on C2 as an organization. Finally, C2 has been discussed as a set of procedures. In practice, however, C2 is a commander and a C2 system—a combination of people, organization, technological means and resources, and procedures.

Commanders have exercised C2 throughout history. They have performed many of the same C2 functions as long as warfare has existed. For example, Alexander the Great exercised C2 as long ago as 331 BC at the battle of Arbela.

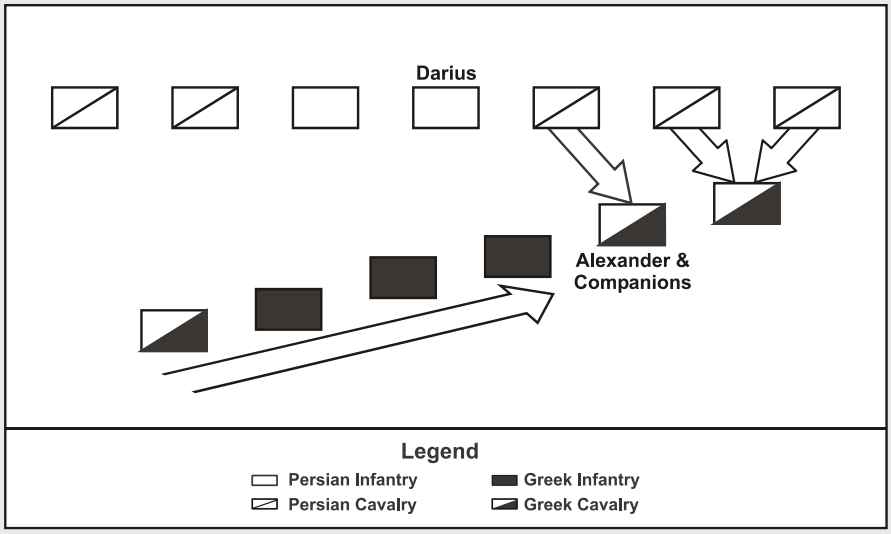
The Battle Of Arbela (331 BC)

The Battle of Arbela (Gaugamela) occurred near the town of Erbil on the upper Euphrates in present-day Iraq. There, the Macedonian army of 40,000 infantry and 7,000 cavalry under Alexander the Great met a Persian army of at least 200,000 infantry and 45,000 cavalry under King Darius. Alexander's superior exercise of command and control allowed him to decisively defeat the larger force.

In *The Anabasis*, Arrian writes of Alexander the Great's generalship: "He was...most brilliant to seize the right course of action, even where all was obscure; and where all was clear, most happy in his conjectures of likelihood; most masterly in marshaling an army and in arming and equipping it; and in uplifting his soldiers' spirits and filling them with good hopes and brushing away anything fearful in dangers by his own want of fear... And all that had to be done in uncertainty he did with utmost daring; he was most skilled in swift anticipation and gripping of his enemy before anyone had time to fear the event..." These traits were clearly exhibited in his brilliant victory over the Persians and King Darius at the Battle of Arbela (Gaugamela).

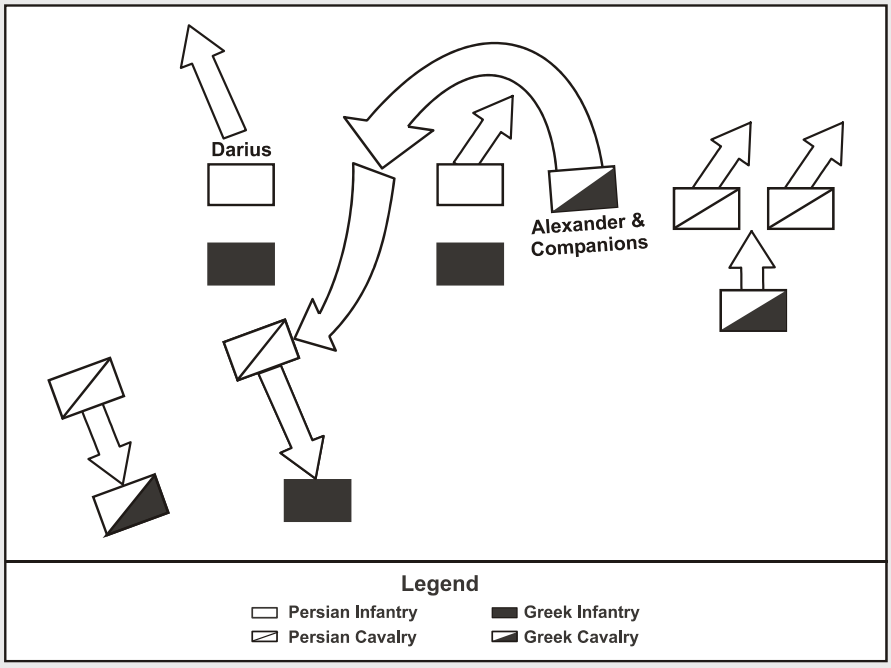
For four days before the battle, Alexander rested and fed his men. He slept soundly the night before the battle, instilling in his men confidence of victory, despite the Persians' outnumbering them by more than five to one. When the two armies lined up opposite each other on the plain near Gaugamela, the Persian lines extended well beyond Alexander's. Alexander assumed (rightly) that Darius

would try to outflank him. He responded by stationing his phalanx in the center and strongly supporting his flanks with deep formations turned at 45 degrees to prevent their encirclement. (See map Introduction-1.) Alexander's order of battle and the tactics emerging from it, arranged in accordance with his foresight into the enemy's intentions, was a major factor in gaining victory.



Map Introduction-1. Arbela—Initial Action

As the battle began, Alexander moved to his right, both to position his infantry opposite Darius' chariots and to reduce the Persian overlap of his flank. Darius attacked Alexander's right and, assuming that Alexander would be fully engaged



Map Introduction-2. Arbela—Alexander's Attack

there, ordered the entire Persian cavalry line to advance in two enveloping attacks. This maneuver, however, created a gap in the Persian front.

Demonstrating superb command instincts, Alexander immediately exploited the opportunity. He wheeled toward the gap and, making a wedge of the Companion Cavalry and part of the phalanx, personally led the charge. (See map Introduction-2 on page xi.) As Alexander closed in on the decisive point—Darius himself—Darius fled the field and the Persian center disintegrated.

Meanwhile, Alexander's advance created its own gap—in the Greek center. The Persian Guard and Indian Cavalry quickly penetrated there. Alexander turned the Companions immediately and led them across to the other side of the battle to aid the left flank—evidence of his extraordinary control. The Persian Guard was defeated. When the Persian force and their allies learned that Darius had fled, most of them quit the battlefield.

Command and control, as opposed to simply command, first entered Army terminology during World War II. Before then, the word *command* included those functions associated with control today. Since 1977, C2 has been considered one of the battlefield operating systems, which the Army uses to address the conduct (planning, preparation, execution, and assessment) of operations in discrete subsets. Until now, FM 3-0 and FM 5-0 (101-5) have addressed C2 doctrine principles. Other field manuals discussed C2 within the context of their subject. FM 7-15 lists the Army tactical tasks associated with the C2 battlefield operating system.

The term *command and control* is well known throughout the Army, but it is not well understood. The Army has struggled to find a definition that accurately portrays what a commander does in battle and in training. The Army has defined *command* as what a commander needs to do to get his force to accomplish the mission. As warfare has become more complex the concept of "command" has evolved into "command and control." But trying to encompass all aspects of this concept in a single description lost the meaning of command and consideration of the art of command. Nevertheless, the term is well established in current and emerging joint doctrine. Army doctrine follows joint doctrine, and Army forces operating as part of a joint force follow joint doctrine; however, the nature of land combat operations has special and specific requirements for C2 that Army C2 doctrine must address.

FM 6-0 gathers the scattered parts of C2 doctrine discussed in multiple sources, such as branch and echelon field manuals, into one field manual that goes beyond them in detail. It provides a common guide for schools and centers in writing C2 doctrine in branch and echelon manuals for which they are proponents. It uses the term *command and control* to identify what commanders do and how they execute the task of leading their units to accomplish missions. Army values and leadership attributes, skills, and actions are vital to exercising C2; however, FM 6-0 goes beyond the discussion of leadership in FM 22-100. Commanders use C2 to plan, prepare for, and execute the other tactical tasks, synchronize functions among them, and continually assess the situation or execution of operations. Without C2, the other tactical tasks cannot commence or be synchronized with one another. FM 6-0 also discusses the C2 system's impact on prioritizing

resources. The most important resource in any army is its people, who must be organized to undertake and complete military activities.

Chapter 1 introduces and discusses the nature, environment, and concept of command and control. It addresses how "command" is related to "control," and how the environment affects the exercise of C2. It establishes mission command as the Army's preferred concept of C2. While FM 6-0 discusses the components of C2—command and control—separately, it emphasizes that exercising C2 is not a phased application of each but a single, continuous application of both. FM 6-0 addresses them separately for analysis only.

The principal aspect of command and control is *command*. Chapter 2 discusses the nature of command and the art of command. Only a properly designated commander may exercise C2; therefore, commanders are the focus of authority for effective C2. They focus their individual C2 systems to support their conduct of military operations. Each commander's practice of C2 reflects an underlying philosophy and style. The tactics, techniques, and procedures associated with C2 in offensive and defensive operations also apply to stability operations and support operations. They apply to all Army organizations in both peace and war. Army C2 doctrine emphasizes the importance of personal command and a strong C2 concept linked to a supporting C2 system and oriented on Army operations doctrine.

The aspect of *control* has always been inherent in the practice of command. At the battle of Arbela, Alexander's use of visual observation, assessment of the meaning of the gap, and direction of his cavalry force to exploit opportunity against the critical weakness in the Persian army illustrate the concept and role of control in C2. Other doctrinal publications have addressed the concept of control their discussions of C2, but those discussions have been inconsistent with one another. FM 6-0 establishes a single definition and concept of control within the overall concept of C2 for the entire Army.

Chapter 3 discusses the nature of control and the science of control. The requirement for control is created by the impediments to mission accomplishment that Clausewitz identified as fog and friction. Singly or in combination, these impediments act against the force before, during, and after operations. Fog and friction always exist because uncertainty—about both enemy and friendly forces—cannot be removed from battle. They often cause the execution of operations to deviate from the commander's intent. Control identifies and counters their effects by alerting commanders to adjust their resources, concept of operations, or objectives. Control also alerts commanders to opportunities to exploit success.

Chapter 4 discusses the role of commanders in C2. Commanders are the key to C2. Their knowledge, experience, and personality—along with how they interact with their units—define command. Commanders must decide what to do, using the decisionmaking technique best for the circumstances, and lead their units to accomplish the mission. Foremost among the commander's roles is combining the art of command and the science of control. Central to their success in this is the process of commander's visualization. Commanders drive C2. Under mission command, however, commanders emphasize influencing actions rather than detailed directions or directives. They normally issue broad guidance and use close personal supervision to intervene in subordinates' actions only in exceptional

cases. They establish a positive command climate for the unit, train subordinates in C2, and use battle command to direct operations.

Chapter 5 addresses the command and control system. All commanders must devote, acquire, or receive the resources needed to create a C2 system that performs the functions needed to exercise C2. At every level of command, the commander's C2 system supports effective exercise of C2. The term "system" is deceptive. It does not solely mean an arrangement of equipment, like a communications system. Rather, it is an organization of all resources used to support the commander's exercise of C2. The art exercised by commanders with respect to the C2 system lies in their expert integration of all C2 system elements to best serve their needs in pursuit of mission accomplishment. Commanders combine the elements of their individual C2 systems into a cohesive whole so that C2 resources are not wasted.

Chapter 6 establishes doctrine for exercising C2. Commanders exercise C2 by placing their individual C2 systems into action. Exercising C2 is a dynamic process that occurs throughout the operations process—assessing, planning, preparing for, and executing military operations. While these activities are cyclical and continuous, they do not necessarily occur sequentially. All units in operations perform varying levels of planning, preparing, and executing; assessing takes place throughout the other three activities and provides feedback for decision-making.