

LWD 1

THE FUNDAMENTALS OF LAND WARFARE



2002

CHIEF OF ARMY'S MESSAGE

I believe that the Army has won a special place in the hearts of our fellow citizens by dint of sacrifice and long service to this country. Indeed, many feel that the Australian nation was forged through the efforts of our soldiers at Gallipoli and on the Western Front during the First World War. Every member of today's Army is an heir and a custodian of this legacy, which bestows on us great honour and at the same time bequeaths an awesome responsibility.

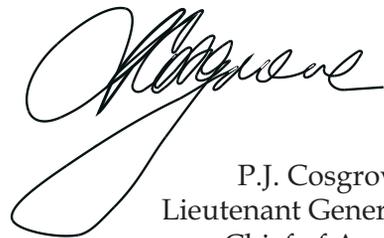
Although times and technology have changed, the fundamental mission of the Australian Army remains fixed, enduring and inviolable: it is to win the land battle, defeat our enemies and safeguard the interests of the nation and the lives of our people. The Army is sustained by the Australian people. This entails sacrifice on their part and, in turn, imposes a professional obligation on all Army personnel. Our part in this unique social contract is to provide a potent and disciplined force that is capable of engaging in operations across the spectrum of conflict. The Army can only retain the trust of the Australian people and the Government through its professional mastery of the art of war and its readiness to support peacekeeping, humanitarian assistance and disaster relief operations.

To carry out these tasks effectively, we must be multiskilled, well trained and doctrinally prepared. Our skills must be second to none, honed for combat but adapted for peace. As a small force we need to have a knowledge edge over potential adversaries. Good doctrine is a vital element in providing these capabilities. It is a truism of soldiering that 'as you train, so you fight'. Good doctrine provides the philosophical and intellectual framework that permits the Australian Army to capitalise on the matchless qualities of its soldiers: initiative; toughness; courage; and loyalty to their mates, their units and their country. Without good doctrine, these qualities cannot be harnessed in the national interest.

We live in an era of unprecedented change, which is taking place in an increasingly unstable region. For this reason doctrine should never be the sterile product of textbook learning. It must encapsulate the collective wisdom and experience of our most able practitioners. Good doctrine is dynamic and constantly evolving; it draws from the past to inform the future. It builds on the hard lessons learnt by our forebears from ANZAC right through to Somalia and East Timor. Some of these lessons have been inscribed in blood. But an army cannot be a preservation society. The pages of history are littered with the relics of armies that have failed to adapt to changes in the nature of war. Armies that cling to outmoded doctrine embrace defeat.

This 2002 edition of *Land Warfare Doctrine 1: The Fundamentals of Land Warfare (LWD 1)* provides the Australian Army with the doctrine it needs to navigate safely the shoals of conflict in a new century. It draws on the feats of arms of our illustrious predecessors, but it also is unambiguously forward-looking. *LWD 1* represents 'world's best practice' in strategic thinking about land power. It provides relevant doctrine for the future conduct of land operations that the Army will be expected to carry out in partnership with the Navy and Air Force, as well as with friends and allies. The Army's land forces must be highly mobile, well prepared and able to manoeuvre effectively in a littoral environment. Above all, we must never forget that superior leadership and people skills are the best guarantees of battlespace success.

LWD 1, 2002, is the first major keystone statement of the Australian Army's doctrine for the challenges of our second century. It must be studied and digested by all ranks. It is not, however, the final word on land warfare but rather a starting point for vigorous intellectual debate at all levels of the Army. I commend this publication to you. We must all achieve professional mastery over the fundamentals of land warfare.

A handwritten signature in black ink, appearing to read 'P.J. Cosgrove', with a large, sweeping flourish underneath.

P.J. Cosgrove
Lieutenant General
Chief of Army

THE ARMY MISSION

The Army's mission is to win the land battle.

THE ARMY VISION

The Army's vision is to become a world-class army, ready to fight and win as part of the Australian Defence Force team, to serve the nation and make Australians proud.

THE ARMY'S ETHOS AND VALUES

The ethos of the Army is that of the soldier serving the nation: mentally and physically tough, and with the courage to win. We fight as part of a team, and are inspired by the ANZAC tradition of fairness and loyalty to our mates. We are respected for our professionalism, integrity, *esprit de corps* and initiative.

The Army's core values are:

Courage

Initiative

Teamwork

DISTRIBUTION

This publication has been distributed to all Army officers, elements of Navy and Air Force, senior members of the Australian Public Service and members of Parliament, the media and academics.

*This publication supersedes Land Warfare Doctrine 1:
The Fundamentals of Land Warfare, 1998*

PREFACE

The Australian Army is a physical and institutional expression of the Australian Government's responsibility to defend Australia, its people and its interests. The Army's ethos and core values reflect its unique relationship with the people of Australia. This is a relationship that has been forged over a century in both peace and war by the outstanding service and sacrifice of Australia's soldiers. In particular, the Army is responsible, through the Chief of the Defence Force, to the Minister for Defence, for the provision of land warfare capabilities as part of the wider Australian Defence Force (ADF). The Department of Defence supports the development of these capabilities.

The Army's professional understanding of warfare is conveyed through the agency of military doctrine. This doctrine is defined as the 'fundamental principles by which military forces guide their actions in support of national objectives. It is authoritative, but requires judgement in its application'.¹ Military doctrine is a formal expression of current military thought; it is general in nature and describes the fundamentals, principles and preconditions of military operations.

LWD 1 is the Army's keystone doctrine. It provides the intellectual basis for all other Army doctrine by integrating historical ideas about the nature and conduct of war with contemporary military thinking in order to create a foundation for success in modern conflict. Military doctrine shapes and educates the minds of soldiers, and describes the procedures necessary to fight future conflicts.

The six chapters of *LWD 1* outline how the Army will conduct modern land warfare:

- ***Chapter 1: The Nature of Land Warfare*** describes land warfare—the utility of land forces—and introduces an Australian concept of land power.
- ***Chapter 2: Influences on Modern Land Warfare*** describes those factors that shape the conduct of land operations. It introduces the phases of

1. *Australian Defence Force Publication 1, Doctrine*, 1993, p. 1-1.

conflict, the categorisation of conflict, the nature of the modern battlespace and the factors affecting future land warfare.

- *Chapter 3: Military Strategy* outlines the main features of Australia's military strategy and describes the Army's contribution to Australia's maritime concept of strategy.
- *Chapter 4: The Conduct of Land Warfare* describes the Army's preferred warfighting philosophy based on the use of the manoeuvrist approach.
- *Chapter 5: Fighting Power* describes the intellectual, moral and physical components of Army's fighting power, and defines the role of professional mastery in bringing them together.
- *Chapter 6: Generating Land Warfare Capability* describes the Army's capability management framework and approach to continuous modernisation.

LWD 1 is of central importance in developing a potent, versatile and modern land force capable of operating in a joint context. This document provides the basis for success in modern land warfare through doctrine that reflects the Army's military experience and the way that the land force expects to fight in future conflict.

Associated Publications

LWD 1 should be read in conjunction with the following publications:

- *Australian Defence Force Publication 1, Doctrine*, 1993;
- *Australian Defence Force Publication 3, Rules of Engagement*, 1992;
- *Australian Defence Force Publication 4, Preparedness and Mobilisation*, 2000;
- *Australian Defence Force Publication 6, Operations*, 1998;
- *Australian Defence Force Publication 20, Logistics in Support of Joint Operations*, 1999;
- *Australian Defence Force Publication 37, Law of Armed Conflict*, 1996;

- *Australian Defence Force Publication 101, Glossary*, 1994;
- *Defence 2000, Our Future Defence Force*, 2000;
- *Land Warfare Doctrine 2-0, Intelligence*, 2001; and
- *Decisive Manoeuvre: Australian Warfighting Concepts to Guide Campaign Planning (Interim Edition)*, 1998.

On-line Doctrine

This and other doctrine publications are available at the following intranet address:

<http://defweb.cbr.defence.gov.au/armydoctrine/>

Gender

Words importing gender refer to both male and female, unless specifically stated otherwise.

© This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from Doctrine Wing, Training and Doctrine Group, Land Warfare and Development Centre, Tobruk Barracks, PUCKAPUNYAL VIC 3662.

TABLE OF CONTENTS

	Page
CHIEF OF ARMY'S MESSAGE	1
THE ARMY MISSION	3
THE ARMY VISION	3
THE ARMY'S ETHOS AND VALUES	3
PREFACE	5
GLOSSARY	13
ABBREVIATIONS	19
CHAPTER 1. THE NATURE OF LAND WARFARE	21
INTRODUCTION	21
THE CHARACTERISTICS OF LAND WARFARE	22
AUSTRALIA'S CONCEPT OF LAND POWER	26
THE ARMY MISSION	28
CONCLUSION	28
CHAPTER 2. INFLUENCES ON MODERN LAND WARFARE	31
INTRODUCTION	31
CONFLICT AND WAR	32
THE NATURE OF CONFLICT	35
FACTORS SHAPING MODERN LAND WARFARE	38
THE MODERN BATTLESPACE	42
CONCLUSION	46
CHAPTER 3. MILITARY STRATEGY	47
INTRODUCTION	47
AUSTRALIA'S NATIONAL SECURITY FRAMEWORK	48
AUSTRALIA'S STRATEGIC CONTEXT	50
AUSTRALIA'S MILITARY STRATEGY	52
THE ARMY'S ROLE IN MILITARY STRATEGY	53

LAND POWER IN JOINT WARFIGHTING	58
CONCLUSION	61
CHAPTER 4. THE CONDUCT OF LAND WARFARE	63
INTRODUCTION	63
BASIS OF THE MANOEUVRIST APPROACH	64
APPLYING THE MANOEUVRIST APPROACH	66
ENABLING CONCEPTS	69
CONCLUSION	75
CHAPTER 5. FIGHTING POWER	77
INTRODUCTION	77
THE GENERATION OF FIGHTING POWER	77
THE INTELLECTUAL COMPONENT	78
THE MORAL COMPONENT	80
THE PHYSICAL COMPONENT	83
INTEGRATING THE COMPONENTS OF FIGHTING POWER	85
CONCLUSION	87
CHAPTER 6. GENERATING LAND WARFARE CAPABILITY	89
INTRODUCTION	89
ARMY CAPABILITY	89
CAPABILITY ELEMENTS AND PREPAREDNESS	94
CONTINUOUS MODERNISATION	100
CONCLUSION	102
ANNEXES:	
A. MILITARY DOCTRINE	103
APPENDIX 1 TO ANNEX A	107
B. A BRIEF HISTORY OF AUSTRALIAN MILITARY STRATEGY	109
C. TRAINING TO WIN	113
D. THE LAW OF ARMED CONFLICT	117
INDEX	123

ILLUSTRATIONS

1.	The Phases of Conflict Against Time	33
2.	The Categorisation of Conflict	35
3.	Characteristics of the Modern Battlespace	42
4.	Non-Linearity	43
5.	The Levels of Command	48
6.	Combat Functions	71
7.	Fighting Power	78
8.	The Army Model and Key Functions of Capability	93
9.	The Fundamental Inputs to Capability	95
10.	The Army Capability Development Continuum	101
11.	The Doctrine Relationship	105

GLOSSARY

The terms listed below are used in this publication. Definitions which appear in *Australian Defence Force Publication (ADFP) 101, Glossary* are shown verbatim in normal type. Definitions or portions of definitions which are not included in *ADFP 101* are shown in italics.

Adapt. *To adapt is to respond effectively to a change in situation or task. Adaptation rests on professional mastery, mental agility and flexible organisations.*

Army Model. *The Army model illustrates the relationships between the Army, the wider Australian Defence Organisation (ADO), the national support base and the international support base. The Army Model describes how the Army develops and sustains land forces that are relevant, effective and capable.*

Asymmetric Warfare. *Asymmetric warfare describes military actions against an adversary to which he may have no effective response and which pit strength against weakness, sometimes in a non-traditional and unconventional manner.*

Backcasting. *Backcasting is the term used to describe the process of taking Army After Next (AAN) concepts or capabilities that promise significant improvement in effectiveness and testing them within the *Army Experimental Framework* (AEF).*

Battlespace. *The battlespace includes all aspects of the environment that are encompassed by the area of influence and the area of interest. These include the operational environment (oceanic, continental, aerospace, littoral, electromagnetic) and those relevant aspects of society, politics, culture, religion and economy.*

Battlespace Operating System. *The battlespace operating system (BOS) represents the combination of personnel, collective training, major systems, supplies, facilities, and command and management – organised, supported and employed to perform a designated function as part of a whole. The eight BOS are: Manoeuvre; Fire Support; Information Operations; Surveillance and Reconnaissance; Mobility and Survivability; Air Defence; Command and Control; and Combat Service Support.*

Campaign. *A campaign is a series of simultaneous or sequential operations designed to achieve an operational commander's objective, normally within a given time or space.*

Campaigning. *Campaigning describes a controlled series of simultaneous or sequential operations designed to achieve an operational commander's objective, normally within a given time and space.*

Centre of Gravity. The centre of gravity is that characteristic, capability or locality from which a military force, nation or alliance derives its freedom of action, strength or will to fight at that level of conflict.

Close Combat. *Close combat involves the ability to find, close with and destroy an enemy.*

Combat Functions. *The combat functions describe the range of actions that land forces must be able to undertake to apply land power. They are fundamental to the manoeuvrist approach and are generated through the synergies created by the combined arms team and joint task force.*

Command. Command is the authority which a commander in the military Service lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organising, directing, coordinating and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale and discipline of assigned personnel.

Critical Vulnerability. *A critical vulnerability is a characteristic or key element of a force that, if destroyed, captured or neutralised will significantly undermine the fighting capability of the force and its centre of gravity. A critical vulnerability is not necessarily a weakness but any source of strength or power that is capable of being attacked or neutralised. A successful attack on a critical vulnerability should aim to achieve a decisive point in an operation or campaign. A force may have a number of critical vulnerabilities.*

Decisive Points. *A decisive point is a major event that is a precondition to the successful disruption of the centre of gravity of either combatant. A decisive point is created normally by successfully attacking or neutralising a critical vulnerability. Operational-level planning aims to exploit an enemy's critical vulnerabilities in a sequence or matrix of decisive points known as lines of operation.*

Dislocation. *Dislocation involves action to render the enemy's strength irrelevant by not allowing it to be employed at the critical time or place. In effect, dislocation separates the enemy's centre of gravity from the key capabilities that support or protect it.*

Disruption. *Disruption is a direct attack that neutralises or selectively destroys key elements of the enemy's capabilities. The aim of disruption is to reduce the enemy's cohesion and will to fight by neutralising or destroying parts of his force in a manner that prevents the force from acting as a coordinated whole.*

Fighting Power. *Fighting power is the result of the integration of three interdependent components:*

- *the intellectual component provides the knowledge to fight,*
- *the moral component provides the will to fight, and*
- *the physical component provides the means to fight.*

Fundamental Inputs to Capability. *Fundamental Inputs to Capability (FIC) comprise eight capability elements which interact to generate the Army's capability. The FIC elements are:*

- *organisation;*
- *personnel (incorporates individual training);*
- *collective training;*
- *major systems;*
- *supplies;*
- *facilities;*
- *support; and*
- *command and management (incorporates doctrine).*

The FIC elements replace the Army's elements of capability that were previously articulated under the acronym POSTED: personnel, organisation, support and facilities, training, equipment, and doctrine.

Joint Effects. *The term 'joint effects' refers to the outcomes that result from the application of each of the Service's fighting power in the battlespace.*

Key Functions of Capability. *The key functions of capability represent the Army's contribution to the ADF's ability to generate, deploy, sustain, protect and command potent combat forces.*

Leadership. *Leadership can be defined as the art of influencing and directing people to achieve willingly the team or organisational goal.*

Littoral. *A littoral environment is one in which the operational domains of sea, land and air merge.*

Manoeuvrist Approach. *The manoeuvrist approach seeks to shatter the enemy's cohesion through a series of actions orchestrated to a single purpose that creates a turbulent and rapidly deteriorating situation with which the enemy cannot cope. The manoeuvrist approach focuses commanders at every level on exploiting enemy weaknesses, avoiding enemy strengths and protecting friendly vulnerabilities.*

Manoeuvre Theory. *See manoeuvrist approach.*

Manoeuvre Warfare. *See manoeuvrist approach.*

Mission Command. *Mission command is a philosophy of command and a system for conducting operations in which subordinates are given a clear indication by a superior of his intentions. The result required, the task, the resources and any constraints are clearly enunciated, however subordinates are allowed the freedom to decide how to achieve the required result. The term 'directive control' is synonymous but is being replaced by mission command. Mission command is the internationally, more widely accepted term.*

Non-linearity. *Non-linearity refers to operations distributed throughout the battlespace. It differs from the historical linear approach where the opposing forces' front and flanks delineated the battlefield.*

Orchestration. *Orchestration refers to the coordination of effects across space and time.*

Professional Mastery. *Professional mastery integrates the components of fighting power. It is an expression of personal competence displayed by an individual's ability to combine character, self-confidence, effective leadership, professional knowledge, professional military judgement and experience. It is measured by performance in battle and is a process of continual learning developed through education, training and experience.*

Shape. *To shape is to engage in actions that enhance the friendly force's position, delay the enemy's response, or lead the enemy into an inadequate or inappropriate response in order to set the conditions for decisive action.*

Shield. *To shield is to protect friendly forces and infrastructure. Shielding is achieved by measures that include avoiding detection, and protection against physical or electronic attack.*

Shock. *Shock is created through the combination of advanced technologies, tactical proficiency and creative patterns of manoeuvre in order to generate a series of events to which an enemy is unable to respond.*

Strike. *To strike is to apply tailored effects in a timely fashion. Striking requires the precise integration and application of force at selected points in the battlespace to achieve specific outcomes.*

Sustain. *To sustain is to provide appropriate and timely support to all forces from deployment, through the completion of assigned missions, to redeployment.*

Symmetric Operations. *Symmetric operations involve the engagement of similar military forces in force-on-force warfare.*

Synchronisation. *Synchronisation is the focusing of resources and activities to produce maximum combat power at the decisive time and place.*

Tempo. *Tempo is the rhythm or rate of activity relative to the enemy, within tactical engagements and battles, and between operations.*

Theatre of Operations. *A theatre of operations is a designated area for which an operational, joint or combined commander is appointed and in which a campaign or a series of major operations is conducted. A theatre may contain one or more joint force areas of operations.*

Warfighting. *Warfighting is the application of lethal force in combat against a recognisable enemy for a specific purpose.*

ABBREVIATIONS

The following abbreviations are used in this publication. Their sources are as indicated:

ADFP 103

ADF	Australian Defence Force
ADFP	Australian Defence Force Publication
LOAC	Law of Armed Conflict
MLOC	minimum level of capability
OLOC	operational level of capability
RDF	ready deployment force
ROE	rules of engagement

Common Military Usage

AAN	Army After Next
ADO	Australian Defence Organisation
AEF	Army Experimental Framework
AIB	Army-in-Being
BOS	Battlespace Operating System
C4ISR	command, control, communications and computing, intelligence, surveillance, reconnaissance
ECF	Enhanced Combat Force
FIC	Fundamental Inputs to Capability
INTERFET	International Force East Timor
LWD	land warfare doctrine
POSTED	personnel, organisation, support and facilities, training, equipment, and doctrine.
WMD	weapons of mass destruction

CHAPTER 1

THE NATURE OF LAND WARFARE

What are the roles and purposes of modern land forces?

The inherent strength of land warfare is that it carries the promise of achieving decision.

Dr Colin S. Gray
European Director
National Institute for Public Policy (US)

INTRODUCTION

War on land is an enduring aspect of human experience, and represents the oldest and most decisive form of statecraft. For 3 000 years, organised society has been defined by values derived from territorial consciousness, making land the principal geographical medium on which conflict occurs. The strategic significance of land warfare has been a constant factor in the history of conflict for two reasons. First, the use of land-based force is an unequivocal action that demonstrates a society's resolve to achieve a decisive political outcome. Second, armies retain the unique capacity to capture, occupy and hold terrain and to maintain a continuous presence for as long as required. As the American military strategist [Rear Admiral J. C. Wylie](#) once noted, 'the ultimate determinant in war is the man on the scene with the gun'.¹

While technological and political developments have changed the character of land warfare, its nature, as the most intense experience a society can confront, remains unchanged. This chapter outlines the Army's view of the nature of land warfare in the early years of the 21st century. It seeks to situate land warfare in the broader context of a modern concept of land power—a concept that emphasises the versatility of the Army in contemporary military affairs.

1. [Rear Admiral J. C. Wylie](#), *Military Strategy: A General Theory of Power Control*, Naval Institute Press, Annapolis, MD, 1967, p. 72.

THE CHARACTERISTICS OF LAND WARFARE

Land warfare represents the most comprehensive form of conflict and, until recently, victory or defeat on land has been synonymous with victory or defeat for the state. Great land powers such as Sparta, Rome, France, Germany and Russia have suffered their most decisive defeats on land. Land operations have also played a critical role in the wars of maritime powers such as Athens, Carthage, Venice, Britain, Japan and the United States of America. As the maritime strategist [Sir Julian Corbett](#) noted, 'since men live upon land and not upon the sea, great issues between nations at war have always been decided – except in the rarest of cases – by what your army can do against your enemy's territory and national life, or else by the fear of what the fleet makes it possible for your army to do.'² Victory in war therefore usually requires supremacy on land.

Prosecuting Land Warfare

The capacity to wage land warfare is a key component of a country's military strength. Land warfare is multidimensional: it involves the integration and manoeuvre of military formations (organisations and their personnel, vehicles, weaponry, logistics and communications) and the coordinated application of *fighting power* to defeat the enemy's will to resist.³ The multidimensional character of land warfare means that, in order to prosecute it successfully, commanders must be perceptive, intuitive, innovative, skilled in balanced decision-making and possessed of extraordinary willpower in order to orchestrate all the resources available to defeat the enemy.

The successful conduct of land warfare combines both scientific knowledge and human artistry or, as [Sir Basil Liddell Hart](#) puts it, 'war is a science which depends on art for its application'.⁴ Military science consists of the systematised knowledge derived from observation, study and experimentation carried out in order to determine the nature, principles, means, methods and conditions that affect the preparation for, or conduct of, war. Military art, on the other hand, concentrates on the human dimension of warfare—in particular on the application of judgement—in order to overcome the unpredictable and chaotic nature of battle.

2. [Sir Julian S. Corbett](#), *Some Principles of Maritime Strategy*, Conway Maritime Press, London, 1972, p. 14.
3. [Chapter 4](#) discusses the Army's warfighting philosophy, termed the 'manoeuvrist approach'. [Chapter 5](#) discusses *fighting power*, which is the product of intellectual, moral and physical components. The contribution of joint forces to land warfare is also discussed in [chapter 4](#).
4. [B. H. Liddell Hart](#), *Thoughts on War*, Faber and Faber, London, 1944, p. 123.

The Conduct of Land Warfare and the Principles of War

A study of the history of land warfare reveals that its conduct is influenced by certain broad precepts, which have come to be recognised as the Principles of War. These principles are critical to the successful conduct of operations, and provide the means by which professional soldiers can discuss warfare and explain it to a non-specialist audience. In most Western democratic states, the Principles of War form part of the philosophical component of all military doctrine.

The characteristics of land warfare have long been reflected in the Principles of War, which are:

- selection and maintenance of the aim,
- concentration of force,
- cooperation,
- offensive action,
- security,
- surprise,
- flexibility,
- economy of effort,
- sustainment, and
- morale.

The principles are not dogma, nor are they intended as constraints on freedom of action. Balancing the competing demands they represent is the essence of success in warfare.

Challenges of Modern Land Warfare

Modern land warfare is characterised by close and violent combat among adversaries seeking to impose their will upon one another. The realities of uncertainty, friction and danger, which create chaos and the fog of war,⁵ require the values of courage, initiative and teamwork in the battlespace. Chaos will be present in all conflicts, even those lower-level conflicts not termed 'war'. Modern land warfare has the following dynamics:

- *The Continuous Battle.* Due to advances in a range of technologies, particularly those that aid night vision, battle has the potential to be a 24-hour phenomenon which may continue until one side or the other is exhausted.
 - *The Pace of Battle.* Advances in battlefield mobility and information technology have dramatically increased the pace of battle, allowing commanders to influence and determine operational tempo and placing new demands on soldiers.
 - *The Density of Battle.* Continuing advances in precision and lethality will result in smaller and more adaptable forces fighting conventional war. This reduction in forces will create a less dense battlespace with ill-defined boundaries, allowing greater room for manoeuvre at both the operational and tactical levels of command.
 - *The Range and Precision of Battle.* The range of combat will extend further and involve greater precision than in the past, due to improvements in weapon systems and target acquisition.
 - *The Multidimensional Battle.* War will be conducted in and from the air, land, sea and space, and in the electromagnetic spectrum. War will involve not only military forces but other government agencies, particularly at the strategic level. It will occur simultaneously and at all levels of intensity, throughout the battlespace.
 - *The Information Battle.* Revolutionary advances in information technology and telecommunications have the potential to confer unprecedented levels of situational awareness on opposing
5. The term 'fog of war' refers to the uncertainty in conflict created by incomplete, inaccurate and often contradictory information about the enemy, the environment and the friendly situation.

commanders. The pursuit of an advantage in the information battle will need to be balanced by flexibility and timely decision-making.

- *The Perception Battle.* The battle for the hearts and minds of domestic and international audiences is a potentially decisive element of modern warfare. This battle will be won by a combination of integrity in the conduct of military operations, careful and honest dealings with the media, and adherence to the law of armed conflict.
- *The Soldier's Battle.* The modern battlespace will often be more complex than the battlefield of the past. The decentralisation of the battlespace will place more responsibility on the shoulders of junior commanders. In the future, tactical actions may have considerable strategic repercussions, putting a premium on well-trained small-unit leaders. The phenomenon of the 'strategic corporal' is likely to become highly significant in future land operations.

Symmetric and Asymmetric Warfare

Modern land conflict involves both symmetric and asymmetric warfare. Symmetric warfare may be viewed as the clash of two conventional adversaries in intense and violent battles. Symmetric operations involve the engagement of similar military forces in force-on-force warfare.

Asymmetric warfare describes military actions against an adversary to which he may have no effective response and which pit strength against weakness, sometimes in a non-traditional and unconventional manner. In terms of the application of land power, it is important to draw a distinction between asymmetric warfare as employed by the militaries of modern liberal democracies and asymmetric warfare as employed by their real and potential opponents. In the context of military operations by modern liberal democratic states, the aim of asymmetry is to achieve disproportionate effects and to afford an enemy no effective counter to the forces used against him.

Two key features of asymmetry are *dissimilarity* and *overmatch*. Dissimilarity involves the employment of such means as special forces or information operations against an enemy when he has no expectation of their use. Overmatch may involve applying overwhelming force against an enemy in the form of military blockade, precision bombardment and pre-emptive strikes in ways he cannot match.

The use of asymmetric strategies by liberal democratic states requires both legal sanction and the exercise of ethical restraint. However, legal and ethical constraints may not necessarily be recognised or reciprocated by potential adversaries. Rather, some opponents may attempt to exploit the open societies and largely undefended civil infrastructures of modern democracies. Over the last decade, the threat to liberal democratic states from rogue states, terrorists and non-state actors employing nuclear, biological and chemical weapons, long-range ballistic missiles and forms of cyber attack has grown. In the future, countering such asymmetric threats is likely to attract increased attention and may influence the acquisition of future military capabilities by liberal democratic countries.

AUSTRALIA'S CONCEPT OF LAND POWER

The fundamental task of the Australian Army is to conduct land warfare – that is, to engage in warfighting on land. Warfighting is the application of lethal force in combat against a recognisable enemy for a specific purpose. An Army adept at warfighting possesses the essential foundation for undertaking the full range of military operations that require the application of land power.

Defining Land Power

Land power is the ability to exert immediate and sustained influence on or from the land in conditions of peace, crisis and war. It involves the capability to use land forces to uphold and protect Australia's sovereignty and interests. Land forces will have the capability to undertake a wide range of warfighting and non-combat tasks on Australian territory and in the regional maritime environment. If necessary, land power may be projected further afield. In all cases, the use of land power represents a powerful indicator of Australia's strength of commitment.

The Versatility of Land Power

The employment of land forces in peace, crisis and war illustrates the inherent versatility of land power, which offers the Government broad policy options across the phases of conflict. The 'phases of conflict' is a term that describes conditions ranging from competing tensions in times of peace (for example, economic rivalries, diplomatic friction and ideological differences); deterring aggression; to fighting in joint and combined operations in times of general war.⁶

6. The phases of conflict are further explained in [chapter 2](#).

In the context of the phases of conflict, the Army's responsibilities include the notion of shaping the international security environment and responding to crises that are not strictly defined as war. Military Operations other than Conventional War⁷ are the most obvious means by which the Army and the ADF support government objectives and the civil community in times of peace. Such operations include peacekeeping, peace enforcement, non-combatant evacuation operations, humanitarian aid, and military aid to the civil authorities. Through these operations, land power offers operational and strategic flexibility by providing the Government with the means to respond and adapt to changing and evolving circumstances.

Generating land power is dependent on a balanced approach to force structure and development. The Army achieves this balance by appropriately applying resources to the six key functions of capability: *force generation; force deployment and redeployment; combat operations; force protection; force sustainment; and force command*. These key functions allow the ADF to develop the right forces for employment in combat and to place them in the right location for a sufficient period of time to have a strategic effect. The key functions are generated by the efforts of the entire ADO, the national support base and the international support base.

The Human Dimension of Land Power

The human dimension is fundamental to the concept of land power. Modern armies depend on the abilities of professional, innovative, adaptive individuals who can react quickly to changing conditions. Land forces require high-quality personnel moulded by training into cohesive teams that have good collective morale (*esprit de corps*). Without a large reservoir of human talent, armies cannot be successful. The human dimension adds to land power's versatility, especially in missions that are personnel-intensive or require close human interaction (such as peace operations, humanitarian intervention and reassurance missions).

A land task force on a humanitarian mission, for example, may find itself engaged in close combat with hostile forces while simultaneously enforcing a truce and distributing aid. In this regard, soldiers represent the human face of warfighting. Tough, courageous and aggressive in combat, they can also show flexibility and initiative, and demonstrate subtlety and compassion when called upon to do so.

7. Military Operations other than Conventional War now replace what were previously referred to in ADF and Army doctrine as Military Support Operations.

Land Power and Joint Operations

Land power does not operate in isolation. The employment of land, sea and air forces in joint operations will often be necessary in order to achieve decisive political outcomes. Australia's geo-strategic circumstances require joint forces that can be employed in a littoral environment where the respective domains of land, sea and air forces converge.

In terms of the key functions of military capability, land forces conducting littoral operations are fundamentally dependent on sea and air forces for deployment, protection, sustainment and redeployment. Accordingly, land forces must be developed in balance with the other services. However, there may be some contingencies involving close combat, humanitarian assistance or peace support and peace enforcement, where land forces may have a greater role to play than platform-based air and sea forces.

THE ARMY MISSION

Warfighting is the Army's fundamental skill. Mastery of warfighting makes the other tasks inherent in land power possible. For this reason, the Army's mission is to win the land battle.

The Army achieves its mission by providing a potent, versatile and modern land force that can be applied with discrimination and precision to protect and promote Australia's national interests. In the pursuit of this mission, the Army must be at the leading edge of military thinking in order to ensure that its land forces and their capabilities are strategically relevant. Land forces must be trained and equipped in accordance with doctrine that takes account of the latest developments in technology and is relevant to Australia's geo-strategic circumstances.

CONCLUSION

Land warfare is an enduring aspect of human experience. By developing expert skills in warfighting, the Army provides a foundation for the employment of land power through the phases of conflict. The Army thus makes an integral contribution to the ADF's capacity to wage war in pursuit of national interests. Combat is shaped by dynamics that change the nature of individual conflicts, but not the enduring nature of war itself.

An adaptable and versatile Army provides the Government with the essential range of options needed to meet current and future national security challenges and promote broader national interests. The deployment of land forces is the most profound commitment available to the Government. Such commitment provides the means to demonstrate resolve, deter attack, reassure allies and, if necessary, influence the conduct of a campaign, its termination and the shape of the post-conflict resolution. Ultimately, land forces provide decision in conflict. The influences on modern land warfare are the subject of the following chapter.

CHAPTER 2

INFLUENCES ON MODERN LAND WARFARE

What shapes modern land warfare?

The fighting of wars is a human enterprise that has no parallel. It is the deliberate use of concentrated and organised violence that principally distinguishes it from all else; and it is this distinction that shapes the field army, directs its business and defines its culture.

Brigadier Andrew Pringle,
Chief of the General Staff's Exercise, May 1996

INTRODUCTION

Australia is proud of its reputation as a good international citizen and its contribution to the progress of humanity in general and international society in particular. As a matter of course, and as a founder member of the United Nations, Australia seeks to resolve international disputes by peaceful means if possible. Australia does, however, maintain a defence force to protect its sovereignty and meet its continuing responsibilities under the collective security provisions of the United Nations Charter. In the course of its history, Australia's armed forces have been used on numerous occasions for such purposes, most seriously for either self-defence or defence assistance to allies during war. This situation is unlikely to change for the foreseeable future.

This chapter describes influences on modern land warfare. Some of these influences are enduring, and the Army already has significant experience in coping with them. Other influences and factors are relatively new or emerging and likely to produce significantly different experiences in future conflicts.

CONFLICT AND WAR

The distinction between *conflict* and *war* is one of degree and perception rather than substance, as all war is conflict, yet not all conflict is termed 'war'. For the sake of clarity, *LWD 1* uses the term 'conflict' unless the subject specifically requires 'war' to be discussed.

Conflict can take many forms, ranging from steps taken to enforce sanctions through to violent clashes between opposing forces. It is usually understood as a quarrel between states. Individuals and non-state actors are, however, becoming increasingly important as parties to violent conflict. Despite differences in size, wealth and power, parties to conflict have one common aim: to threaten or use force to impose their will on another in order to achieve a political purpose.

Peace is international society's ideal condition, and is characterised by the use of non-violent means to resolve competing interests. While peace may include vigorous competition between nation-states or other entities, such competition is usually non-violent and is ideally conducted in accordance with international customs and law. Peaceful competition may, however, lead to disputes that escalate in severity. When non-violent means fail to resolve such disputes, at least one party may decide to pursue an advantage through violence. The unpredictable nature of such decisions is the reason governments raise armed forces and prepare them for conflict.

The Phases of Conflict

Conflict itself generally involves progression through three phases: *pre-conflict*, *conflict* and *post-conflict*. The path to conflict is however, dynamic and unpredictable. Some situations may not develop into full-blown conflict. Alternatively, a conflict may not be fully resolved and relations between parties may revert to the pre-conflict phase. Attempts at conflict resolution generally overlap the pre-conflict, conflict and post-conflict stages. [Figure 1](#) illustrates how the level of competition may vary over time. The need for land forces that are capable of acting in support of national policy is constant across all phases of conflict.

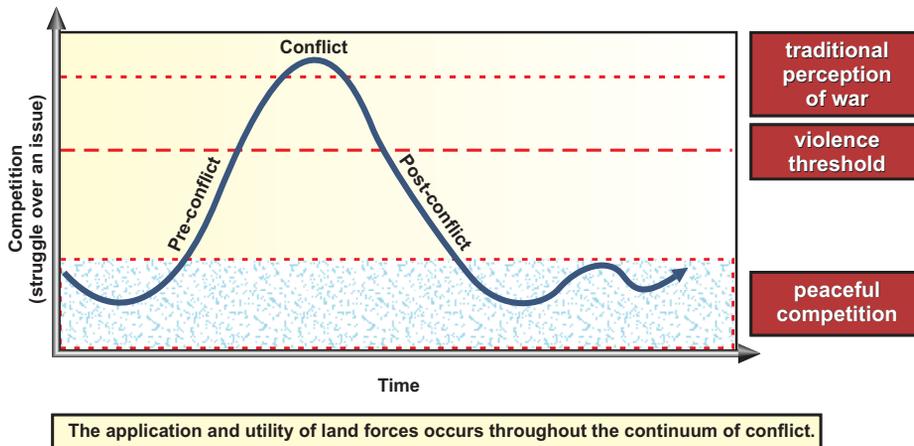


Figure 1: The Phases of Conflict Against Time

During the pre-conflict phase, parties contemplate or threaten the use of force to achieve their ends. Parties may either communicate this intention, or hide it to preserve surprise. Third parties, such as the United Nations or regional organisations, may become involved in attempts to prevent conflict.

Within the conflict phase, protagonists attempt to impose their will on an enemy using all available elements of national power, particularly *military force*.¹ The will to fight is the product of three factors: the resolve of the political leadership, the support of the people, and the capacity of the armed forces. The enemy's will to fight is usually defeated when the perceived cost of pursuing an objective outweighs the likely gain.

During the post-conflict phase, parties cease to resort to violence to attain their objectives. Military force may be used to stabilise a post-conflict situation and create the conditions for state institutions and civil society to re-emerge. Failure to reconcile parties at this stage may create the underlying causes of future conflict. In this stage, new parties may become involved for humanitarian or political reasons.

1. In this context, *military force* is a broad term that describes the potential to employ organised violence. While military force is usually deployed in a physical domain, it also includes force deployed in non-physical domains, such as the human mind and cyberspace, using electronic warfare, manipulative deception, offensive counterintelligence, and psychological operations as part of information operations.

The Categorisation of Conflicts

While no two conflicts will be the same, many will have similarities that can provide useful comparisons for commanders and planners. Conflicts are categorised using the characteristics of scale, intensity and duration:

- **Scale.** Scale represents the degree of threat to national security, the size and nature of forces committed, and the geographic size of the area of military operations. The scale of conflict is managed through the three levels of command (strategic, operational, tactical) discussed in [chapter 3](#).
- **Intensity.** Intensity refers to the overall tempo,² degree of violence and technological sophistication of the violence employed. The rate of consumption of resources is also a measure of intensity. The intensity will be high when the violence occurs frequently or when encounters between combatants are particularly violent. As a measure, intensity may vary during the course of a particular conflict. It will also often vary at the level of individual participants, depending on their particular situation and perspective at any one time. For example, a soldier in contact with an armed assailant during a peacekeeping operation will be in an intense situation. For these reasons, conflicts should never be categorised in terms of their intensity alone, and the concept is generally of most use at the strategic rather than the operational or tactical levels of command. Consequently there is no direct relationship between the intensity and the nature and scale of the forces involved.
- **Duration.** Duration is the length of time spent in, or moving through, the various conflict phases.

Categorising conflict by using these characteristics enables a deeper understanding of the nature of conflict and the resources required to conduct land warfare. Preparation for conflict must anticipate and incorporate the full array of credible threat capabilities even where violence is infrequent. [Figure 2](#) categorises some historical examples using these characteristics.

2. Tempo is the rate or rhythm of an activity, relative to that of the enemy, within tactical engagements and battles, and between operations. It incorporates the capacity of a force to transition from one operation to another (*ADFP 6, Operations*).

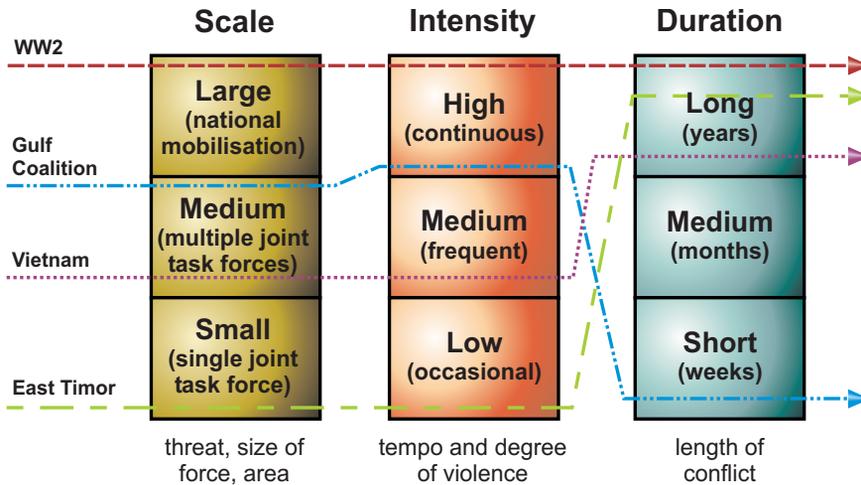


Figure 2: The Categorisation of Conflict

THE NATURE OF CONFLICT

As indicated in [chapter 1](#), conflict is dynamic, unpredictable, difficult to control, and therefore *chaotic*. This chaos is the result of the complex interaction of *friction*, *danger* and *uncertainty*—the enduring features of war—and strongly influenced by four variables: *human interaction*, *the physical domain*, *innovation* and *chance*. Success in battle requires comprehension and exploitation of these features and variables.

Enduring Features

Friction, danger and uncertainty will always be present in conflict:

- **Friction.** The factors that generate friction are enemy action, adverse weather, complex terrain,³ poor coordination, insufficient or inaccurate information and human error. These factors combine to make even the simplest of actions difficult to accomplish. Initiative, sound leadership, operational experience, thorough and flexible planning, and the confidence gained by realistic training mitigate, but never eliminate, friction.

3. Complex terrain includes heavily vegetated, mountainous, riverine, coastal, urban and any other terrain that constricts movement and impairs surveillance, target detection and engagement.

- **Danger.** The danger associated with extreme levels of violence causes fear among combatants, and can dramatically degrade the efficiency and effectiveness of soldiers and units. Realistic training and strong leadership reduce the negative effects of fear by generating high morale, confidence and resilience.
- **Uncertainty.** Incomplete, inaccurate and often contradictory information about the enemy, the environment and the friendly situation creates uncertainty in conflict. This uncertainty is often referred to as the 'fog of war'. For commanders and staffs at all levels, it means accepting the inevitability of uncertainty, planning for such uncertainty, accepting and managing consequent risks, and using judgement and discretion in decision-making.

Variable Features

Four variable features make each conflict situation different. These are human interaction, the nature of the physical domain, innovation and chance.

Human Interaction. In any conflict there are three distinct parties involved: enemy forces, friendly forces and non-combatant parties. Regardless of nationality or motivation, the enemy will be creative and determined, and will employ different combinations of force, method and technology to achieve his goals.

Armies will often operate as part of a coalition with friendly forces. They may also be required to operate alongside other government and civilian agencies. All partners in a coalition are faced with the problem of reconciling their respective strategic objectives as well as issues of interoperability. These issues include doctrinal compatibility, identification of friendly forces, communication and coordination.

Some non-combatants will act only to ensure physical self-preservation or the protection of their interests at all costs, while others will be willingly present, either trying to help resolve the conflict or attempting to alleviate the suffering of others.

Regardless of their differences, human interaction between parties to a conflict is made by four characteristics:

- **Free and Creative Will.** Free and creative will is the most important characteristic of human interaction. Free will means that parties have the ability to make choices, and influencing these choices is an essential element of war. Creativity allows protagonists to improvise under

extreme pressure. Creativity is shaped mainly by culture and experience, but it may also be partly intuitive.

- **Political Aims.** The willingness to use or threaten violence to achieve political aims distinguishes conflict from conventional peaceful competition.
- **Resources.** Protagonists must have access to sufficient resources in order to achieve their strategic aims. The allocation, protection, development and sustainment of invariably limited resources will largely govern the capacity to fight.
- **Fallibility.** Humans make mistakes that have unintended and unpredictable consequences.

The Physical Domain. Good weather and open terrain enable land forces to move rapidly and to detect and engage targets at longer ranges with greater effect. Adverse weather, climate and complex terrain degrade the effectiveness of sensors and weapon systems, and reduce the physical capacity of soldiers to move and fight. Adverse conditions also provide the opportunity to exploit degraded enemy capabilities.

Innovation. The process of technological, organisational and doctrinal adaptation in response to changing conditions constitutes innovation, which provides the Army with the opportunity to create an advantage over the enemy.

Chance. In situations of conflict, chance creates random and unpredictable events that present a commander with opportunities and threats. Successful exploitation of unanticipated opportunities can increase the effects of chaos on the enemy. A creative approach is critical to exploiting chance.

Exploiting the Conflict Environment

The nature of chaos in war is reflected by Moltke's axiom 'no plan of operations survives the first collision with the main body of the enemy.'⁴ Commanders' plans must give due account to all potential contingencies. Commanders who adapt their plans and capitalise on, or create their own, opportunities will be in the best position to exploit the chaotic conflict environment. In order to lead a flexible and adaptable army, commanders must be competent, resilient and intellectually agile.

4. Helmuth Graf von Moltke, *Moltke on the Art of War*, ed. Daniel J. Hughes, trans Daniel J. Hughes and Harry Bell, Novato, California, Presidio, 1993, p. viii.

FACTORS SHAPING MODERN LAND WARFARE

Apart from the enduring features of war, diverse and rapidly changing factors shape and affect modern land warfare. The two key and closely related factors are *globalisation* and *technological change*.

Globalisation

The contemporary world is often described as being in an era of globalisation in which there is a close connection between global, regional and national economic and security concerns. In the area of strategy, globalisation has created a trend towards convergence of national and collective security. In a globalised strategic environment, the development of regional threats can distort the complex workings of the world economy and lead to preventive military intervention by the international community.

The need to uphold international order has led to the merging of defence strategy with broader security concerns such as humanitarian and peace operations. Because of globalisation there has been a major conceptual shift in the conditions that govern land warfare. For example, collective intervention in crises has replaced containment, and the ability to compel is now often seen as being more important than deterrence in dealing with states or other groups that threaten international order. Seven factors emanating from globalisation are shaping modern land warfare:

- ***Greater Cooperative Defence.*** Globalisation has created an increasing trend towards cooperative defence and security arrangements. The costs of interstate war, the requirements of new technology and the need for international order have led to increased military cooperation and coordination, as seen in the Gulf War, in Kosovo and in numerous peace enforcement operations. Increasingly, land warfare is likely to take place in coalitions under a United Nations mandate or in regional coalitions formed to resolve regional crises.
- ***The Growing Link between Globalisation and Regionalisation.*** The rising density of trade and economic connections among states has increased the costs of regional instability to all. Regionalisation and globalisation are not so much contradictory as mutually reinforcing processes. Hence ethnic disharmony, fragmentation of multinational states and intercommunal conflict often have global significance, and the international community is now more often willing to deploy forces to resolve these problems.

- ***Proliferation of Advanced Weapons and Asymmetric Challenges.*** The proliferation of advanced weapons (including nuclear, biological and chemical weapons, and ballistic missiles) has regional and global significance. The increasing transnationalisation of military technology empowers rogue states and non-state parties, and challenges armies to respond to potential asymmetric threats. Countering proliferation and asymmetric threats places a premium on international action and multilateral agreements, which may in turn lead to coalition operations by land forces.
- ***Human Rights and Sovereignty.*** A major consequence of globalisation has been a greater willingness on the part of international society, often led by the United Nations, to intervene in circumstances where sovereign governments are either unwilling or unable to protect the human rights of their peoples. The Australian-led International Force East Timor (INTERFET) operation in East Timor is a recent example.
- ***Urbanisation.*** Population growth in the 20th century has contributed to the urbanisation of littoral regions worldwide, increasing the numbers of non-combatants in a combat zone and adding significantly to the complexity of military operations. Consequently, the Army must be able to conduct urban operations.
- ***Environmental Degradation.*** Population increases, uncontrolled industrial development and unsustainable resource usage have stressed vital ecosystems. Shortages of clean water, reduced food production and increased pollution have the potential to cause conflict between those who benefit from resource exploitation and those who are forced to live in degraded environments.
- ***Role of the Media.*** A pervasive global media ensures that future conflict will be more transparent and creates opportunities for otherwise disenfranchised parties. It may dramatically influence political opinion and public support. It will ensure a global audience for the Army on operations and bring critical opinion to bear on even minor incidents that transgress acceptable behaviour.

Future conflict will thus be more complex than ever before and its causes more diverse. So-called 'dirty wars' involving non-state parties may increase in frequency. Humanitarian interventions will be a new category of conflict, although such interventions will be problematic because of the uncertain impact of the modern electronic media. The ability to apply force with discrimination will be critical and the management of the perceptions of the various parties to a conflict will be vital to success.

Technology

Land warfare is often less sensitive to technological developments than maritime or air warfare because of the generally greater environmental and situational complexity involved. However, the commercial sector will continue to drive technological change over the next decade, presenting opportunities and challenges for the development of land force capability. The areas where technological change might have the greatest effect include:

- ***Information Technology and Telecommunications.*** Digitisation of the battlespace will enhance situational awareness, improve sustainment and facilitate better integration of weapon and sensor systems. Conversely, digitisation creates its own vulnerabilities. It must therefore be managed effectively at all levels in order to minimise these vulnerabilities. These systems increase the tempo by helping commanders to reach better decisions faster.
- ***Sensor Systems and Intelligence.*** Advances in sensor technologies and the means to access and distribute information derived from them provide an advantage that is not confined to wealthy nations. In particular, commercially available satellite imagery is enhancing the transparency of the future battlespace. At the same time, the Army's capacity to turn information into intelligence will be of critical importance.
- ***Weapon Systems Technology.*** With the benefits provided by recent improvements, conventional weapons are achieving increased precision, reach and lethality. Combined with advances in command and control systems, this equips military forces with an increased ability to achieve lethal influence over larger areas, especially in open terrain. Some forces can project influence into distant areas and so not expose themselves to immediate counterattack. To counter this, there is a greater need for dispersion and better measures for physical protection, deception, operational security and countersurveillance. Increasingly, forces will exploit complex terrain to neutralise an enemy's target acquisition and weapons systems.

The global proliferation of high-technology and relatively low-cost weapons has also added to the potential lethality of conflict. The availability of these weapons, including weapons of mass destruction (WMD) and the associated means of delivery, has increased the capacity of lesser powers, organisations and even individuals to threaten levels of violence previously only available to wealthy nation-states.

On the other hand, non lethal weapons add another dimension to military capabilities by providing the means to tailor responses to specific situations. These technologies focus on incapacitating protagonists and separating them from neutral parties. Non lethal weapons provide the means for a graduated response and can be especially useful in minimising collateral damage.

- ***Human Sciences.*** The study of the human sciences aids in the understanding of the physiological, and psychological impacts on the soldier in the battlespace. Advances in medicine and health services have increased the rate of prevention of illnesses and improved the treatment and care of casualties. Advances in ergonomics, psychology and physiology continue to enhance the performance of soldiers in high-tempo operations.
- ***Mobility and Speed.*** Continuing development in the mobility and speed of vehicles has dramatically enhanced the ability of forces to deploy and redeploy. The pace of battle is no longer dictated by the foot soldier, but by the technology that can transport soldiers to combat and move them around the battlespace.
- ***Power Source Technology.*** Advances in power source technology have been slower than in other areas. The capacity of armies to move throughout the theatre of operations remains limited by the range of vehicles and the large quantity of fuel and batteries required to sustain operations. The limitations of power source technology will continue to impose restrictions on a deployed force's ability to sustain operations until a technological breakthrough occurs.

The ability of non-state actors to gain access to sophisticated technologies with military applications erodes the 'technology edge' of many countries, including Australia. This growing threat increases the importance of proliferation control regimes and the security of international technology-sharing agreements.

Military capabilities will increasingly depend on the adaptation of commercially available technologies and the use of commercial off-the-shelf products.

THE MODERN BATTLESPACE

Globalisation and technological change are shaping the conflict environment and, more narrowly, the modern *battlespace*. The battlespace refers to two areas of conflict: the area of influence and the area of interest. It includes the traditional domains of land, air and sea; the littoral regions where these three converge; space; and the electromagnetic environment. The battlespace also embraces the social and political contexts in which conflict is waged.

The four attributes of the modern battlespace that distinguish it from the battlefield of earlier times are non-linearity, increased integration, continuous operations and increased connectivity. These attributes are illustrated in figure 3 and are described in the following paragraphs.

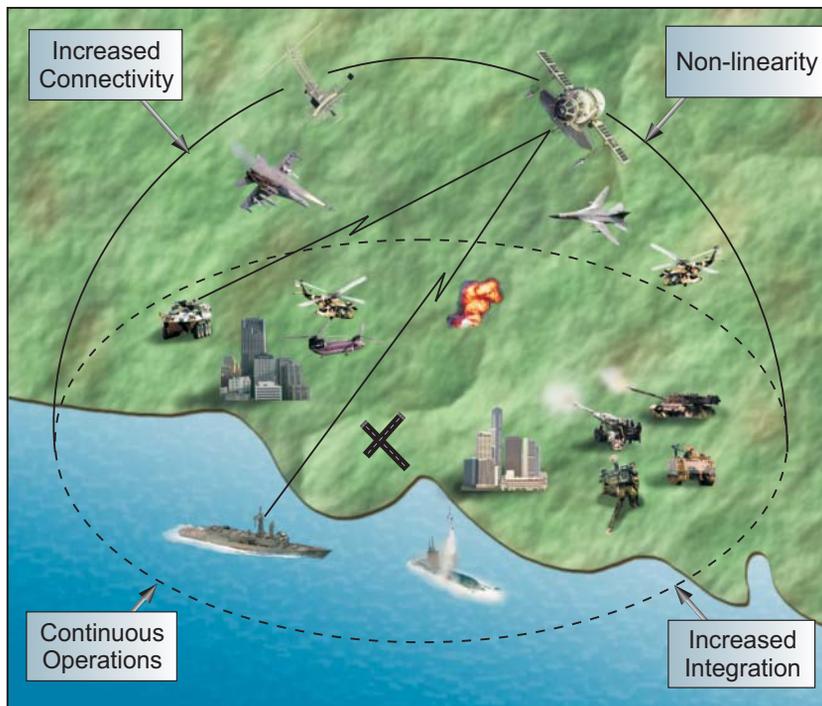


Figure 3: Characteristics of the Modern Battlespace

Non-linearity

The term *non-linearity* refers to operations distributed throughout the battlespace. It differs from the historical linear approach where the opposing forces' fronts and flanks delineated the traditional *battlefield*. Non-linearity results from technological advances that enable land forces to manoeuvre, acquire and engage targets throughout the battlespace.

Traditionally, non-linearity has been associated with counterinsurgency and unconventional warfare. Its relevance to conventional warfare arises as commanders acquire the means to move forces, gather information, transmit orders, acquire targets and strike at widely dispersed points within the battlespace (figure 4). Non-linearity will also create temporary blind areas, particularly in complex terrain.

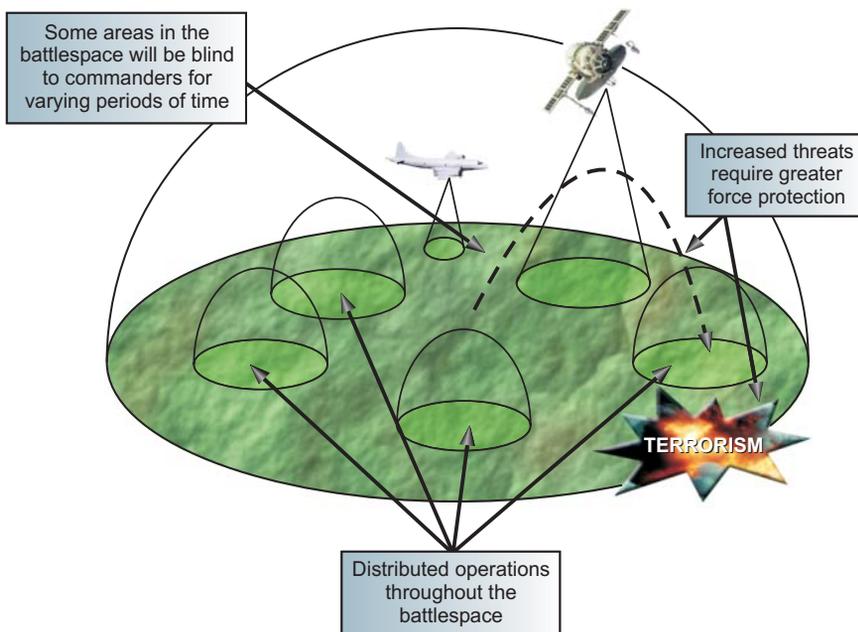


Figure 4: Non-linearity

Long-range, precision-strike and asymmetric threats will substantially increase lethality across the modern battlespace. As a result, forces operating in support areas will often face as much risk as those actively conducting combat operations. In order to match the requirements of the changing threat environment and the challenge of non-linearity, the Army requires sound and focused intelligence, flexible organisations, suitable doctrine, adequate force protection, the ability to concentrate and disperse rapidly, and the ability to concentrate offensive fire and information effects.

Increased Integration

Success in the modern battlespace requires a high level of integration within the Army, and between the Army and joint and coalition forces. Integration also includes other government, non-government and international agencies. Integration occurs through:

- ***The Combined Arms Team.*** Combined arms teams are balanced groupings comprising combat, combat support and combat service support elements.⁵ They allow rapid grouping and regrouping in order to optimise combat effects⁶ according to the variable conditions created by the enemy, task and terrain.
- ***Joint Task Forces.*** Fighting in the modern battlespace requires a joint approach to the conduct of operations. This approach is achieved through the integration of compatible command and control systems, and the development of joint doctrine, operating procedures and training practices.
- ***Coalition Operations.*** Although coalition interoperability depends on doctrinal and technological compatibility, it starts with a common purpose and is sustained by personal relationships based on well-developed cross-cultural skills. Combined exercises, personnel exchanges and standardisation agreements are essential in building effective coalition operations.

5. *Combat* refers to infantry, armoured, and/or aviation elements whose primary purpose is the direct engagement of an enemy in close combat. *Combat support* refers to elements drawn from artillery, field engineering, intelligence, communications and electronic warfare resources. *Combat service support* refers to logistic, maintenance, health service and construction engineering elements providing sustainment.

6. The term *combat effects* refers to the outcomes that result from the application of fighting power in the battlespace.

- **Civil-military Integration.** Civil-military integration is essential for successful on-shore and offshore operations. In continental Australia, effective civil-military cooperation will be required to maintain government leadership and minimise the impact of conflict on national life. Civil-military operations offshore will involve integration with numerous civilian agencies including Australian Government representatives from the Department of Foreign Affairs and Trade or the Australian Agency for International Development (AusAid), contractors providing logistic support, and international aid agencies. Offshore operations will also require effective relationships between the host nation and members of the coalition.

Continuous Operations

Technological developments have made continuous operations possible. As technology reduces the limitations of night operations and moderates the effects of weather, both friendly and enemy commanders will seek to manipulate the tempo of battle to their advantage. Continuous operations place great demands on sustainment systems, and severely test the endurance of soldiers and equipment.⁷ In order to increase human performance, armies must prepare for continuous operations through organisational change, training, and the exploitation of medical technology.

Increased Connectivity

Using networked communications, increased connectivity has improved access to information from a broad range of sources. It has increased the flow of information between the battlespace and the outside world, adding a layer of complexity for commanders at all levels. Better communications also allow commanders to make and communicate better decisions, thus enabling smaller, dispersed forces to deliver disproportionately greater effects. Increased connectivity underpins the Army's goal for a *sensor-actor architecture*. A sensor-actor architecture links battlespace sensors to the delivery of precise and timely physical and non-physical effects within the framework of the commander's intent.

7. One consequence for soldiers is sleep deprivation, which degrades higher-order complex thinking, such as that involved in planning and the achievement of decision superiority, more than simple mental operations such as weapon-firing drills. The capacity to perform complex tasks diminishes, in terms of speed and accuracy, by three to four times over a 72-hour sleepless period.

CONCLUSION

Understanding the nature of conflict provides commanders and soldiers with valuable insights into the rigours and danger of battle. Although conflict is inherently chaotic and unpredictable, its effects are not exclusive and the enemy faces the same problems. Modern warfare is also being shaped and affected by diverse and rapidly changing factors and circumstances, especially by globalisation and the spread of advanced technology. The future battlespace will be distinguished by its non-linearity, requirements for increased integration, potential for continuous operations and increased connectivity through networked systems.

Changes to the conflict environment and the emergence of an increasingly complex battlespace demand a comprehensive response across all the elements of military capability. Winning future battles will depend on skilled personnel, flexible organisations, robust support infrastructure, excellent training, the right equipment and sound doctrine. More than anything else, professional mastery (discussed in [chapter 5](#)) and continuous modernisation (discussed in [chapter 6](#)) will underpin the Army's response to these challenges. Australia's military strategies, and especially the Army's responsibilities within such strategies, are the other key factors in shaping the Army's response to this changing strategic environment. [Chapter 3](#) describes Australia's military strategy, and the Army's contribution to the defence of Australia and the protection of Australian interests.

CHAPTER 3

MILITARY STRATEGY

What is the Army's role in Australia's Military Strategy?

It is true that we are not a numerous people, but we have vigour, intelligence and resource, and I see no reason why we should not play not only an adult, but an effective part in the affairs of the Pacific.

Prime Minister Robert Menzies, 1939

INTRODUCTION

Military strategy is derived from national strategic policy. At its core, Australia's strategic policy aims to prevent or defeat any armed attack on Australia. This objective however, requires more than just the defence of Australia's coastline. Australia has strategic interests and objectives at regional and global levels made necessary by the potential for insecurity with the region. The key to defending Australia lies in control of the air and sea approaches to the continent so as to deny these approaches to hostile forces and provide Australian forces with freedom of action. This type of defence requires a maritime concept of strategy, which includes a vital and central role for land forces due to the nature of the air and sea approaches.

The maritime concept of strategy also finds expression in a positive commitment to regional security. The intention is to shape Australia's strategic environment by working cooperatively with regional states to prevent threats arising, or to deal with them offshore when they do arise. Positive engagement with regional countries sets Australia's strategic posture: it communicates commitment, shared interests and responsibility to friends, while cautioning potential adversaries against the use of force. This maritime concept, along with the requirement to be self-reliant and proactive¹, applied to the defence of

1. *Defence 2000 - Our Future Defence Force* states that the government's approach to defending Australia is shaped by self-reliance, a maritime strategy and proactive operations.

Australia and to the security of its immediate neighbourhood, are the prime force-structure determinants of the ADF.

AUSTRALIA’S NATIONAL SECURITY FRAMEWORK

Australia has adopted an organisational framework that maximises the Government’s ability to manage challenges to national security.² This framework establishes clear lines of responsibility between and within government agencies, including the ADF. In turn, the ADF recognises three levels of command that clearly delineate responsibilities for the planning and conduct of military operations.

Levels of Command in the Australian Defence Force

The ADF manages its contribution to national security through three levels of command: *strategic*, *operational* and *tactical*. The levels of command reflect the distribution of responsibilities for planning and directing the resources allocated to national security (figure 5).



Figure 5: The Levels of Command

2. National security requires the coordinated interaction of all of the elements of national power: political, economic, military, societal and environmental.

A clear appreciation of the allocation of responsibility provides an overall understanding of how the Government, the ADO and the people respond to crises. The levels do not depend on the scale, intensity or duration of the conflict, and they overlap, as shown in [figure 5](#).

Strategic Level. The strategic level is responsible for coordinating the application of national power to achieve an end-state favourable to the national interest. At this level, all the elements of national power are employed in a manner that maximises their relevance and effect. The strategic level is subdivided into *national strategic* and *military strategic* levels.

- The *national strategic* level refers to the political dimension of conflict at the macro level, both domestically and internationally, and the mobilisation of national military and non-military resources to meet the Government's strategic objectives. The political dimension relates both to the desired political end-state, and to the domestic support on which governments depend to enable the prosecution of hostilities.
- The *military strategic* level is responsible for the military aspects of planning and direction of conflict. This level includes the setting of the military end-state and the broad military approach to its achievement. Military strategic commanders provide advice to the Government and translate the Government's strategic objectives into policy and plans for the use of military force. As part of this responsibility, strategic-level commanders establish military strategic objectives, provide direction to operational-level commanders, craft military strategies, allocate resources, and impose conditions and limitations on the military actions to be undertaken in designated theatres of operations. Australian Defence Headquarters, incorporating Army Headquarters, both contributes to the national strategic level and has responsibility at the military strategic level.

Operational Level. The *operational level* is concerned with planning and conducting campaigns to attain military strategic objectives within a theatre of operations.³ A campaign is a series of simultaneous or sequential operations designed to achieve an operational commander's objective, normally within a given time or space. The operational level entails sequencing tactical events to achieve strategic objectives, and applying resources to bring about or sustain those events. Military actions at the operational level are invariably joint and often coalition in nature. The operational level is the vital link between military strategic objectives and tactics. Headquarters Australian Theatre, Headquarters

3. A theatre of operations is a designated area for which an operational, joint or combined commander is appointed and in which a campaign or a series of major operations is conducted. A theatre may contain one or more joint force areas of operations. (*ADFP 101, Glossary*).

Northern Command and occasionally the Deployable Joint Force Headquarters work at the operational level.

Tactical Level. At the *tactical level*, commanders plan and conduct battles and engagements to support operational-level (campaign) objectives. Tactical activities focus on integrating and applying *fighting power* to defeat the enemy at a particular time and place, and to exploit this success (fighting power is described in [chapter 5](#)). In comparison with the operational level, events at the tactical level occur within relatively short time-frames, and the options available to commanders at this level are limited. Most ADF units fight at the tactical level.

Overlap in the Levels of Command. The levels of command overlap because, while commanders have different responsibilities, the effects of their decisions will pervade all levels. For example, decisions taken by strategic leaders on rules of engagement (ROE) and the allocation of resources will have a direct impact on the tactical level. Similarly, decisions made by a junior commander in combat might have direct strategic repercussions. Overlap between the levels also shows the importance of a coherent chain of intent from top to bottom that ultimately produces the desired national end-state.

AUSTRALIA'S STRATEGIC CONTEXT

Military strategy is derived from national security policy, which itself reflects judgements drawn from three primary sources of influence on the national security outlook. These are Australia's strategic environment, strategic circumstances, and historical experience of military engagement. Some understanding of these influences is required to appreciate the Army's contribution to Australian national security.

Australia's Strategic Environment

Australia occupies a unique strategic position which forces potential aggressors to face the challenges posed by a substantial sea-air-land gap. In terms of Australia's wider national interests however, the security of the Asia-Pacific region as a whole is central to Australia's national security. Political, social and economic change within the region, and particularly in East and South-East Asia, have immediate repercussions for Australia. Of particular importance to regional security is the relationship between China, India, Japan, Russia and the United States and Australia's relationship with each of these nations. Indonesia's size, population, location, proximity, economic potential and regional influence accord it particular significance within Australia's strategic outlook.

The geo-strategic attributes of the region, coupled with Australia's nature as a 'dry archipelago', can be a positive asset for the projection of land power in a joint context. Australia's centres of population and key national resources tend to be distributed around the margins of a vast, largely arid and sparsely populated continent. What has been termed the 'tyranny of distance'⁴ continues to define how Australia views its strategic circumstances. A maritime concept of strategy in a littoral environment offers land forces the ability to overcome the traditional constraints imposed by hostile terrain, limited forces and extensive areas of territorial and operational responsibility.

Australia's Strategic Circumstances

Australia's distinctive geography, population, culture, international relations and history strongly influence and constrain the ways in which the ADF conducts military operations. Some of the factors that influence the ADF's approach to warfare include:

- demographic distribution of Australia's relatively small population;
- small military forces;
- large land mass and vast surrounding maritime approaches;
- liberal-democratic political system and national values;
- largely Westernised culture and Western orientation in world affairs;
- generally well-educated and technologically adept population; and
- modern industrialised economy integrated into the world economy.

Australia's Historical Experience of Military Engagement

Australia's past record of involvement in armed conflict has been characterised by participation in coalition operations to secure regional and wider interests. From the colonial period to the end of the Cold War, Australia's experience of military engagement was dominated first by its position in the British Empire and then by its relationship with the United States. In both cases Australia was a junior partner in alliance with a major global power. The United States alliance continues to play a critical role in

4. Geoffrey Blainey, *The Tyranny of Distance: How Distance Shaped Australia's History*, Sun Books, Melbourne, 1966.

Australia's strategic outlook; however this outlook also involves an extensive network of bilateral and multilateral strategic relationships with other countries and organisations within the region. As was demonstrated by Australia's involvement in the Cambodian peace process, and more recently in East Timor, Australia may be called on to make significant contributions to regional military coalitions.

AUSTRALIA'S MILITARY STRATEGY

The Defence White Paper *Defence 2000 – Our Future Defence Force* outlines Australia's military strategy and allocates the following strategic tasks to the ADF:

- defend Australian territory;
- contribute to the security of Australia's immediate neighbourhood;
- support Australia's wider interests and objectives by being able to contribute effectively to coalitions of forces to meet crises beyond Australia's immediate neighbourhood; and
- support national peacetime tasks, including specific and ongoing commitments to coastal surveillance and emergency management as well as ad hoc support to wider community tasks.

Australia's military strategy emphasises the long-standing preference of Australian defence planners to defend Australia in the maritime approaches to our territory. These approaches are *littoral* in nature. A littoral environment is one in which the operational domains of sea, land and air merge. By their nature, littoral areas require the effective conduct of joint operations. In the Asia-Pacific region they may require effective coalition operations.

The application of Australian military strategy requires an understanding of the characteristics of warfare relevant to the Australian context:

- ***The Manoeuvrist Approach.*** *The manoeuvrist approach emphasises the need to take the initiative and to apply pressure at times and places, and in ways the enemy least expects.*⁵

5. The manoeuvrist approach is described in [chapter 4](#).

- ***The Knowledge Edge.*** The knowledge edge allows the ADF's relatively small force to maximise its effectiveness by achieving integration of information, knowledge, and decision-making through the exploitation of information technologies.⁶
- ***Cooperation in Military Operations.*** Within Australia's immediate neighbourhood the ADF would most probably deploy as part of a coalition force. Beyond this, ADF elements would only deploy as part of a coalition force.
- ***Versatility and Adaptability in Military Operations.*** As a small force with a wide range of potential tasks, the ADF needs to be both versatile and adaptable.
- ***Justifiable Action.*** Given the nature of military operations and Australia's desire to preserve its status as a good international citizen, it is imperative that the basis and conduct of the ADF's operations be both moral and legal.

THE ARMY'S ROLE IN MILITARY STRATEGY

The Army has a central role to play in Australia's maritime strategy. By operating as part of a joint force in the maritime approaches, the Army must be able to defend Australia's vital interests and secure its territorial sovereignty. The Army's main role in military strategy is to contribute effective land force assets in any contingency and to be capable of participating in joint task forces alongside Navy and Air Force. The Army must therefore be able to deploy highly trained, well-equipped and sustained land forces for a variety of operations at short notice in both Australia's immediate neighbourhood and on Australian soil. For much of the last two decades, land force planning has been dominated by a focus on preparations to meet lower-level contingencies on Australian territory. That focus will now be broadened to meet a wide range of possible contingencies, both on Australian territory and beyond.

6. The knowledge edge is described in [chapter 4](#).

In general, the Army's contribution to Australian military strategy falls into three key areas:

- warfighting;⁷
- Military Operations other than Conventional War⁸ to assist Australian and regional communities; and
- activities undertaken to assist in shaping Australia's strategic environment, including the provision of a deterrent and the promotion of a stable region.

Warfighting

The fundamental task of the Australian Army is to engage in warfighting on land. Warfighting is the application of lethal force in combat against a recognisable enemy for a specific purpose. Whatever the contingency, the Army's adeptness in warfighting provides the essential foundation for it to be able to undertake the full range of military operations that require the application of land power. These operations range from high-technology conventional warfare to the complex range of tasks involved in Military Operations other than Conventional War. To meet such a broad set of priorities, the Army must possess relevant doctrine, world-class training and an effective modernisation program.

The Army's participation in warfighting operations would typically embrace the following contingencies:

- contributing to coalition warfighting operations to protect Australia's national interests;
- contributing to the defeat of military incursions onto Australian territory;
- protecting population centres, industry and key infrastructure throughout Australia from attack;

7. The Army further divides warfighting operations into offensive, defensive and security operations.

8. The term 'Military Operations other than Conventional War' now replaces what was previously referred to in ADF and Army doctrine as Military Support Operations. The Army divides Military Operations other than Conventional War into peace and support operations.

- contributing to an expansion and mobilisation capacity to counter a major and sustained threat to Australia;
- contributing to the protection of Australia's offshore territories and resources; and
- contributing to strike and denial operations.

Military Operations other than Conventional War

During periods of extended peace, Military Operations other than Conventional War are the most obvious means by which the Army and the ADF support government objectives and the civil community. Land forces have a prominent role to play because these operations require presence, compassion and cooperation with local communities.

Military Operations other than Conventional War may temporarily degrade some aspects of warfighting capability such as equipment serviceability and training regimes, while significantly enhancing others such as professional competence and regional relationships. More importantly, Military Operations other than Conventional War may contain, defuse, degrade or simply delay the development of issues that could become security problems for Australia.

The Army's contribution to Military Operations other than Conventional War includes:

- peacekeeping;
- peace enforcement;
- contribution to search and rescue operations;
- contribution to unilateral and multilateral humanitarian and disaster relief operations; and
- assistance in the recovery and evacuation of Australian nationals from hostile or crisis environments within the Asia-Pacific region or beyond, through special recovery operations, services assisted evacuation or services protected evacuation.

Shaping Australia's Strategic Environment

Regional engagement and the maintenance of Australia's alliance relationships are two important activities that shape this country's strategic environment. While the Army prepares for its core business of warfighting, it also engages with regional countries and traditional allies. The Army contributes to the security of allies and friends by providing training and materiel assistance. The Army participates in exercises, personnel exchanges and cooperative research to develop and strengthen alliances and prospective coalitions. This activity also helps to promote democratic institutions and general stability in the region.

In both warfighting and Military Operations other than Conventional War, the Army, as a component of the ADF, helps to shape the strategic environment by positively contributing to Australia's security. The term 'shaping' describes those preventive activities that seek to minimise the likelihood of the emergence of security threats to Australia and its interests.

In peacetime, the military aspect of this shaping role is achieved through military liaison, combined exercises, exchange programs and information sharing. In periods of tension, the Army may be employed to demonstrate resolve and support to a friendly nation, possibly deterring aggression. Shaping has an obvious priority in peace, but it also represents a vital activity during periods of conflict, when maintaining international support, strengthening coalition commitment and demonstrating domestic resolve are paramount. The focus of post-conflict activities is reshaping the strategic environment so that regional stability is restored.

The Army's contribution to shaping activities in the region includes:

- participating in exercises, exchanges and interoperability programs to maintain strong relations with Australia's allies;
- providing training and advice, participating in exercises and exchange programs, and developing interoperability with other forces to promote cordial relations and confidence-building measures between regional countries;
- contributing to United Nations and other multinational humanitarian, disaster relief, peacekeeping, counter-WMD, and peace enforcement operations;
- helping to monitor and control the proliferation of WMD in the Asia-Pacific region, and more widely as necessary; and
- contributing to cooperative regional surveillance operations.

Australia's regional and global strategic interests impose a responsibility to assist in securing stability in the Asia-Pacific and supporting the United Nations in maintaining international security. The Army maintains liaison with other armed forces and conducts exercises with traditional allies and other countries that share its interests. This liaison requires participation in exchange programs and information sharing as well as contributions to United Nations and multinational operations when necessary.

While the Army's contribution to military strategy most often takes the form of military support tasks and shaping activities, success in these areas—and therefore strategic success—is derived directly from the organisation, skills and capability developed for warfighting. Strategic success also relies on ensuring that the general utility of land power makes a positive contribution to joint warfighting.

Flowing from Australia's military strategy is the requirement for the Army, as part of the ADF, to contribute to three generic types of military task:

- manoeuvre operations in a littoral environment;
- protective and security operations on Australian territory; and
- contribution to coalition operations in the near region, the wider region and worldwide.

In addition, the Army enhances broader national security and policy development through a range of activities, which includes:

- contributing to the formulation and execution of military strategy;
- providing emergency and disaster relief assistance to the civil community;
- providing assistance to the civil authorities with barrier law enforcement functions such as immigration, quarantine and customs;
- assisting the civil authorities in protecting the Australian community from acts of serious violence or lawlessness, particularly terrorism;
- conducting routine surveillance of northern Australia and offshore territories; and
- providing policy and intelligence support to national security decision-making in conjunction with the other Services.

LAND POWER IN JOINT WARFIGHTING

While Australia is responsible for the security of almost 10 per cent of the earth's surface, the Australian nation can only devote a relatively small proportion of its human and material resources to defence. As a relatively small force, the ADF must be versatile, adaptable and agile so that it can conduct a broad range of missions. Achieving these characteristics relies on generating *joint effects*.⁹

The Contribution of Land Power to Joint Effects

Land, air and sea forces have different but complementary attributes. In any joint operation, but specifically one in a littoral environment, the essence of success is to achieve joint effects by utilising the relative strengths of each Service to compensate for the relative weaknesses of the others. Joint effects are therefore a force multiplier for the ADF.

While only land forces can sustain operations in the land environment, those same forces may encounter difficulties in implementing a manoeuvrist approach in a littoral environment because of the restrictions that terrain and other physical features place on mobility. Consequently, the speed, responsiveness and reach of air lift, and the mobility, versatility, lift capacity and sustained reach of naval forces must be harnessed to enable land forces to be deployed to maximum effect.

Land forces need to establish a position of advantage with respect to an adversary, from which force can be threatened or applied, to enable decisive operations. To establish such a position effectively, the ADF must achieve and maintain a joint warfighting capability, and the Army must become accustomed to conducting operations across environmental boundaries. Some appreciation of the Army's contribution to the application of Australian military strategy is required in order to understand the role that the Army will play in future ADF operations.

9. The term *joint effects* refers to the outcomes that result from the application of each of the Service's fighting power in the battlespace.

The Army's Contributions to Joint Warfighting

Army capabilities and activities contribute to a wide range of military strategies, military response options and joint contingency plans. These capabilities include the following:

Command and Control. As one of the components of Australian Defence Headquarters, Army Headquarters contributes to planning and decision-making at the strategic level. The Army provides specialist personnel and capabilities to operational-level joint headquarters as well as the base structures for the ADF's Deployable Joint Force Headquarters and Headquarters Special Operations. Army communications units provide the backbone for land-based command and control elements deployed throughout Australia and overseas. In addition the Army provides civil affairs personnel to support deployed force headquarters.

Manoeuvre. As part of a joint or coalition task group, Army force elements conduct warfighting operations that seek to undermine the enemy's will. Such operations usually involve dominating territory, or conducting strikes against critical vulnerabilities. The Army achieves these effects by conducting offensive, defensive, protective or security operations. These operations are generally conventional in nature, but certain Army units can apply covert or unconventional means to achieve similar effects. Army forces can be inserted into an area of operations using a variety of sea, air or land-based methods of entry. Direct actions—such as the destruction of enemy forces, including command and control and logistic assets, and the disruption of enemy sea and land communications—may be achieved by using Army combat units. The Army may also assist maritime and air manoeuvre by seizing, protecting, denying, destroying or operating forward-operating bases. Land forces can control the land adjacent to sea-lanes and supplement naval anti-air warfare systems with ground based air defence. Army also provides forces for amphibious operations for ship-to-shore transfer of materiel, and specialist personnel for fire direction and reconnaissance missions.

Offensive Fire. The Army's offensive fire assets contribute to the joint force commander's freedom of action through the application of coordinated and timely lethal and non lethal force. These assets include artillery, aviation, electronic warfare, armour and infantry. They complement other joint offensive support assets by producing direct, indirect and electronic effects in joint fire plans. The Army contributes to Joint Fire Support Coordination Cells, which advise the commander on the employment of offensive fire and coordinate plans to support operations. The Army also provides specialist teams to coordinate air-ground operations. In the offensive phase of operations, the Army can provide forces to reduce enemy air and sea power through strike and target designation.

Intelligence. The Army provides specialist personnel to a wide range of ADF intelligence-gathering and analysis staffs. In terms of specialist and general intelligence functions, the Army provides the following:

- **Intelligence.** The Army provides the bulk of the ADF's intelligence capabilities for human intelligence collection, interrogation, ground-based electronic warfare, counterintelligence and psychological operations. Army tactical headquarters are linked into the ADF Distributed Intelligence System.
- **Surveillance.** Tactical units with operational-level functions and national strategic linkages, such as the Army's Regional Force Surveillance Units and regional intelligence elements, provide the ADF with a unique capability to monitor activities in focal areas. They also enable the maximisation of civil-military cooperation to meet both defence and wider national security responsibilities.¹⁰
- **Reconnaissance.** Army Special Forces provide an important strategic capability for close-in reconnaissance and detailed intelligence-gathering on land and coastal targets.

Force Protection. The Army's contribution to force protection falls into two main categories:

- **Protection of Bases.** Airpower and seapower can only be projected from secure bases; the protection of these bases depends, in part, on land forces. Army ground based air defence provides the low-level air defence of ADF bases.
- **Protection of the National Support Base.** As part of its role to safeguard the national interest, the Army may be required to contribute to operations that assure national sovereignty and enhance the wellbeing of the civil community. These operations include protecting the population and key national infrastructure from attack. The Army must be able to expand and mobilise to counter a major and sustained threat to Australia. Finally the Army must be able to assist the civil authorities during civil emergencies and protect the Australian community from acts of violence, particularly acts of terrorism.

10. Regional Force Surveillance Units assist national surveillance activities by patrolling wide areas, including offshore islands, to establish normalcy patterns and to detect variations. Regionally based intelligence elements actively manage information provided by the civil population. Both activities allow changes in normalcy patterns to be identified and monitored during times of increased tension and conflict.

Logistics. The Army maintains the Logistic Support Force to provide the full range of operational logistic requirements to deployed land forces. The Logistic Support Force also has the flexibility to provide limited logistic support to other air and naval forces in cooperation with joint, combined and coalition logistic agencies. The Army's logistic capabilities are termed *combat service support*; they include movement control, personnel support, construction and general engineering, terminal operations, medical and dental facilities, general transport support, materiel and supply services, and contract management support.

In summary, Australia's strategic characteristics require that the ADF maximise the synergy of all three Services. The Army's contribution to joint warfighting is to produce capability that will ensure the success of military strategy.

CONCLUSION

The Army's role in the continuum of conflict is not limited to the use of force alone, but also involves shaping Australia's strategic environment. The Army contributes to Australia's maritime concept of strategy by providing a wide variety of capabilities and response options to the ADF's ability to prosecute joint operations.

In the aftermath of conflict, the Army **also** has a leading role in shaping the security environment. The Army can apply its warfighting capabilities to help establish a sufficient degree of stability to allow the resumption of civil authority. It can also provide an impartial monitoring force to verify compliance with agreements. Within force capabilities, the Army will be able to develop infrastructure for the long-term benefit of the recipient community.

As part of the ADF, the Army has an integral part to play in support of Australia's maritime concept of strategy by conducting joint and coalition manoeuvre operations in the littoral environment. Only land forces have the capacity to provide an enduring presence in littoral conditions. The Army conducts protective and security operations in Australia and contributes to offshore missions.

The diversity of operational tasking across the continuum of conflict presents the Army with significant challenges. These challenges are met by the elements of the Army's warfighting philosophy, which are described in the following chapters.

CHAPTER 4

THE CONDUCT OF LAND WARFARE

What is the Army's warfighting philosophy?

Supreme excellence consists in breaking the enemy's resistance without fighting.

Sun Tzu

INTRODUCTION

The Army's warfighting philosophy is derived from multiple sources, including its understanding of the national character, the nature and history of warfare, the utility of land forces and their role in national military strategy. It also takes account of the nature of future conflict, the resources likely to be assigned, and the expectations of the Australian people. This warfighting philosophy must ensure that the Army retains strategic relevance while maintaining tactical superiority.¹ To this end, the Army has embraced a warfighting philosophy termed the *manoeuvrist approach*. The manoeuvrist approach seeks to shatter the enemy's cohesion through a series of actions orchestrated to a single purpose, creating a turbulent and rapidly deteriorating situation with which the enemy cannot cope. The manoeuvrist approach focuses commanders at every level on exploiting enemy weaknesses, avoiding enemy strengths and protecting friendly vulnerabilities. At all times, the commander is seeking to undermine the enemy's centre of gravity.

1. *Tactical superiority* refers to the Army's ability to successfully conduct operations against numerically similar land forces.

BASIS OF THE MANOEUVRIST APPROACH

The manoeuvrist approach is based on *manoeuvre theory*, which is a way of thinking about warfare rather than a particular set of tactics or techniques, and its essence is defeating the enemy's *will* to fight rather than his *ability* to fight. Manoeuvre theory emphasises the centrality of the human element in warfare. It relies on speed, deception, surprise, and the application of firepower and movement. The fundamental tenets of manoeuvre theory concentrate on applying strength against weakness; recognising and exploiting war's inherent characteristics of friction, danger, uncertainty and chaos; and focusing friendly planning on defeating the enemy plan rather than defeating the enemy forces.

Importantly, manoeuvre theory regards war as a competition based in time and space rather than on spatial position alone in which the ability to maintain a higher tempo of operations relative to the enemy's creates opportunities for defeating the enemy's centre of gravity. Manoeuvre theory is based on a profound understanding of the enemy, and particularly how the enemy's perceived strengths can be undermined. The theory also assumes a detailed knowledge of friendly forces, and the neutral or non-combatant parties within and outside the battlespace.

While the manoeuvrist approach seeks to conserve friendly resources wherever possible, this philosophy still accepts *close combat* as an essential characteristic of land warfare. Close combat involves the ability to find, close with and destroy an enemy. This ability is essential because posing or threatening to use force has little meaning without the capability to act.

The manoeuvrist approach is applicable at all levels of command:

- ***Strategic Level.*** Strategic manoeuvre incorporates the coordinated application of all elements of national power in support of national strategic objectives. Consequently, *military* strategic manoeuvre uses military forces as part of military strategy. Military strategic manoeuvre positions a nation's fighting forces for operational and tactical success and creates the strategic conditions for that success. For a country whose resources are limited, effective strategic manoeuvre is vital. Examples of successful military strategic manoeuvre include the Israeli strike against Iraqi nuclear capabilities in 1981; British military diplomacy to isolate Argentina during the Falklands conflict in 1982; and the United States mobilisation, deployment and sustainment of forces during the Gulf War in 1991.

- **Operational Level.** Operational manoeuvre places forces, including their administrative support, in a favourable position relative to the enemy. Operational manoeuvre occurs within a theatre of operations or campaign and is likely to require coordinated offensive, defensive and deception actions to position forces for decisive engagement. The use of information operations opens up new possibilities for the application of operational manoeuvre. When used pre-emptively, or with surprise, operational manoeuvre may lead to a decision without battle. Australia's geo-strategic characteristics dictate a heavy reliance by the Army on the Navy and Air Force for mobility, information, fire-power and logistic support. The Australian landings at Lae-Salamaua in World War II, [General Douglas MacArthur's](#) amphibious lodgement at Inchon during the Korean War, and the isolation of Communist guerillas from the local population by the Commonwealth Forces during the Malayan Emergency are examples of successful operational manoeuvre.
- **Tactical Level.** Tactical manoeuvre employs physical and non-physical means to achieve a position of relative advantage over the adversary in order to accomplish the assigned mission. The purpose of tactical manoeuvre is to destroy the enemy's cohesion and so cause his capitulation by the coordinated use of speed, shock action and lethal force. Sometimes tactical manoeuvre may have limited objectives, where its purpose is to reinforce the potential dislocation or disruption achieved through operational manoeuvre. Tactical manoeuvre involves engaging the enemy in battle and must assume that close combat will be required to achieve decision. Effective tactical manoeuvre maximises the integrated effects of joint and coalition force elements as well as land force combined arms teams. Australian and allied actions during the battles of Hamel in 1918, Kaiapit in 1943, Maryang San in 1951, Coral/Balmoral in 1968 and the deployment of troops to the intra-Timor border in 1999 are examples of successful tactical manoeuvre.²

2. For more detail see:

- * Bean, C.E.W., *ANZAC to Amiens*, Australian War Memorial, Canberra, 1946.
- * Dexter, D., *Australia in the War of 1939-1945*, Series 1 (Army), Volume VI, 'The New Guinea Offensives', Australian War Memorial, Canberra, 1961.
- * Breen, B., *The Battle of Maryang San*, Headquarters Training Command, Sydney, 1991.

APPLYING THE MANOEUVRIST APPROACH

The manoeuvrist approach is applied by maintaining a focus on actions that ultimately result in the defeat of the enemy's will to fight. These actions may occur through both physical and non-physical means. Choosing where and how to apply the available means requires an understanding of the complex interaction of friendly, neutral and enemy forces within the battlespace, and how each element can contribute to undermining the enemy's centre of gravity. The actions taken to defeat the enemy's centre of gravity form the basis of the friendly commander's scheme of manoeuvre.

Commanders should expect to confront a clever and creative enemy who will also attempt to apply manoeuvre theory. Superior tempo and security are essential to developing a winning advantage.

Defeating the Enemy's Will to Fight

The primary objective of the manoeuvrist approach is to defeat the enemy's will to fight. To this end a commander will apply available *means* to produce *effects* that in turn create an expectation of defeat in an enemy's mind. Means will be physical (fire and manoeuvre) and non-physical (such as information operations); in both cases the aim will be to exploit surprise and create a sense of *shock*.

The physical destruction of military capability and the support infrastructure on which it depends is clearly not the only path to the destruction of an enemy's will. Effects that obscure the real situation, interfere with rational decision-making or raise stress to intolerable levels can also attack the will to fight by sapping intellectual, moral and physical energies.

Perception management contributes to defeating the enemy's will by purposefully manipulating human perceptions to obscure the real situation from the enemy, and clarify that situation for the friendly force. In the context of the manoeuvrist approach, perception management is the key to defeating the will to fight. The object is always to affect the way an enemy perceives his situation with a view to convincing him of the futility of further resistance, to take actions contrary to his interests, or to reassess the cost of action that sustains his will to fight. At the tactical level, killing or threatening to kill parts of the enemy's force will be a direct way of influencing the enemy's perception. At other levels, commanders may be able to find other ways of achieving a similar effect, such as severing lines of communication, or separating allies—physically or morally—from one another. Knowing the enemy, and the vulnerabilities that concern him most, is therefore a building block towards perception management and victory.

Perception management must also be applied to friendly forces and non-combatants. Without direct efforts to represent the friendly side's actions accurately, enemy propaganda can undermine the will to fight and erode neutral support. For example, leaders must provide their forces with accurate information about the situation and the reasons for taking action. Such information not only allows soldiers to understand what they should do in the absence of orders, but helps to build trust and confidence in their leaders. In relation to non-combatants, integrity, consultation and good information flows will have a positive impact on their perceptions and influence their support in a conflict situation.

Approaches to Defeating the Enemy's Centre of Gravity

Manoeuvre at all levels relies on a thorough assessment of the enemy's *centre of gravity* and *critical vulnerabilities*. By successfully attacking or neutralising an enemy's critical vulnerabilities, *decisive points* are created that are a precondition to defeating the enemy's centre of gravity. Attacking the enemy's centre of gravity is the most likely path to success, but it is seldom the easiest. The approaches to defeating the enemy's centre of gravity are described as *dislocation* and *disruption*. Any plan should seek to incorporate actions to achieve both effects.

Dislocation. Dislocation involves action to render the enemy's strength irrelevant by not allowing it to be employed at the critical time or place. In effect, dislocation separates the enemy's centre of gravity from the key capabilities that support or protect it. Dislocation may be:

- **Physical.** Focusing the enemy's strength in the wrong place constitutes physical dislocation. Such dislocation could be achieved by attacking the enemy at an unexpected place, or by using deception to draw the enemy's main effort or reserve into a position where it cannot be used effectively.
- **Functional.** Functional dislocation involves shaping the battlespace, thus making the enemy's strength irrelevant or inappropriate. For example, difficult terrain functionally dislocates mobility.
- **Temporal.** Temporal dislocation is achieved by preventing an enemy from employing his strength at a time of his choosing, for example by acting pre-emptively.
- **Moral.** Moral dislocation is the undermining of the enemy's legitimacy. It occurs when the bonds between the enemy's leadership, people and military forces – the sources of moral strength – are broken.

Disruption. Disruption is a direct attack that neutralises or selectively destroys key elements of the enemy's capabilities. The aim of disruption is to reduce the enemy's cohesion and will to fight by neutralising or destroying parts of his force in a manner that prevents the force from acting as a coordinated whole. Selecting targets for disruption should always be considered in terms of the effect on the enemy's centre of gravity. The identification and targeting of critical vulnerabilities will also guide the commander in choosing the best course of action. Pitting friendly strength against enemy strength should not be pursued unless this option will lead to the immediate collapse of the enemy's will.

The successful application of the manoeuvrist approach requires the ability to control and vary tempo. Tempo is the rhythm or rate of activity relative to the enemy, within tactical engagements and battles, and between operations. Control of tempo is required to conserve the fighting power of friendly forces, until the enemy's critical vulnerabilities and the centre of gravity can be decisively attacked. It is derived from three elements: speed of decision, speed of execution, and speed of transition from one activity to the next.

Imperatives

The application of the manoeuvrist approach requires a framework that encourages individual initiative, boldness and decisive action within the scope of the higher commander's intent. Developing this framework requires people to have particular qualities that are unique to armies and other uniformed services. The framework required to employ the manoeuvrist approach is described by three imperatives that allow the Army to exploit its fighting power effectively: *mission command*, *orchestration* and *close combat*.

- **Mission Command.** Mission command provides the framework within which a manoeuvrist approach can be effectively applied. While mission command is a decentralised philosophy, it provides commanders with the flexibility to apply centralised control when appropriate. Regardless, mission command is based on the clear expression of the commander's intent. Once this intent is understood, subordinate commanders are given the freedom of action to achieve that intent with the resources allocated. Mission command aims to allow faster, more relevant decision-making. *Initiative*, *trust* and strong *leadership* underpin mission command. Initiative instils in commanders and their subordinates the desire for responsibility, and leadership the willingness to take decisive action. Trust, supported by experience and training, enables commanders and subordinates to understand the thought processes of others, and so provide a guide for unified action.

Initiative, trust and leadership must be based on sound professional judgement.

- **Orchestration.** Orchestration is the coordination of effects across space and time. It requires commanders to visualise the conditions that will create a rapidly deteriorating situation for the enemy, and then to express how those conditions will be created in the *commander's intent*. Where the enemy's weakness is not readily apparent, the commander should act to create an advantageous situation, communicating his intentions clearly so as to allow subordinate commanders to use their own creativity. Orchestration requires effective *synchronisation*, which is the coordination of the means to deliver effects at a particular time and place.
- **Close Combat.** The ability to engage in *close combat* is imperative to the application of the manoeuvrist approach. Close combat or the threat of close combat creates dilemmas for the enemy commander and can lead to the deteriorating situation that shatters the enemy's cohesion. The ability to engage in close combat may also provide superior commanders with options to apply other means to target the centre of gravity. Close combat skills are the result of an ethos and training regime that emphasises the importance of the fighting soldier, a willingness to endure hardship, and an ability to function as a team in dangerous circumstances. The Army's ethos, coupled with intellectual, moral and physical exertion, provides the Army with the foundation for engaging in close combat.

ENABLING CONCEPTS

The manoeuvrist approach depends for its effective application on a number of enabling concepts. They include *joint warfighting*, the employment of *combined arms teams*, and the capability to generate the effects described in the *combat functions*. The concept of a *knowledge edge* and the principles of *command* and *training* are also essential.

Joint Warfighting

The techniques and capabilities of each service in *campaigns* are used in joint warfighting to achieve effects that will be greater than the sum of the parts. Campaigning refers to a controlled series of simultaneous or sequential operations designed to achieve an operational commander's objective, normally within a given time and space. The joint perspective must pervade mission planning and execution in order to allow the force to maximise its strength, while protecting vulnerabilities. Campaigning is described in [ADFP 6, Operations and Decisive Manoeuvre](#) and [Australian Warfighting Concepts to Guide Campaign Planning](#).

[Chapter 3](#) covers the Army's contribution to joint warfighting: command and control, manoeuvre, offensive fire, intelligence, force protection, and logistics.

Combined Arms Teams

The Army contributes to joint warfighting through combined arms teams, which include combat, combat support and combat service support elements, grouped to achieve a mission. Each team aims to:

- cover the vulnerability of one part of the force with the strength of another, and
- present a dilemma for an enemy by causing actions to protect against one threat that increase vulnerability to another threat.

When grouped, the combined arms team will usually represent a balance of BOSs (see [chapter 5](#)). Consequently, combined arms teams provide the Army with a flexible means of warfighting and with the ability to operate in a broad range of situations.

Combat Functions

The combat functions describe the range of actions that land forces must be able to undertake to apply land power. They are fundamental to the manoeuvrist approach and are generated through the synergies created by the combined arms team and joint task forces. The combat functions allow a force to react positively to a changing situation by seizing the initiative, and defeating the enemy. The combat functions are illustrated in [figure 6](#) and described below.

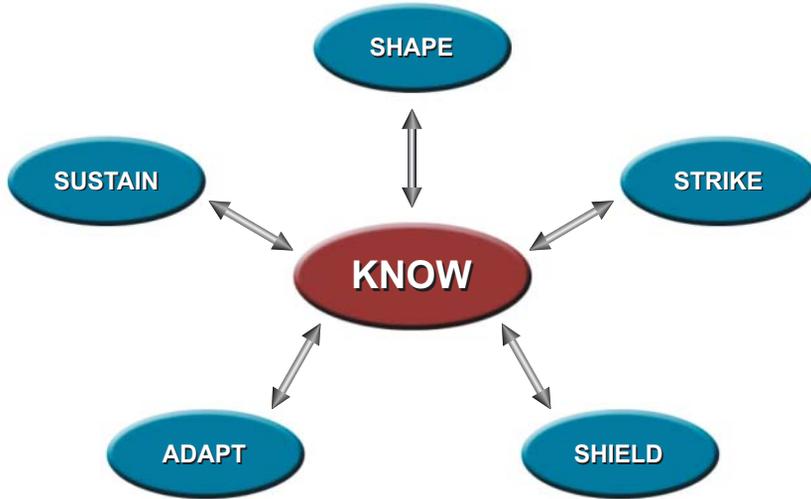


Figure 6: Combat Functions

Know. To *know* is to possess the capacity to predict, detect, recognise and understand the strengths, vulnerabilities and opportunities available within the battlespace. Knowledge links the other combat functions, and is derived from *information* and *understanding*. Information is gained from Army, joint, coalition and civilian C4ISR³ assets. Fully integrated C4ISR systems with real-time or near real-time links provide forces with a crucial advantage. When information is analysed, interpreted and understood, it becomes knowledge. Understanding is a cognitive process that is enhanced by professional mastery. The use of knowledge and the achievement of a *knowledge edge* provide forces with a distinct advantage over the enemy.

Shape. To *shape* is to engage in actions that enhance the friendly force's position, delay the enemy's response, or lead the enemy into an inadequate or inappropriate response in order to set the conditions for decisive action. Shaping can take the form of disruption or dislocation, by preventing the enemy from using terrain or key capabilities, or by constraining the enemy's freedom of action. Shaping can also include measures to prepare the friendly force so that consequent action can be more effective, such as enhancing mobility corridors. Actions to shape the battlespace may include movement and physical strikes.

3. C4ISR is the acronym for command, control, computers and communications; intelligence, surveillance, and reconnaissance assets.

Strike. To *strike* is to apply tailored effects in a timely fashion. Striking requires the precise integration and application of force at selected points in the battlespace to achieve specific outcomes. It depends on the capacity of the force to orient, organise, move and apply physical and non-physical effects. Since the strike function can involve moving units through the battlespace and applying effects, it forms a substantial portion of the Army's application and procedural-level doctrine.

Shield. To *shield* is to protect friendly forces and infrastructure. Shielding is achieved by measures that include avoiding detection, and protection against physical or electronic attack. A wide variety of activities contribute to shielding, including signature management, movement, fire, physical protection, information operations, counter-reconnaissance operations, operational security procedures, active and passive air defence, and deception. As the combat component of force protection, shielding is most effective when it is supported by a continuous and accurate assessment of threats and risks, and early warning. Force protection is described in [chapter 6](#).

Adapt. To *adapt* is to respond effectively to a change in situation or task. The chaotic nature of war results partially from actions by two forces that are constantly trying to dislocate or disrupt each other. This constant search for asymmetry leads to a dynamic and chaotic battlespace. The presence of non-combatants adds to this dynamism. Success in this environment requires rapid and continual adaptation of procedures and plans. Adaptation rests on professional mastery, mental agility and flexible organisations.

Sustain. To *sustain* is to provide appropriate and timely support to all forces from deployment, through the completion of assigned missions, to redeployment. It includes the provision of stocks, replacement of weapon systems and reinforcement. Sustainment of own forces is a joint responsibility that will be challenged by the enemy. The dispersion of units throughout the battlespace exacerbates the problem. Resupply and maintenance systems that exploit situational awareness and incorporate modular replacement allow anticipatory planning that enhances freedom of action.

The Knowledge Edge

The centrality of knowledge to the combat functions makes achieving a *knowledge edge* essential to operations. Achieving a knowledge edge requires predictive processes and data collection, the rapid analysis and dissemination of intelligence, and superior decisions governing the employment of force. The knowledge edge allows a commander the opportunity to conduct decisive operations.

The knowledge edge is effected through reliable and secure linkages between information collection (sensors), decision-makers, and BOSs (actors) through command and control systems. Information technology provides the potential for real-time or near real-time linkages between these functions throughout the battlespace. Improved sensor-actor links permit more rapid and responsive decision-making, thus increasing the effectiveness of land forces.

The Army will acquire a knowledge edge by:

- developing all individuals so that they understand the relevance of the intelligence provided to them, comprehend its implications, and effectively translate that knowledge into action;
- investing in knowledge management and communication systems that enable the passage of a recognised picture between all elements in the battlespace and between the various levels of command;
- developing the doctrine that underpins the effective integration of data from all ADF, government, coalition and some civilian assets to create intelligence.⁴

Command and Training

The manoeuvrist approach relies on effective command at all levels and thorough preparation for operations. Effective command relies on career-long education and professional development, while thorough preparation for operations relies on realistic training.

4. The use of intelligence and knowledge is addressed in [Land Warfare Doctrine 2-0, Intelligence](#).

Command. Command is the authority, responsibility and accountability vested in an individual for the direction, coordination, control and administration of military forces. The exercise of command relies on professional mastery, which is built on ability gained through training, education and the experience of command. Commanders need to be highly effective leaders and managers to achieve their mission. Command, leadership and management are discussed in [chapter 5](#).

The manoeuvrist approach relies on adaptive, decisive and independently minded commanders supported by professional and versatile staffs. The effective use of their staff gives commanders freedom of action to focus on the key issues rather than be distracted or overwhelmed by detail. Commanders rely on staff for frank advice to ensure that plans are robust. For this reason commanders who cultivate ‘yes men’ are unable to apply a manoeuvrist approach effectively.

Mission command enables commanders to use initiative and empowers subordinates to capitalise on opportunities. It precludes the use of prescriptive plans and rigid orders that attempt to predict enemy actions. Commanders are therefore required to train their subordinates in an environment that fosters initiative and mission command. Mission command does not preclude centralised control where circumstances warrant such an approach.

Commanders should maintain regular personal contact with their subordinate commanders during all stages of an operation. This contact allows a commander to confirm progress, issue orders and develop first-hand knowledge of the enemy, terrain and any local intelligence that might be useful in future planning. During battle, commanders should locate themselves where they can best get a ‘feel’ for the situation in order to influence the outcome through timely decision-making. Commanders and their subordinates must understand that command presence and personal contact are not meant to undermine trust and initiative. In particular, commanders will have to manage the temptation to interfere in their subordinates’ actions, given the growth of situational awareness that has been created by the increased availability of information.

Preparing for Combat. Training that simulates battle conditions as closely as possible is more likely to prepare individuals and teams for the stress of combat. The training environment is also the place to develop mutual trust between leaders and subordinates. Two-sided free-play exercises allow commanders to use their understanding of the manoeuvrist approach against a thinking opponent. Evaluation and objective feedback are essential elements of training, and every training activity should be used to identify faults and ways of enhancing individual and group performance. Training will be discussed further in [annex C](#). Preparation for combat is built on concepts inherent within professional mastery.

CONCLUSION

The manoeuvrist approach is a warfighting philosophy that is well suited to Australia's experience of war, geo-strategic circumstances and the nature of its soldiers. It is not a detailed prescription of what to do in battle. Instead, the manoeuvrist approach aims to develop a state of mind that focuses the Australian soldier's courage, initiative and teamwork against a creative and thinking enemy. Its aim is always to undermine enemy cohesion and therefore his will to fight. Shattering the enemy's will to fight requires the application of the right means to produce coherent effects in a way that makes the situation appear lost to the enemy. Dislocation and disruption aim to trigger this collapse by converting the Army's fighting power into effects on the enemy.

The successful application of the manoeuvrist approach depends on the imperatives of mission command, orchestration and close combat. Most importantly, the manoeuvrist approach is built on joint warfighting, a knowledge edge, boldness and rigorous training. *Fighting power*, which is explained in [chapter 5](#), describes how the Army generates forces to win the land battle.

CHAPTER 5

FIGHTING POWER

How does the Army generate fighting power?

Human force is threefold: it is mental, moral and physical, but none of these forms of force can be expended without influencing the other two.

Major General J. F. C. Fuller

INTRODUCTION

Australia is unlikely ever to possess a large standing army. However, as Marshal de Saxe has pointed out, 'it is not big armies that win battles; it is the good ones'.¹ To this end, the Army has embraced the concept of *fighting power*, which seeks to harness all its moral, physical and intellectual resources in the pursuit of success in battle. Fighting power extends the earlier notion of combat power by adding an intellectual component to the moral and physical dimensions. This chapter describes these three components and the role of professional mastery in integrating them to generate fighting power.

THE GENERATION OF FIGHTING POWER

Fighting power is the result of the integration of three interdependent components: the intellectual component provides the knowledge to fight; the moral component provides the will to fight; and the physical component provides the means to fight. The role of professional mastery in the integration of these components to generate fighting power is illustrated in [figure 7](#).

The intellectual and moral components of fighting power represent the human dimension of warfighting. They are concerned with how people, individually and collectively, apply their non-materiel resources—intellect, emotions, motivation and leadership—to fight and win. The capacity to apply these resources is a critically important element in the human dimension of

1. Maurice de Saxe, *My Reveries Upon the Art of War*, Stackpole Books, Harrisburg, PA, 1985, p. 202.

warfighting. It is what enables individuals and teams to succeed in a complex and chaotic battlespace characterised by danger, uncertainty and friction.

The physical component of fighting power is represented by the *BOS*, which are the building blocks of Army capability. The division of responsibility under the respective *BOS* describes how equipment and trained personnel are supported and organised into forces that can be fielded in battle.

THE INTELLECTUAL COMPONENT



Figure 7: Fighting Power

The knowledge and the communication and thinking skills of each member of the Army team comprise the intellectual component of fighting power. The intellectual component may be described as the way in which creativity and analytical ability are applied to meet military challenges. In its application, the intellectual component is expressed in three important ways: *analytical excellence*, *adaptability*, and *concept-led innovation*.

Analytical Excellence

Analytical excellence refers to the capacity of individuals to assess a situation quickly and accurately, and determine and communicate an appropriate response reliably. It is the product of minds that have been shaped by training, education and experience. Its epitome is the commander and team who can move through the decision cycle faster than an adversary to produce a successful outcome.

Adaptability

Adaptability refers to the capacity of individuals to accommodate changed circumstances without being overwhelmed or neutralised. It is expressed in a willingness to pursue new or changed objectives in the absence of a full explanation for change. Adaptability requires particular trust and confidence in higher leadership. Adaptable individuals also require confidence in themselves—in their training and preparation for battle—and in their capacity to comprehend a situation and respond appropriately with a minimum of supervision.

Concept-led Innovation

More abstract than adaptability, but no less important, concept-led innovation is an essential dimension of the intellectual component of fighting power. It is primarily exercised in campaign planning and, outside the battlespace, through the development of new capabilities, operational concepts and doctrine. Concept-led innovation is the product of an organisational climate that encourages inquiry, debate, experimentation, testing and informed change. More broadly, such innovation underpins the Army's concept-led and capability-based modernisation on a continuous basis.

Summary

The intellectual component is that dimension of fighting power concerned with what the Army knows and how the Army operates. It is engendered by a continuum of individual training and education that begins with the selection of recruits. It is reflected in the high priority accorded to demanding and rigorous collective training. It facilitates timely, accurate and unambiguous communication between competent professionals in the pursuit of shared goals, within and outside the battlespace. The intellectual component of fighting power rewards professional self-development and encourages innovation.

THE MORAL COMPONENT

In the midst of chaos, danger and uncertainty, individual soldiers need to overcome fear and rise above their personal circumstances in the pursuit of organisational goals. Where the intellectual component of fighting power provides the knowledge to fight, the moral component supplies and sustains the *will* to fight. The moral component is the other half of the human dimension of fighting power and is reflected most especially in the willingness to endure hardship, danger and mortal peril. The moral component of fighting power is expressed in, and depends on, three essential and interdependent elements: *purpose*, *integrity* and *morale*.

Purpose

Purpose refers to individual and collective belief in the worth of the cause underlying the task at hand. This belief is influenced by a range of intangible factors such as legitimacy, shared values and group ethos, and is sustained by good leadership. These intangible factors operate to sustain individuals and teams in the pursuit of their objectives when the environment and the situation conspire to distract them. In some circumstances, particularly in small teams, the upholding of values and the embodiment of ethos can assume the place of purpose. A sense of purpose greatly contributes to the Army's core values of courage, initiative and teamwork.

Legitimacy refers to perceptions of justice, legality and morality as they apply to military operations and related actions. At the highest level, legitimacy finds expression in Australia using force under defined circumstances only and in a strictly controlled manner, such as the United Nations Security Council resolution sanctioning Australian leadership of the INTERFET mission.

More broadly, such legitimacy is expressed in the terms of international conventions covering the resort to, and the use of, military force including a substantial body of law embodying *Just War* doctrine.² Legitimacy also flows directly through to the lowest levels when expressed in ROE and orders for opening fire.

Integrity

A noble purpose cannot provide moral legitimacy unaided. The personal character and ethics of those tasked with achieving such a purpose are equally important. Even the most just cause can be undermined by deficiencies in the way it is pursued. Only a just purpose implemented with integrity will suffice in the Australian context.

Successful military operations demand integrity and moral courage at every level. The importance of a soldier's moral character in general, and his leadership in particular, cannot be overstated with regard to developing and sustaining fighting power. Both in and out of battle, leadership—whether exercised directly through command or indirectly through peer example—is much more than the practical art of influencing and directing people to achieve purposeful objectives.

War is chaotic and full of moral dilemmas; it often involves the need for restraint in situations where normal constraints are absent or sublimated. Practical methods of leadership and peer example can be taught, modelled and practised, but the Army's warfighting ethos, and Australia's national ethos, dictate that such methods can only be fully implemented and sustained by soldiers of robust integrity. Leadership and the collective trust required within the Army depend on robust personal integrity anchored in the character and qualities capable of absorbing the shocks and dilemmas of battle.

2. The *Just War* concept is the internationally accepted doctrine that maintains that resort to war (known in legal terms as *jus ad bellum*) can only be justified if six key principles are satisfied. The principles are generally agreed as:
 - * **Last Resort.** Every effort must be made to resolve differences by peaceful means before resorting to the use of force.
 - * **Competent Authority.** Only legitimate (national) authorities can decide on war.
 - * **Just Cause.** War may be resorted to only after a specific fault, and if the purpose is to make reparation for injury or restore what has been wrongfully seized.
 - * **Right Intention.** The intention must be the advancement of good or the avoidance of evil.
 - * **Probability of Success.** In a war, other than one strictly in self-defence, there must be a reasonable prospect of victory.
 - * **Proportionality.** The innocent shall be immune from direct attack, and the amount and effect of force used shall not be disproportionate to the end achieved.Further references on the *Just War* concept include:
 - * Michael Walzer, *Just and Unjust Wars*, Basic Books, NY, 1977,
 - * Barrie Paskins and Michael Dockrill, *The Ethics of War*, Duckworth, London, 1979,
 - * Richard Norman, *Ethics, Killing and War*, Cambridge University Press, Cambridge, 1995.

Integrity, demonstrated through moral courage, is therefore essential for a holistic approach to soldiering and for sustaining the will to fight, even in cases of mortal danger. Leaders and peers who set a good example earn respect for their professional abilities and personal qualities. Integrity also involves dedication to the mission or task at hand without any loss of moral perspective concerning the proper enforcement of military discipline, the appropriate employment of force in combat and the protection of non-combatants.

Morale

Morale is a quality of individuals and teams that is closely related to their sense of purpose, the way that they are led and the character of the soldiers concerned. High morale sustains individual and collective will in the face of adversity. Morale reflects and expresses the degree of confidence with which individuals and teams approach the task at hand and is a critical factor in the generation of fighting power. Building and sustaining individual and collective morale, traditionally referred to as *esprit de corps*, is a major responsibility of commanders at all levels. The key to success with this responsibility is understanding that morale has *spiritual*, *rational* and *material* foundations.

Morale cannot be permanently sustained by rational and material motivations alone. In particular, these motivations cannot nourish the spiritual aspect of human interaction and satisfy the common need to contextualise human effort with wider purposes, individual mortality and religious faith. The spiritual foundations of morale within the Army are primarily but not exclusively grounded in the Judeo-Christian tradition, and the associated and derivative ethical and moral values that underlie Australian society. They particularly find acknowledgement and expression in the prominent place accorded to the role of chaplains in the provision of spiritual guidance and direction to the Army, especially when engaged on operations.

The rational foundations of morale reflect the importance of reason. Soldiers must be confident that they have been prepared well for operations by challenging, relevant and realistic training. Commanders and staffs must be prepared to explain in readily understood language the rationale for operations, and must acknowledge that their effectiveness as commanders is ultimately based on the confidence and respect that soldiers have in and for them. All these aspects must be nurtured in training.

The material foundations of morale reflect the critical part played by tangible measures. These measures may be direct, for example, the best available weapons and equipment; rapid evacuation of casualties; good food; reliable mail services; and regular, diverse and healthy rest and recreation. They may also be indirect or background measures, such as reasonable conditions of service, fair remuneration and comprehensive support to soldiers' families.

Morale can be maintained under adverse material circumstances where it is obvious that commanders are doing their very best to improve conditions.

Summary

The moral component is that dimension of fighting power concerned with the individual and collective will to fight. It is engendered by confidence in the cause concerned, nurtured by moral leadership and sustained by high morale. The moral component is reflected in the high priority given to character issues, character training and moral education in the Army's recruitment and promotion processes, and in the Army's warfighting culture. It is also reflected in the emphasis on spiritual guidance provided by Army chaplains. The moral component of fighting power reflects the Army's role as a last-resort warfighting instrument of a Western liberal democracy, within an international system still striving for the resolution of disputes through reason and the rule of law.

THE PHYSICAL COMPONENT

The physical component of fighting power, represented by the BOS, provides the Army with the means to fight. These operating systems are interdependent and equally important. Within the battlespace and in combination, they allow a commander to orchestrate effects in time and space to achieve assigned objectives.

Battlespace Operating Systems

Each BOS represents the combination of personnel, collective training, major systems, supplies, facilities, and command and management—organised, supported and employed to perform a designated function as part of the whole. This relationship is discussed in [chapter 6](#). The BOS are:

- *Command, Control and Communications*. The Command, Control and Communications BOS includes all systems and personnel involved in exercising authority and direction over assigned or attached forces. This BOS includes a range of personnel, equipment, communications, facilities and procedural systems that are employed by a commander to plan, direct and control forces and operations in the accomplishment of a mission.
- *Manoeuvre*. The Manoeuvre BOS generates a range of battlespace effects including suppression, neutralisation and destruction of the enemy, and the seizure and retention of ground in all seasons, weather and

terrain. The Manoeuvre BOS includes all infantry, armour and Army Aviation force elements. This BOS is the dynamic element of combat, providing the means of prosecuting close combat and concentrating sufficient force at the decisive point to achieve surprise, psychological shock and physical momentum. Manoeuvre BOS effects are enhanced through the synchronisation of manoeuvre with the other BOS. There are three characteristics of all Manoeuvre BOS forces: *firepower, mobility and protection*.

- *Intelligence, Surveillance and Reconnaissance.* The Intelligence, Surveillance and Reconnaissance BOS produces intelligence for the planning and conduct of operations. This BOS includes all systems and personnel involved in planning, managing and collecting information on enemy capabilities and intentions, and the physical environment. This is achieved through intelligence gathering, reconnaissance and surveillance using visual, aural, electronic, photographic or other means.
- *Information Operations.* The Information Operations BOS is that capability specifically designed to affect adversary decision-making and information flows, while enhancing or protecting friendly information and decision systems. This capability usually fulfils shape and shield functions in both offensive and defensive terms. It normally includes operations security, deception, computer network operations, electronic attack measures, electronic protection measures, counterintelligence, and psychological operations. Information operations planning, civil affairs and public information are included in the BOS as the information operations support capability.
- *Offensive Support.* Offensive support is the collective and coordinated use of indirect fire weapons, armed aircraft, and other lethal and non lethal means in support of a ground or air manoeuvre plan. Offensive support includes indirect fire capabilities and the offensive support architecture and systems required to plan and coordinate fire, including joint assets. The effectiveness of offensive support is dependent on the integration of intelligence, surveillance, target acquisition and reconnaissance assets that detect and track targets before an attack and provide combat assessment after its conclusion.
- *Mobility and Survivability.* The Mobility and Survivability BOS provides a diverse range of effects that contribute in the broadest sense to knowing and shaping the physical dimension. These effects are generated by five types of support that are integrated through the command, control, communications, computers and intelligence of the

Mobility and Survivability effort. These systems include: geospatial support to enhance knowledge of the physical dimension; mobility support to enhance friendly freedom to physically manoeuvre; counter-mobility support to deny the enemy freedom to physically manoeuvre; survivability support to reduce the effects of hazards; and sustainability support to enable a force to maintain the necessary level of fighting power.

- *Ground Based Air Defence.* Ground based air defence comprises all Army weapons systems, processes, procedures and personnel designed to nullify or reduce the effectiveness of attack by hostile aerial platforms and munitions after they are airborne. In so doing, they prevent the enemy interfering with the conduct of land operations from the air, thereby enhancing a commander's freedom of combat manoeuvre. It includes systems designed to acquire, intercept, engage, destroy or neutralise weapons delivery platforms and/or the weapons themselves. This BOS encompasses dedicated air defence/anti-air systems, defensive counter-air systems, and also the use of fire by non-specialist weapons (all arms air defence) at aerial targets.
- *Combat Service Support.* The Combat Service Support BOS includes all systems, platforms and personnel required to sustain forces in the combat zone, including systems to provide combat service support, command, control, communications, computers and intelligence, distribution, materiel support, support engineering, health services support, personnel services and civil affairs.

Summary

The physical component is that dimension of fighting power concerned with the means to fight. These means are generated through a concept-led, integrated and mutually dependent process whereby the elements of FIC are focused towards structuring, equipping, supporting and training the Army for successful warfighting.

INTEGRATING THE COMPONENTS OF FIGHTING POWER

Professional mastery integrates the components of fighting power. At its most abstract, professional mastery is the demonstrated level of skill applied to the art and science of war. On a more practical level, professional mastery is an expression of how an individual applies the skills, knowledge and attitudes developed through education, training and experience to meet the requirements of the task at hand. Individual professional mastery forms the basis of the Army's collective professional mastery, in which excellence in all aspects of the profession of arms represents a unified field of applied knowledge.

Developing Professional Mastery

An individual's innate attributes include physical capacity, intellectual ability and moral values. These attributes can be enhanced over time by education, training and experience. Education is a whole-of-life process that develops higher-order cognitive skills through both structured and unstructured learning. Training, on the other hand, is the process of developing the specific vocational skills required to perform set tasks.

Experience, or experiential learning, is fundamental to individual development. It involves the exercise of skills, knowledge and attitudes 'on the job' at all levels and, more broadly, in personal and public life. Experience helps to develop the deductive and inductive decision-making skills that are essential for exercising professional mastery.

The exercise of leadership, whether by an individual in a formal command position or as a member of a team, is the core activity that integrates the components of fighting power. For example, leaders demonstrate professional mastery through the translation of operational concepts into orders or suggestions that employ the physical element of fighting power to best effect. Securing the willing cooperation of others in the execution of orders depends on those orders making sense morally as well as militarily. This process of making sense of situations is a key responsibility of leaders, and essential to creating cohesive units and harnessing the manoeuvrist approach.

All ranks can and should aspire to professional mastery. For most warrant officers, non-commissioned officers and soldiers, the pursuit of professional mastery will predominantly involve work at the tactical level. They will fill the roles of operator, supervisor, manager or advisor, and provide an example to their colleagues.

To support these responsibilities, the focus of their training and education will be vocational, in order to concentrate their learning experiences on the development of deductive reasoning skills.

Commissioned officers will be required to possess appropriate combinations of education, training and experience at various stages of their professional development. At any given stage, they must display the necessary leadership to do their job. For example, senior officers working at the strategic level are expected to understand the impact of a broader range of external forces on events, and the implications of those changes for lower levels that are not totally visible to them.

The Army's personnel management and training systems aim to develop professional mastery at all ranks. The Army seeks to measure each individual's skills, knowledge and attitudes, where practical, to determine the educational, training and experience requirements of people so that professional mastery—in relation to both current and future job requirements—can be achieved.

CONCLUSION

Individuals and organisations contribute to winning the land battle by exerting their intellectual, moral and physical strengths to defeat the enemy's will. Fighting power encompasses how the Army combines individuals and their supporting equipment into combat organisations. Professional mastery is the glue that binds the components together to optimise the Army's fighting power.

The components of fighting power need to be constantly debated, tested and modernised. Professional armies shun complacency; they value forthright and robust intellectual and professional debate, especially in the discussion of doctrine and the development of future capability. This debate can only occur when professional mastery is achieved throughout the Army. The Army's process for generating future land warfare capability is discussed in the final chapter.

CHAPTER 6

GENERATING LAND WARFARE CAPABILITY

How does the Army generate the capability to successfully conduct land warfare?

The aim of military study should be to maintain a close watch upon the latest technological, scientific, and political developments, fortified by a sure grasp of the eternal principles upon which the great captains have based their contemporary methods, and inspired by a desire to be ahead of any rival army in securing options in the future.

Sir Basil Liddell Hart

INTRODUCTION

The Army must provide the ADF with prepared forces that can win the land battle. The process of generating and sustaining such forces is called *capability management*. It aims to balance current capability requirements (preparedness) with the development of future capability (modernisation) to produce strategically relevant and combat-ready forces. This chapter describes the means by which the Army maintains preparedness in order to win today's battles, and modernises to win future battles.

ARMY CAPABILITY

The Army's capability is developed to provide the Government with a range of options that can be used to support the nation's strategic interests. These options are based on strategic guidance, which is reviewed by the Government and the Department of Defence on a regular basis.

Given the high costs and the long life of Army equipment and facilities, developing a relevant, credible and cost-effective land force capability is a significant challenge. To guide this process the Army uses a capability management framework that is based on capability outputs, the Army Model and the key functions of capability.

Capabilities Expected of the Army

Defence's framework of *capability* outputs provides a vehicle for resource and preparedness management. The Army, as one Defence output, is expected to manage a number of sub-outputs¹ that either provide, or directly contribute to, ADF combat capability. While the Army's sub-outputs are organisationally based, they do not limit or affect the requirement to task-organise prepared forces for operations as part of a joint, coalition or combined force. These outputs may change over time to reflect changes to the Army's roles and structure.

The Army uses a number of measures of effectiveness to determine its suitability to meet government requirements. These measures include:

- **Relevance.** The Army continues to provide land forces that contribute to defence strategy.
- **Credibility.** The Army provides the capability to conduct the tasks allocated by government.
- **Scalability.** The Army can expand and contract in a controlled fashion to meet changing security requirements.
- **Sustainability.** With support from other sources, the Army can maintain specified levels of commitment for the required period of time.
- **Flexibility.** The Army possesses a balanced range of capabilities that provide options to satisfy critical strategic objectives. These capabilities are not based on a single means or technology, and they must be responsive to changes in the strategic environment.
- **Efficiency.** The above measures are met using the minimum resources necessary.

1. The Army's sub-outputs are Special Forces Operations, Mechanised Operations, Light Infantry Operations, Army Aviation Operations, Ground Based Air Defence, Combat Support Operations, Regional Surveillance, Operational Logistic Support to Land Forces, Motorised Infantry Operations, and Protective Operations.

The development of effective outputs provides the ADF with land force capabilities that are relevant, effective and capable. The Army Model describes how the Army develops and sustains this land force capability in peace and conflict.

The Army Model

The Army Model describes the relationships between the Army, the wider ADO, the national support base and the international support base. The model highlights six key functions of capability that are essential for the conduct of operations, and illustrates those elements that collectively create the ability to deploy combat-ready forces on operations. The components of the Army Model are:

- ***The Deployable Force.*** The Deployable Force contains combat, combat support and combat service support elements. It comprises the *Ready Deployment Force* (RDF), designated at high readiness, and other medium to high-readiness units. The RDF provides the initial *Deployed Force*. The lower-readiness elements of the Deployable Force provide round-out² of the Deployed Force to the operational level of capability (OLOC) and provide the basis for a second rotation, should that be required. The Ready Deployment Force's size and composition is determined by strategic guidance. It will consist mainly of full-time (regular) forces, but will also have individual and collective part-time (reserve) elements that provide specific capabilities at appropriate levels of readiness.
 - ***The Combat Force Reserve.*** The Combat Force Reserve also contains combat, combat support and combat service support elements. It provides a mobilisation and sustainability base for the Deployable Force through individual reinforcement, individual rotation and equipment cross-levelling. It could provide a third rotation force following mobilisation if required. The Combat Force Reserve is, in essence, the Army's strategic depth because it allows the Deployable Force to adapt to changed strategic circumstances.
 - ***The Enabling Component.*** The Enabling Component includes individual training and base logistic support elements from the Army and the wider ADO. It provides the support required to expand and sustain the Deployable Force and the Combat Force Reserve, as well as the means to generate new capabilities. The Enabling Component must possess sufficient surge capacity to meet short-notice increases in
2. Round-out involves the transition of personnel and equipment to bring the Deployable Force up to OLOC.

demand. In many of these endeavours, the Enabling Component draws resources from the national and international support bases by recruiting personnel, procuring materiel and commissioning the provision of services.

- ***National and International Support Bases.*** The Army is highly dependent on the support received from its national and international support bases. The national support base includes all government departments, private agencies and firms that provide support to the Army, such as infrastructure, materiel and logistics. The Australian people are also a critical element of this base, as they provide volunteers for the Army. The international support base includes overseas materiel and logistic-support sources, and other national defence forces.

The Key Functions of Capability. The components of the Army Model represent the Army's contribution to the ADF's ability to generate, deploy, sustain, protect and command potent combat forces. Together, these ADF activities are called the *key functions of capability*:

- ***Force Generation.*** Force generation is the process of recruiting, training, organising and equipping suitable personnel and forces for specified roles, tasks and operational viability periods within designated warning times. Force generation also implies reconstitution of forces after they have been withdrawn from operations.
- ***Force Deployment and Redeployment.*** Force deployment and redeployment is the ability to mount, move and stage forces between home locations and an area of operations, and between areas of operations while maintaining operational viability to achieve strategic objectives.
- ***Combat Operations.*** Combat operations are the actions (as described by the combat functions in [chapter 4](#)) taken by deployed force elements to achieve their assigned missions.
- ***Force Sustainment.*** Force sustainment is the process of providing the physical and psychological support, consumable and non-consumable materiel and essential infrastructure to enable deployed-force elements to continue operations beyond their designated operational-viability period to achieve strategic objectives.

- **Force Protection.** Force protection includes the passive and active measures taken by the entire force to provide a commander with freedom of action by preventing the enemy, environment or other influences from interfering with the other capability functions to achieve strategic objectives.
- **Force Command.** Force command is the process of synchronising and directing activities in the other capability functions to achieve strategic objectives.

The key functions of capability are generated by the combined efforts of the ADO, other government departments, civilian firms and sometimes coalition forces. Army capability management must address each key function so that combat forces are developed and support is provided to the enabling component in a balanced manner. Figure 8 displays the relationship between the Army Model and the Key Functions of Capability.

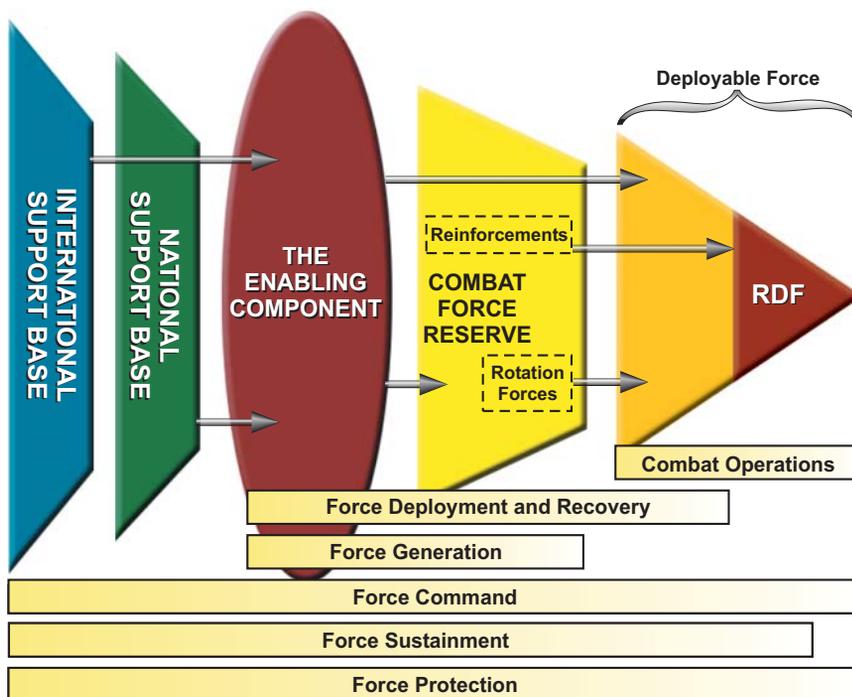


Figure 8: The Army Model and Key Functions of Capability

CAPABILITY ELEMENTS AND PREPAREDNESS

The resources available to the Army will always be limited, whether the task is preparing for conflict or fulfilling peacetime commitments. The Army Management Framework provides the mechanism to balance the competing demands of generating capability for near-term tasks from a *capability baseline*³ (preparedness) and developing future capability (modernisation). Balance is required because decisions to invest in one area will generally result in fewer resources for the other.

Current capability is managed by allocating resources to units. These resources are described in terms of the FIC: organisation, personnel, collective training, major systems, supplies, facilities, support, and command and management. Some resources, as well as having the ability to surge and sustain operations, will be provided from Reserve forces. Decisions concerning this allocation are based on preparedness requirements identified by Australian Defence Headquarters.

Elements of Capability – Fundamental Inputs to Capability

Army capability is generated by the interaction of the eight FIC elements (see [figure 9](#)). The FIC elements replace the Army's elements of capability that were previously articulated under the acronym POSTED: personnel, organisation, support and facilities, training, equipment and doctrine. In combination, these elements of capability are *fielded* as BOS.⁴ The BOS are sub-systems that generate the physical component of the Army's fighting power.

3. *Capability baseline* refers to the core capabilities and skills (both individual and collective) required by the land force to perform operational tasks. The baseline is defined by sub-output, in terms of a set of tasks with a readiness notice and specified collective training standard, within an operational context.
4. The BOSs include Command and Control; Manoeuvre; Fire Support; Reconnaissance, Intelligence and Surveillance; Air Defence; Information Operations; Mobility and Survivability; and Combat Service Support. The BOS will continually evolve as new capabilities are introduced. BOS are explained in [chapter 5](#).



Figure 9: The Fundamental Inputs to Capability

Organisation. Every ADO agency needs to ensure that it has the optimum number of personnel positions, the appropriate balance of competency and skill-sets, and the correct structure to accomplish its tasks and to ensure adequate command and control arrangements. This is essentially a minimal-cost activity that provides the underpinning structure for the ADO. At the Service level, consideration must be given to developing flexible functional groupings that can meet contingency personnel rotation requirements and continual force-improvement requirements.

Personnel. Assuming an appropriate establishment is authorised, the positions must be filled with individuals who satisfy appropriate individual readiness requirements. These requirements include medical and dental standards, physical fitness, and appropriate individual training. Each individual must have the competencies to perform the functions of his or her position (both specialist and common military skills) and the motivation to apply those competencies to achieve the required performance standards of the organisation. The personnel element includes the retention and development of people to meet the needs of the ADO. This category includes salaries and wages, superannuation and allowances.

Collective Training. Collective training applies laterally across combined, joint, and single Service elements and vertically down to unit levels. To enhance performance, organisational elements must undertake a comprehensive and ongoing collective training regime validated against the detailed preparedness requirements derived from government guidance.

Major Systems. Major systems include ships, tanks, missile systems, armoured personnel carriers, major electronic systems, and aircraft.

Supplies. There are eleven classes of supply as covered in *ADFP 20, Logistics in Support of Joint Operations*.

Facilities. Facilities include buildings, structures, property, plant and equipment, and areas for training and other purposes (for example, exercise areas and firing ranges), utilities and civil engineering works necessary to support capabilities, both at the home station and at a deployed location. Facilities may be owned directly or may be leased.

Support. Support encompasses the wider national support base and includes training and proficiency support, materiel and maintenance services, communications and information technology support, intelligence, recruiting and retention, research and development activities, administrative support, and transportation support. Agencies that could provide this support include:

- other sub-outputs;
- output enablers;
- owner support agencies;
- private industry or contractors;
- other government agencies; and
- international support base agencies.

Command and Management. Command and management underpins Defence's operating and management environments through enhanced command and decision-making processes and management reporting avenues. Command and management processes at all levels are required to plan, apply, measure, monitor, and evaluate the functions an agency performs, with due cognisance of risk and subsequent risk management. Command and management includes written guidance such as regulations, instructions, publications, directions, requirements, doctrine, tactical-level procedures, and preparedness documents. Doctrine and its importance to Army is described at [annex A](#). Consideration must be given to the adequacy of extant written guidance. Command and Management also includes funding not readily attributable to any other FIC element (eg. discretionary funding).

The FIC elements provide the inputs to the Army's capability. They contribute the template against which the Army's physical requirements for fighting power can be checked and assessed.

Preparedness

The Army's preparedness is based on a capability baseline. This capability baseline identifies the core individual and collective military skills, capabilities and proficiencies required by the land force for military operations. Selected capabilities from the baseline are held at higher levels of preparedness through additional resource allocations in order to meet *crisis warning*⁵ times. Therefore the capability baseline identifies the minimum level of capability (MLOC) that the Army needs to meet its commitment to Australia's military strategy.

Analysis of the strategic environment allows the Army to make judgements about the way it will distribute its resources to create strategically relevant, operationally effective and tactically superior forces. The Army bases these judgements on assessments of the warning period likely to precede a particular operational commitment, while considering the time required to develop new capabilities. Given Australia's limited resources, the Army has adopted a multi-tiered approach to preparedness. The multi-tiered approach comprises:

- ***Crisis Warning.*** The Army elements required for current or short-notice operations are predominantly full-time, supported by some specialist part-time elements. These force elements are maintained at high levels of preparedness.
- ***Capability Warning.***⁶ The Army elements that can be generated or developed to operationally competent levels within warning times for conflict are predominantly held in integrated and part-time units. These force elements are maintained at lower preparedness levels.
- ***Critical Individual Skills.*** Specialist skills that cannot be affordably generated or maintained full time, but might be required in small numbers at short notice, are predominantly held in part-time units. Individual members of these force elements will be held at higher levels of preparedness.

5. *Crisis warning* is defined as the limited warning time likely in a crisis. Crisis warning is measured in days or months.

6. *Capability warning* is defined as the warning time expected of a major capability development within the Asia-Pacific region that might threaten Australia. Capability warning is measured in years.

- **Critical Collective Skills.** The Army elements that are not required at short notice but are difficult to generate within capability warning time are also predominantly full-time. They are held at lesser levels of preparedness and are supported by a larger proportion of part-time participation.

Changes to the strategic environment that are identified in quarterly strategic reviews lead to adjustments to ADF preparedness directives. The Army manages preparedness through the Army Preparedness Management System, which is linked to the Army Management Framework. The Chief of Army's Preparedness Directive provides details of readiness notices and triggers changes to the allocation of FIC resources to Army units.

Reserve Forces

Reserve forces are an integral component of the total land force because they provide, across crisis and capability warning times, complementary or supplementary skills as individuals, small groups and units to *sustain* and *surge*.

The Reserve helps to sustain deployed forces by providing round-out, reinforcement and rotation elements. This will vary from individuals, such as reservists held at high levels of readiness, through to small groups, sub-units and units. The Reserve has a critical role in increasing the Army's ability to surge for operations. For example, Reserve units and individuals may be used to increase the Enabling Component's capacity by supplementing training units, providing staff to headquarters and Defence agencies, and providing extra logistic support at relatively short notice.

Mobilisation Capability

Mobilisation is the process that generates military capability by marshalling resources to defend the nation and its interests. Mobilisation is therefore a continuum of activity that encompasses *preparation*, *work-up*, *operations* and *reconstitution*.⁷ This continuum recognises the ongoing nature of mobilisation and the costs associated with maintaining units at unnecessarily high levels of preparedness. Defence and the Army use three tiers of mobilisation: *selective*, *defence* and *national mobilisation*.

7. These phases are explained in *ADFP 4, Preparedness and Mobilisation*.

- **Selective Mobilisation.** Selective mobilisation involves raising the level of preparedness of individuals and/or force elements from minimum levels of operational capability to OLOC to undertake short-term, limited operations endorsed by government.⁸
- **Defence Mobilisation.** Defence mobilisation will require the entire force-in-being to be raised to OLOC for the defence of Australia and its interests. All elements of the ADO will be involved and national resources will be required to support this level of mobilisation.
- **National Mobilisation.** National mobilisation will involve defence mobilisation and the coordination of the national effort to defend Australia and its interests. The Defence Organisation and the nation will be totally committed to maximising the operational effectiveness of all force elements.

The continuum of mobilisation involves a number of activities in each phase. The preparation phase generally involves maintaining a unit's present level of capability at or near the MLOC. It may also include force expansion.

The work-up phase of mobilisation involves raising existing units or formations from their peacetime level to OLOC within a designated period of time. The level of staffing and equipment allocation is critical to achieving OLOC. Units that fall below a certain level of capability (approximately 30 per cent of their operational requirement) will probably be unable to reach their operational requirement in less than two years. This time-frame will be complicated by the long lead-time necessary to procure military-specification equipment, particularly where the suppliers are international companies.

During the operations phase, units will require reinforcement and repair to maintain their combat capability. The reconstitution phase involves returning a unit to MLOC so that it may prepare for future tasking. Mobilisation is discussed further in *ADFP 4, Preparedness and Mobilisation*.

Changes to preparedness and the process of mobilisation can be described using the Army Model. For example, as crisis warning time decreases or the range of anticipated crises expands, forces and resources within the Deployable Force move to a higher state of readiness. Depending on the crises, the Combat Force Reserve may also move to a higher state of relative readiness.

8. The two levels of military capability specified for forces within the ADF balance the need to maintain forces at an appropriate MLOC during peacetime, and ensure that those forces are ready to work up to an appropriate higher level of capability, within a given time-frame. These two levels of capability are respectively the MLOC and the OLOC. The actual level of capability of a force varies, and is referred to as the Present Level of Capability. These concepts are explained in *ADFP 4, Preparedness and Mobilisation*, chapter 1.

Alternatively, as crisis warning time increases or the range of anticipated crises contracts, forces within the Deployable Force move to a lower state of readiness. Concurrently, the Enabling Component can vary its capacity to provide support to the combat forces through activities such as personnel and equipment redistribution, additional procurement, and increased training throughput.

The absence of Combat Force Reserve elements at appropriate levels of readiness, or an inadequate surge capacity in the Enabling Component, jeopardises the timely expansion of the Deployable Force. Without a Combat Force Reserve and a responsive Enabling Component, the Deployable Force would become locked into meeting the challenges of a particular contingency or range of contingencies, with little capacity to adapt in a timely manner to changes in the strategic environment or sustain lengthy operations.

CONTINUOUS MODERNISATION

The maintenance and management of the Army's capability is a long-term process, predicated on an understanding of trends and potential discontinuities within the strategic environment. While the strategic situation can change quickly, the decisions taken on capability take time to implement, and continue their influence for a long time afterwards. For example, replacement of some equipment platforms may take up to 15 years, with the new platform having in some cases an extended life of up to 40 years. The extended life of such platforms makes developing and maintaining capability that is suited to extant strategic circumstances a very complex process.

In the past, the Defence capability development process focused on the optimisation of available weapons platforms. This focus leads to procurement based on platform replacement, which can perpetuate outdated concepts and doctrine. To ensure that future Army capability requirements are considered on the basis of the operational effects required, rather than on the basis of platforms currently due for replacement, the Army has adopted a *concept-led* and *capability-based* approach to modernisation. The concept-led and capability-based approach utilises *warfighting concepts*,⁹ within a joint and increasingly coalition environment, to guide the development and application of military capabilities. Warfighting concepts identify how the Army expects to fight, providing a framework that ensures the convergence of force development with doctrine and training.

9. Future warfighting concepts draw upon joint warfighting concepts.

The concept-led and capability-based approach is designed to optimise current capability by planning realistically for the future, in short, medium and long-term time-frames. The short term is described as the *Army-In-Being* (AIB), which is aimed at delivering a sustainable land combat force in the next five years while at the same time positioning the AIB to progress toward the *Enhanced Combat Force* (ECF). The ECF provides the focus for the development of the AIB over the next 10-20 years. The ECF is well defined in terms of capabilities, force structure, roles and tasks, but retains flexibility to adapt to changing circumstances. Beyond that, the *AAN* focuses thinking in the next 20-30 years. The *AAN* lacks precise shape, and concentrates on examining key concepts and capabilities that are likely to enhance the effectiveness of future land forces. The Army capability development continuum is depicted in figure 10.

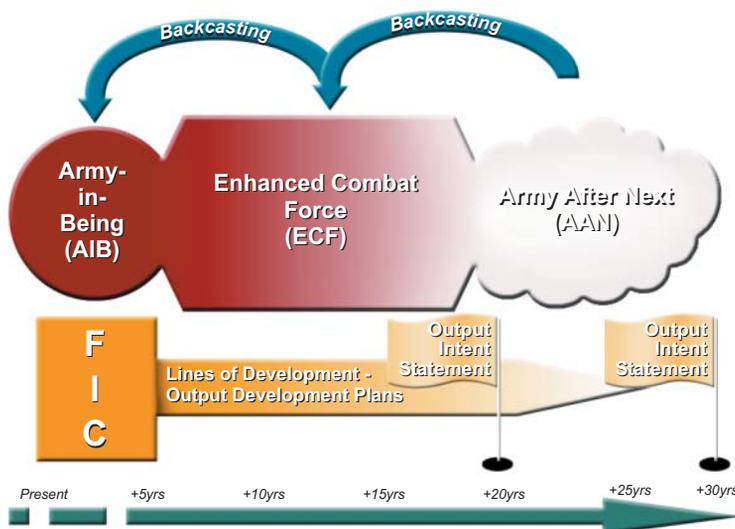


Figure 10: The Army Capability Development Continuum

Future warfare concepts attempt to describe the operating environment, tasks, and warfighting methods of the AAN. The *Army Continuous Modernisation Plan* provides the framework for translating the Chief of Army's intent for ECF and AAN development (referred to as Output Intent Statements) so that further concept studies, scientific research, experiments and wargames can be conducted within the AEF. *The key lessons emanating from these activities contribute to the production of Output Development Plans, which provide capability development organisations with guidance for changing the AIB.*

AAN concepts can be used to influence the ECF and AIB through *backcasting*, which occurs when AAN concepts or capabilities that promise significant improvements in effectiveness are tested within the AEF. In the case of equipment, backcasting can be used to gather information that may result in reduced acquisition cycles for potential force multipliers. Backcasting may also help to maximise commercial-off-the-shelf and military-off-the-shelf technologies.

CONCLUSION

The Army's capability management framework aims to provide the Government with value for money in the form of effective and prepared land forces. It also seeks to position the Army at the forefront of military development through continuous modernisation. Without such a framework the Army's ability to provide relevant and credible capability for land warfare tasks would be severely constrained; at worst, the result would be a force that fails to change to meet the requirements of modern land warfare, or is unable to apply its warfighting philosophy.

The Army's capability management methodology recognises the importance of achieving the balance between preparedness and capability development requirements. This balance is primarily reflected in the way resources are managed and allocated between competing priorities. Preparedness requires a process that allows changing strategic requirements to be reflected in resource allocations. These judgements require a keen appreciation of warning time, and the amount of time and resources that are required to move units to operational levels of capability. Any misjudgements in this area can severely hamper the Army's ability to provide relevant options to the Government.

Devoting all resources to current requirements is, however, likely to leave a force vulnerable to longer-term changes in the strategic environment, or to trends in military development. Therefore the concept-led, capability-based approach to continuous modernisation ensures that Army capability development has a forward-looking focus that is based on the best possible analysis of the demands of land warfare in the future.

ANNEX A

MILITARY DOCTRINE

Military doctrine encapsulates the way in which the Army conceptualises and conducts land warfare. It is defined as the ‘fundamental principles by which military forces guide their actions in support of national objectives. It is authoritative, but requires judgement in its application’.¹ Doctrine is the formal expression of current military thought. Derived from a mixture of operational experience, observation and applied thought, doctrine is general in nature and describes fundamentals, principles and preconditions of military operations at the different operational levels.

Doctrine provides the intellectual underpinning for the way the Army conducts business, based on experience and analysis; experience reinforces the human factors in the art of war, while analysis focuses the technologies and processes embraced in the science of war. Under the endorsed tenet of a concept-led, capability-based Army, doctrine is enshrined as part of the command and management element under FIC. Consequently, the Army cannot consider itself ready for operations unless its doctrine is well crafted and widely understood. The purpose of this annex is to explain the Army’s doctrine hierarchy and the utility of military doctrine.

All doctrine is authoritative, yet it is not dogma. It is dynamic, responsive and always open to changing philosophies and external influences. Doctrine may evolve in response to changes in political, strategic, economic, environmental, societal and technological circumstances.

Doctrine Hierarchy

The body of military knowledge contained in doctrine is hierarchical, ranging from the more philosophical, such as the understanding of the nature of war, through to the purely procedural, such as gun drill or range safety. This body of knowledge is categorised into three levels of doctrine: procedural, application and philosophical. Running parallel to this hierarchy is joint doctrine from the ADF publication series. The following paragraphs explain the levels of doctrine.

1. *Australian Defence Force Publication 1, Doctrine*, 1993, p. 1-1.

Philosophical-level Doctrine. Philosophical doctrine explains the fundamental principles behind the employment of land forces in military operations. It also describes the basic tenets under which land forces operate in a joint environment. Based on regional and sometimes global politico-military environments, philosophical doctrine describes the conditions that determine the Government's options for the employment of land forces. It also describes possible future environments within which an Army may operate. *LWD 1* is the sole philosophical doctrine publication within the Army.

Application-level Doctrine. Application-level doctrine explains how philosophical principles are applied. This doctrine encompasses guidance at both the individual and collective levels for dealing with differing circumstances in order to achieve mission success. Application-level doctrine contains both extant, proven applications and the newer emergent ideas that are yet to mature. This latter doctrine is termed 'developing doctrine' and is authoritative yet unrefined, and thus subject to constant review until it is approved as endorsed doctrine. Application-level doctrine is found in the LWD series.

Procedural-level Doctrine. Procedural doctrine describes the skill-sets that are fundamental to the performance of set tasks by every individual soldier. It includes minor tactics, military techniques and procedures in the detail necessary to ensure team effectiveness and interoperability. This level of doctrine is therefore highly prescriptive and not usually open to interpretation. Given the safety implications inherent in many aspects of procedural doctrine, there is usually only one approved way of applying tactics, techniques and procedures. Procedural doctrine, which has relevance in all-corps training and in the employment of skills across the Army, is referred to as Land Warfare Procedures - General. Doctrine that is only relevant within specific corps or functional areas is termed Land Warfare Procedures - Special.

The doctrine relationship is illustrated graphically in [figure 11](#) and the doctrine hierarchy in [appendix 1](#).

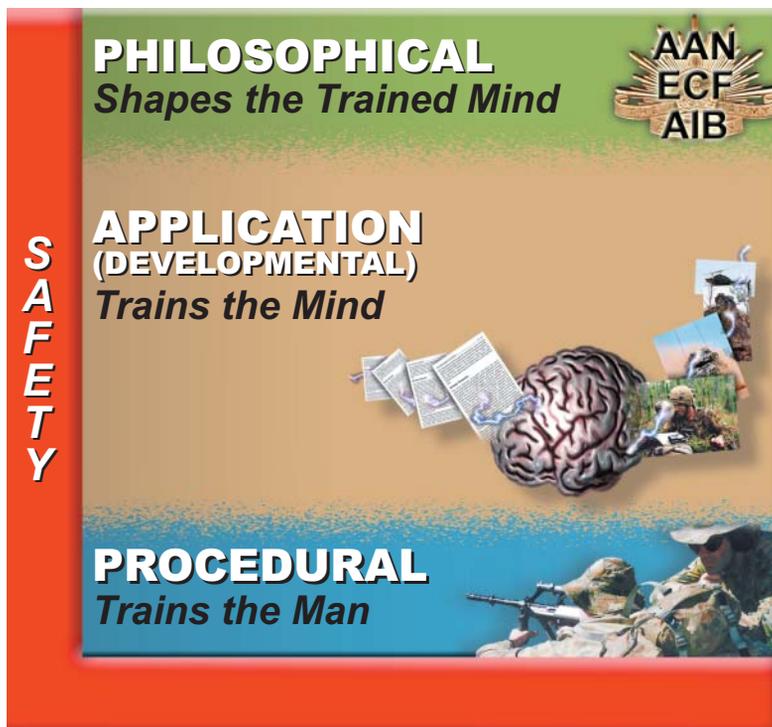


Figure 11: The Doctrine Relationship

Utility of Doctrine

By describing the nature and the characteristics of current and future military operations, doctrine contributes to the Army's ability to fight and win. It also describes the preparations for these operations in peacetime and the methods for successfully conducting military operations in times of crisis and conflict. Because doctrine reflects successful methods of employing elements of the Army, it also indicates the type of military capability that will be required for future operations. Doctrine allows the development of concepts for operations and guides the adoption of new technology, tactics, techniques and procedures. Properly applied, military doctrine is a force multiplier.

Doctrine provides a unifying approach to the planning and conduct of successful operations. It establishes the framework for decision-making by commanders and staff at all levels. Doctrine builds cohesion through mutual understanding. It guides the application of military force in operations, thus reducing the effects of indecision by guiding responses to unpredictable events. Doctrine enables judgement, confidence in decision-making and brevity in communications. It prevents confusion and reduces ambiguity in conditions of uncertainty or scarce detail.

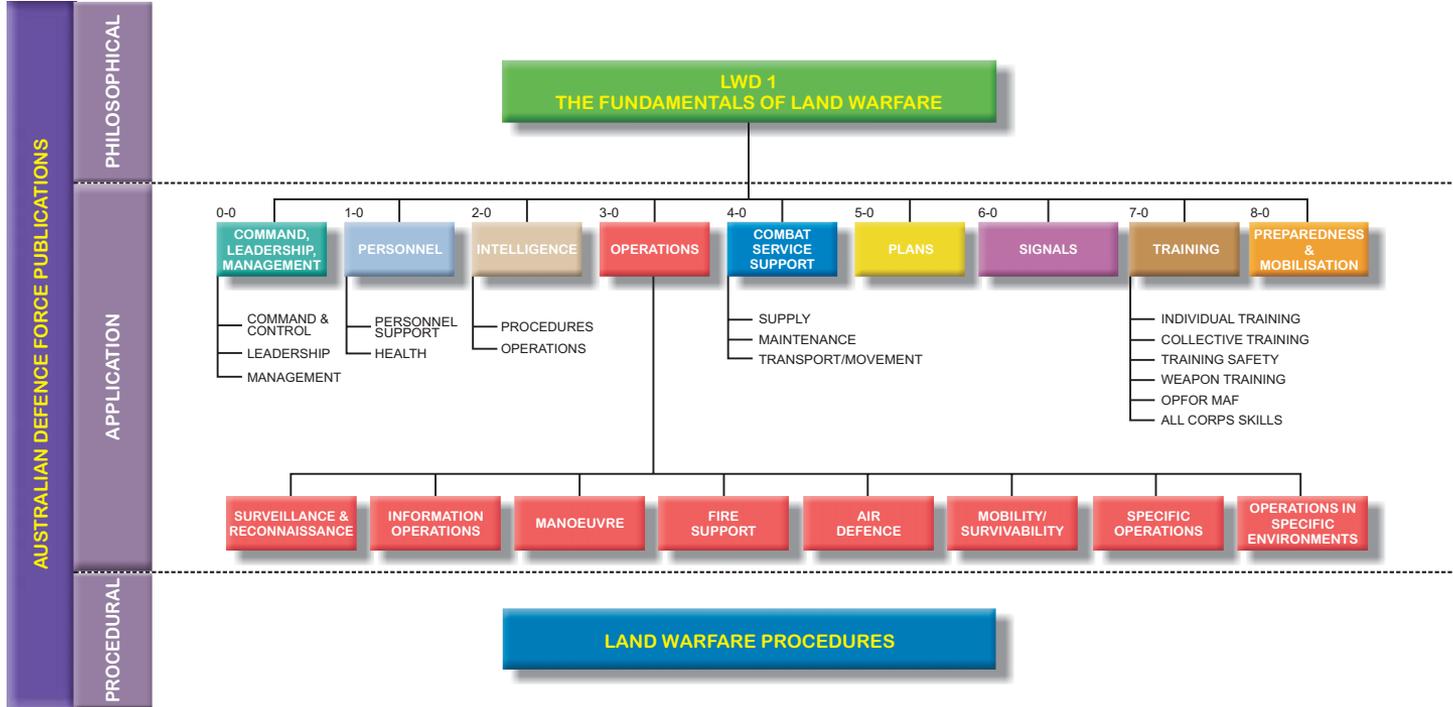
In a joint context, agreed doctrinal procedures provide the 'harmony' for the three Services to operate effectively and safely. In a global context, coalition forces working under similar doctrinal frameworks will achieve greater mission success than nations working together with doctrinal divergence, dissimilar staff processes and the possibility of unsynchronised operational tempo.

In peacetime, doctrine provides the focus for training by establishing the foundations on which the Army 'trains to win'. It also provides a confident framework that enables commanders to develop innovative and creative solutions to solve future problems.

Doctrine is converted into lesson plans, training packages and collective training standards. The utility of doctrine is determined by how effectively it is assimilated into skill-sets for soldiers and formation headquarters staff, or into knowledge sets for Army leaders to create strategic options for government.

For an Army that is concept-led and capability-based, doctrine provides the intellectual framework to transform extant and emergent concepts into accepted practices. In preparation for operations, doctrine provides the benchmark for unit performance and allows commanders to focus tough, realistic training to a proven standard necessary to achieve mission success.

LAND WARFARE DOCTRINE HIERARCHY



ANNEX B

A BRIEF HISTORY OF AUSTRALIAN MILITARY STRATEGY

Since Federation in 1901, Australia has had four broad national military strategies: integration in Imperial (and later Commonwealth) Defence (1901-42 and 1945-69), Forward Defence (1955-72), Defence of Australia (1973-1997) and Regional Defence (1997 onwards). Changes in broad strategy tended to be gradual, and there was considerable, and at times even dissonant, overlap during the transition periods. Each strategy was a response to the circumstances of the era in which it was formulated, and each was heavily influenced by domestic economic, social and political considerations rather than solely driven by an objective view of strategic reality. A common theme throughout, in both theory and practice, has been the desire to forestall the development of a direct threat to mainland Australia.

Traditionally, the debates about Australia's strategic policy have centred on the alternative concept of continental or forward defence. Historically Australia has depended on collective security arrangements with its allies.¹

Under the Imperial, and later Commonwealth, defence strategies, Australia maintained a small, predominantly part-time Army for the land defence of key points in Australia and a navy that was intended to mobilise as a fully integrated element of the Royal Navy in a global role. British strategic seapower, and especially the perception of such power, provided for Australia's strategic and regional security. Australia responded to major wars by raising ad hoc expeditionary land forces to fight as a contingent of a larger Commonwealth force. In the 1920s and 1930s this strategy became overly centred on a single strategic gamble known as the *Singapore Strategy*, which was fiercely debated among the Services and within Government. Its adoption was largely predicated on Government reluctance to fund the military, naval and air power necessary for Australia to have a sufficient degree of strategic (and operational) independence.

1. ANZUS-Australian, New Zealand, United States Treaty; SEATO-South-East Asia Treaty Organization; FPDA-Five Power Defence Arrangements.

Imperial defence strategy became steadily untenable once the British Empire's strategic alliance with Japan was abandoned in 1921, and enmity subsequently developed. As British economic power declined, the Royal Navy and Royal Air Force could not be maintained in sufficient strength in both the European and Eastern theatres. The fall of Singapore to the Japanese in early 1942 vindicated much of the critical strategic analysis proposed by senior Army and Air Force officers throughout the 1920s and 1930s.

During 1941 and 1942, Australia's limited national means were quickly redeployed in the direct defence of mainland Australia. For the first time, invasion of Australia became a real possibility following repeated attacks on the mainland. This experience focused the Government's attention on the critical importance of the archipelagos of South-East Asia and the South-West Pacific to Australian security. Having fought side-by-side in the Pacific campaigns, the United States and Australia became important allies. The events of 1942 highlighted the need to find the right balance between security through alliance with stronger partners and a sufficient measure of self-reliance.

After World War II, Australia gradually adopted a strategy of *Forward Defence*, which reflected both the traumatic World War II experiences and the Australian Government's focus on instability in Asia. The spread of communism through wars of invasion and sponsored insurgencies, and the weakness of the emergent nation-states of South-East Asia were of particular concern. The mid-1960s also saw Australia complete its transition from reliance on Great Britain to alliance with the United States. The creation after World War II of a small but more readily useable regular Army, and of more broadly employable maritime and air forces, also acknowledged the need to increase the element of self-reliance in Australia's defence capability.

Strategic failure in Vietnam in the early 1970s resulted in a reassessment by both Australia and the United States of their respective commitments to support allies in Asia directly. President Nixon's 1969 Guam Doctrine had already noted that, while the United States remained committed to the Asia-Pacific region, the nations of the region should not assume that the United States would commit combat troops to their defence.

In the aftermath of Australia's withdrawal from Vietnam in 1971-72, and from forward bases in Singapore in 1973 and Malaysia in 1985, a gradual but continual reassessment of Australia's military strategy occurred; this reassessment was concurrent with growing strategic and economic stability in much of South-East Asia. Beginning with the debate over the Fortress Australia concept in the late 1960s, this transitional phase culminated in the Dibb Review of 1986, in which a strategy termed *Defence of Australia* was developed and adopted. *Defence of Australia* re-articulated a concept of defence-in-depth, with

the main effort focused on the defeat of an adversary in what was narrowly termed the sea-air gap immediately to Australia's north.

Since Australia's *Strategic Review* 1993, Australia has, however, generally moved towards a more proactive approach to meeting its security needs. Beginning with *Australia's Strategic Policy* 1997, and expanded in the Defence White Paper *Defence 2000: Our Future Defence Force*, there was a long overdue reassessment of where and in what circumstances the direct defence of mainland Australia and Australian interests actually begins. Australian defence policy now openly recognises that a secure Australia depends on a secure region. By working in cooperation with regional states, Australia is best placed to prevent potential threats arising, deal with them when they first arise and do so in a way that maximises Australia's strategic space.

Australian strategic policy is now based on a maritime concept of strategy that acknowledges that Australia's defence closely involves the *sea-land-air* gap of the archipelagos to Australia's north and north-east (the nearer region) in particular, and recognition of Australia's security interdependence with the wider Asia-Pacific region.

At the same time, Australian participation in a number of US-led coalition forces, such as the 1990-91 Gulf War and stability operations in Somalia during 1993, demonstrates Australia's commitment to broader world stability through assistance to allies and the principle of collective security as embodied in the United Nations Charter. Future Australian military commitments will almost certainly be part of regional and broader coalitions, both established and ad hoc.

Coupled with this proactive regional approach and Australia's coalition commitments, there has been an increased involvement by Australian forces in United Nations peacekeeping missions, most notably the East Timor operation. The increased ethnic and social conflicts in failed states during the 1990s have broadened the role and expectations of the United Nations. It is expected that collective security operations in such situations will become increasingly common in the early 21st century, and this will place additional operational calls on the ADF – particularly the Army.

As a founding member of the United Nations in 1945, Australia maintains a strong commitment to its responsibilities under the collective security mechanisms laid down in the United Nations Charter. This commitment reflects not only the foreign policy aim of being a 'good international citizen', but the desire to build a strong rules-based international system that would be to Australia's advantage.

ANNEX C

TRAINING TO WIN

High-quality training is vital because a vigilant enemy will severely punish any mistakes made in combat. The Australian Army recognises that, in order to win battles, knowledgeable, respected and capable commanders need to lead skilled and well-trained soldiers as part of combined arms teams. As a consequence, the Army has developed a system of individual and collective training that is widely acknowledged as one of the best in the world. This training system is the focus of a great deal of effort and resources, and in return it provides the basis of the Army's success. The Army's training system is built on excellent instruction, sound doctrine and individual commitment. The Army is, therefore, focused firmly on training to win.

Training develops the knowledge, skills and attitudes in individuals and groups that enable the 'manoeuvrist approach' to be applied in combat. Quality training ensures that soldiers and the organisations to which they belong are fit to carry out their tasks and responsibilities in battle. Every soldier is a vital link in a larger chain, and the strength of the chain is dependent on the quality of each soldier's training.

Leaders are central to creating quality training. At every level, at all times, the leader is responsible for ensuring that soldiers are fully trained in battle skills. Leaders are accountable for the performance of individual soldiers under their command and for their organisation as a whole.

The Essential Components of Training

Training within the Army covers a broad spectrum of activity, and is divided into individual training and collective, or group, training.

Individual Training. All officers and soldiers must be proficient in the wide range of knowledge and skills that underpin service in any part of the Army. Additionally, they must be proficient in the specialised skills and general competencies necessary for them to perform their particular job. It is important that these skills are upgraded as an officer or soldier is promoted to higher rank. Continuation training is crucial in maintaining skill levels and currency, while cross-training creates a versatile individual who is widely employable. Technology and its impact on the battlespace dictates that soldiers must be skilled operators of complex computer-based equipment. Increasingly, the Army's individual training will be technology-based, allowing people to study part time and in areas geographically remote from training centres. Regional training centres will conduct and facilitate distance training for large numbers

of soldiers who need to update and maintain existing skills and acquire new qualifications. Individual training must remain focused on the ever-changing skills required by the Army to fight and win.

Collective training. Collective training is the combination of individual skills in a group environment to provide a collective output. Individuals rarely operate in isolation in the battlespace. Collective or group training combines individual skills with those required for the performance of group tasks. This collective training ensures that the team can achieve its assigned task. Such achievement is the ultimate measure of the team's success. The nature of collective training is essentially incremental. It is based on building teams from small, cohesive and highly trained groups. As the scale of collective training increases, other specialist teams, normally from within the Army, but at times also from other parts of the ADO, are incorporated into training. Simulation and evaluation are essential contributors to effective collective training, and commanders should make use of these facilities wherever possible.

Role of the Commander. Commanders are responsible for the training of the individual soldiers and the group under their command. This requires commanders to be intimately involved in setting the direction for individual and collective training in their units or formations, and in providing advice and encouragement to their subordinates. In effect, commanders must establish the conditions for their subordinates to excel by gathering sufficient resources, determining priorities and creating realistic conditions. Commanders should place their subordinates in situations that challenge their skills, knowledge and character. Such challenges should be used as a medium to develop a shared understanding of one another, as well as being an opportunity for development. Commanders must also ensure that they receive opportunities to practise their own skills, and to develop and exercise their command teams whenever possible.

Principles of training

Training Must be Effective. Training must ensure that each individual and each team can perform the required tasks, especially when exposed to the shock of battle. Cross-training must develop depth so that the team can continue to function despite casualties. Two-sided, free-play exercises are among the best methods of simulating combat against creative and determined opponents. The use of constructive and virtual simulation and the use of the Combat Training Centre will enhance the effectiveness of training when appropriately integrated into the individual and collective training programs. Debriefing and frank analysis increases the benefits of training, and leads to information that can be used to improve doctrine and equipment. Lessons learnt from both training and operations must be incorporated into the planning of further training.

Training Must be Efficient. Training must be focused on the achievement of the mission. Valuable and limited training resources must only be expended on those mission-essential tasks that are crucial to the realisation of the mission. Joining with other units of the combined arms team is one way of making efficient use of resources. Training cannot be efficient if it is not effective.

Training Must Develop Mutual Trust. The Army's battle history records the vital importance of trust and team cohesion between commanders, soldiers and their fighting partners. Only effective training can create this cohesion. Training includes not only the acquisition of a broad range of skills, but the development of soldiers' confidence in their equipment, their team and their commanders. Commanders must observe training and, where appropriate, be active participants because such participation allows them to gain an understanding of the capability of their soldiers, and for the soldiers to gain an understanding of their commander. Collective training should, wherever possible, be conducted with the other members of the combined arms team. The Army needs to train regularly with other Services and coalition partners to ensure that an appropriate level of operational capability is achieved.

Training Must be Realistic. Realistic training is the key to preparing soldiers and their leaders for battle. The benefits of hard training, as well as prior experience of hardship and stress, will usually, if not always, be translated into success on operations. Operations will expose any soldier who does not meet the requirements of physical fitness, self-discipline and stoicism in the face of adversity. Two-sided exercises, battle inoculation, and realistic simulation can help to create realism and stress.

Training is a Life-long Activity. Soldiers never cease to train. Changes to modern warfare, new equipment and new teams mean that conditions never remain constant. Commanders must place constant emphasis on training teams to optimal effectiveness. Professional judgement is an essential ingredient in this development, as it helps soldiers to develop skills to cope with new situations. At all levels, learning from one another is the key to mastering and maintaining the skills necessary to win.

Evaluation. Training must be evaluated so that the required outcomes are achieved by establishing quality controls and mechanisms to ensure continuous improvement. Both the effectiveness and efficiency of training must be evaluated and the lessons learnt must be fed back into the training.

Leadership Training

Leadership is a product of formal training, experience and personal development. The Army needs thoughtful and resourceful leaders who are decisive, have presence of mind, are aggressive in action and are capable of moulding a cohesive team. Leaders at all levels must be prepared to exploit any opportunity that is presented in the battlespace. Leaders must be able to deal with uncertainty and make decisions based on limited information. The quality of leadership is very much determined by the effectiveness of training at all levels.

The successful leader must be a master in command, leadership and management, and it is through training that the leader is equipped with these skills. Leaders are not only battle commanders, but managers of resources and decision-makers within administrative and technical processes.

Leaders must look for ways to test themselves and their skills. When solving problems, they should use every opportunity to develop their ability to assess a situation and then articulate intent. While collective training provides opportunities to develop these skills, adventure training, sport and routine activities also play their part.

Training – the Last Word

In war, friction creates situations and consequences that can never be predicted nor entirely replicated in training. Well-trained and well-led soldiers are better able to adapt to the unforeseen. Lessons available from operations and training must be utilised in the battle preparation of both leaders and soldiers. Training is fundamental to equipping the soldier, the team and the leader in the skills that will produce victory in battle.

ANNEX D

THE LAW OF ARMED CONFLICT

Introduction

The Law of Armed Conflict (LOAC) is central to the way in which the ADF formulates strategy and conducts operations. All ADF members undergo training in the LOAC in order to understand their individual and collective rights and responsibilities, and the consequences of violating such laws.

This annex summarises the meaning, history and application of the LOAC. It explains the responsibilities of individuals and commanders, the need for compliance, and how the LOAC is implemented in the ADF. Additional detail on the LOAC is contained in [ADFP 37, Law of Armed Conflict](#).

Definition

The LOAC comprises those parts of international law that regulate the conduct of belligerents engaged in armed conflict with one another. The LOAC is about how wars are fought (*jus in bello*) rather than the international laws governing the resort to war by belligerents (*jus ad bellum*). The LOAC lays down the individual rights of non-combatants during armed conflict.

Application of the LOAC does not depend on any assessment of the cause of a particular conflict, nor of the legality of the resort to force by a belligerent. These assessments are the province of *jus ad bellum*, which constrains the formulation of strategy but not the conduct of operations. Furthermore, the LOAC makes no distinction between belligerents acting as aggressors and those who are victims.

Sources

Like most international law, the LOAC is derived principally from international treaties, customary international law and the decisions of international legal tribunals.

The body of law underpinning the LOAC has been extensively codified in a series of international treaties dating from the 1860s to the present day. These treaties underline the development of two distinct branches in the law: the Geneva series of treaties, which secures the protection of persons and property, including non-combatants; and the Hague series of treaties, which governs the conduct of operations. The most significant treaties are the four Geneva Conventions of 1949 (to which additional protocols were added in 1977 and

1980), which set out to protect the sick and wounded, and the medical services that care for them; the sick and wounded at sea, and those who are shipwrecked; prisoners of war; and the civilian population, especially in respect of occupied territories. Among the Hague series is the 1907 Hague Convention IV respecting the laws and customs of war on land; this convention has been determined to be declaratory of customary international law. These two separate branches of the law have to some extent merged in Protocol I to the Geneva Conventions, which addresses both the protection of non-combatants and the conduct of operations.

In situations not specifically addressed by treaties, or in cases where nation-states are not party to certain treaties, reference may be made to a well-established body of customary international law.

An important source of the LOAC is the practice and decisions of tribunals, such as the International Military Tribunal constituted for the trial of German and Japanese war criminals following World War II. The recent establishment of ad hoc war crimes tribunals for the former Republic of Yugoslavia and for Rwanda constitutes another source of law. As well as providing evidence of customary international law, the judgements of such tribunals have often contributed to the development of international law.

Application

The LOAC, as a matter of law, applies in the event of international armed conflict between nation-states. As a matter of policy, the LOAC may apply the principles and the spirit of particular conventions in the absence of armed conflict. This application allows some humanitarian consideration to apply in the event of the total or partial occupation of the territory of one country by the armed forces of another country.

International armed conflict occurs from the first act of aggression by one belligerent against the sovereignty of another belligerent. This act may be signalled by high-intensity conflict, but even a single incursion in a very low-intensity conflict may be all that is necessary to invoke the application of the LOAC.

The existence of an international armed conflict is always a question of fact, objectively determined rather than signalled by political statements or declarations. Application of the LOAC ceases on termination of the armed conflict in the conclusion of an armistice agreement.

Nature of Armed Conflict

Armed conflict may be *international* or *internal* in character. International armed conflict occurs between belligerents, while internal armed conflict occurs within the territory of a nation-state and takes place between its armed forces and dissident armed forces or other armed groups. Internal armed conflict must be distinguished from internal disturbances and tensions, such as riots, and from isolated and sporadic acts of violence, which are subject to the domestic law of the state concerned.

The bulk of the LOAC relates to international armed conflict, and in this annex references to the law are confined to that context. There is, however, a small sphere within the LOAC that has been deemed to be specifically applicable to the regulation of armed conflicts generally, whether they be international or internal in nature. This is codified in Article 3 (referred to as 'Common Article 3') to the Geneva Conventions. Protocol II to the Geneva Conventions is specifically applicable to the protection of victims of non-international armed conflicts.

Individual Responsibility

The LOAC imposes responsibilities on nation-states and individuals. In the first instance, any breach of an international obligation will entail the accountability of the offending belligerent to the aggrieved belligerent, or indeed to the world community. In the second instance, individuals are accountable for their actions largely by means of domestic legal mechanisms.

In Australia the principal domestic legal mechanism for compelling compliance with the LOAC is the *Geneva Conventions Act 1957*. This legislation confers Federal criminal jurisdiction on State and Territory Supreme Courts and on the High Court over 'grave breaches' of the Geneva Conventions and of Protocol I, regardless of the nationality or citizenship of the accused and regardless of the location of the breach. Grave breaches are strictly defined offences committed against protected persons and objects such as willful killing, torture or inhuman treatment, wilful causing of great suffering or serious injury to body or health, and extensive and unjustified destruction and appropriation of property.

Where a 'grave breach' is alleged against a person subject to the *Defence Force Discipline Act 1982*, the person may be prosecuted in a Service tribunal instead of a Supreme Court or the High Court. Many violations of the LOAC are not so serious as to constitute grave breaches, and such violations may also be the subject of prosecution in a Service tribunal.

For members who violate the LOAC and are captured by the enemy there is a third possibility. The enemy is entitled to place the member on trial in his own courts, which may award such penalty as the enemy's laws provide. International law provides minimum safeguards intended to avoid abuse by the enemy of this entitlement.

Countries have prime responsibility for compelling compliance by individuals with the LOAC; however, international law mechanisms have been developed for the prosecution of individuals in certain extraordinary circumstances where a state is unable or unwilling to fulfil that responsibility. Such mechanisms have included the constitution of international tribunals for the trial of war criminals at Nuremberg and Tokyo following World War II, and the establishment in more recent times of war crimes tribunals for the former Yugoslavia and for Rwanda. These mechanisms were developed on an ad hoc basis, but broad agreement has now been reached for the establishment of a permanent International Criminal Court for the trial of individuals charged with a variety of international crimes, including war crimes.

Individuals are accountable under the LOAC for their own acts and omissions, whether they are the direct perpetrators of, or are indirectly involved in, violations. It is a fundamental principle that individuals do not avoid responsibility for violations of the LOAC on the plea that they were obeying superior orders. Manifestly illegal orders engage the individual responsibility of the persons who issue them as well as the persons who carry them into effect.

Responsibilities of Commanders

Commanders at every level have particular responsibilities under the LOAC. In accordance with Protocol I to the Geneva Conventions Article 87, commanders must ensure that members under their command and other persons under their control are aware of their obligations under the Conventions to Protocol I, and they must take all feasible measures to prevent violations and to take appropriate action against offenders. This includes taking action if a commander knows that a subordinate is committing or is going to commit a violation.

An important role of legal officers in the armed forces (as stated in Protocol I to the Geneva Conventions Article 82) is to advise commanders on the application of the Geneva Conventions and Protocol I and on the appropriate instruction to be given to armed forces' members on this subject.

Other Factors Favouring Compliance

As well as legal and moral obligations, a range of practical considerations based on self-interest strengthen and support Australia's commitment to comply with the LOAC. Compliance with the law can:

- encourage reciprocal compliance with the law by the enemy;
- increase unit morale and discipline;
- win international and domestic support for Australia's role in the conflict;
- neutralise any hostility from the civilian population in an area of operations;
- reduce an enemy's will to resist;
- avoid diversion of resources and attention away from the mission; and
- enhance Australia's post-conflict relations with the enemy, and therefore Australia's long-term national interests.

Implementation

Compliance with the LOAC by the ADF is achieved through training, the promulgation of ROE and orders for opening fire, and by other means.

All ADF members receive training in the LOAC appropriate to their role in the Defence Force. In addition, a number of training programs and exercises are conducted within formations and units for the purpose of exposing members to practical scenarios. ADF members must be practised in responding lawfully to problems that may arise in complex operations. The use of LOAC simulation technology, tailored to specific units or operations, greatly enhances the scope and opportunities available for realistic training.

ROE are orders to commanders that set parameters for the use of force by ADF members on operations. They are not law in themselves but must always comply with national domestic law. ROE often express, and in the event of hostilities should always comply with, the LOAC. ROE are therefore drafted with regard to a range of legal, diplomatic, political and operational factors. The primary purpose of ROE is to ensure that military action always

aligns with Australian Government policy and Australia's international obligations.

Orders for opening fire translate ROE into simple rules for members of the ADF. These rules are printed on small cards and carried by all members as an aide-mémoire during exercises and on operations. Practical ROE training should be conducted regularly.

Other means of promoting compliance include the use of graphic or written area profiles and control measures, such as restricted firing areas. Area profiles assist commanders at all levels to identify military targets as distinct from civilian concentrations and protected sites such as medical facilities and cultural monuments.

Related Doctrine and Instructions

LOAC guidance for commanders is contained in *ADFP 37, Law of Armed Conflict*. ROE doctrine for the ADF is contained in *ADFP 3, Rules of Engagement*. Policy governing LOAC training, which all members of the ADF are to undertake, is set out in *Defence Instruction (General) Operations 33-1, Australian Defence Force Law of Armed Conflict Training*.

INDEX

A

AAN	95, 96
adapt	1, 11, 23, 33, 85, 94, 95, 68, 112
AEF	96
Army After Next	95
Army capability	13, 74, 83, 87, 88, 95, 96, 97
Army Experimental Framework	96
Army Mission	3, 24
Army Model	11, 84, 85, 86, 87, 93, 94
asymmetric warfare	11, 21
Australia's strategic environment	43, 46, 50, 57
Australian military strategy	48, 50, 54

B

battlespace	5, 14, 20, 21, 27, 36, 37, 38, 39, 40, 41, 42, 54, 60, 62, 63, 66, 67, 68, 69, 74, 75, 79, 109, 110, 112
Battlespace Operating System	74, 88
BOS	74, 79, 80, 88

C

capability	6, 11, 12, 13, 22, 24, 36, 42, 51, 54, 56, 57, 59, 60, 62, 65, 79, 82, 83, 84, 85, 87, 88, 90, 91, 92, 93, 95, 96, 97, 101, 106, 111
capability-based	75, 95, 97, 99, 102
centre of gravity	11, 12, 59, 60, 62, 63, 64, 65
close combat	11, 23, 24, 40, 60, 61, 64, 65, 71
coalition operations	35, 40, 47, 48, 53
combat functions	11, 65, 67, 69
command	12, 13, 20, 30, 44, 46, 60, 65, 69, 70, 77, 79, 86, 88, 99, 109, 110, 116
command and control	55, 66, 80
critical vulnerability	12

D

decisive points.	11, 12, 63
Defence 2000	43, 48, 107
dislocation	12, 61, 63, 64, 68, 71
disruption	12, 55, 61, 63, 64, 68, 71
doctrine	1, 2, 5, 6, 13, 19, 24, 40, 42, 50, 68, 69, 75, 76, 82, 90, 95, 99, 100, 101, 102, 109, 110, 118

E

effects	14, 32, 40, 41, 46, 54, 55, 61, 62, 63, 65, 66, 68, 71, 79, 95, 101
enabling component	87, 94
ethos	3, 5, 65, 76, 77

F

FIC.	13, 81, 88, 91, 92, 99
fighting power	12, 14, 18, 46, 54, 71, 73, 74, 75, 76, 77, 78, 79, 81, 88, 91
firepower.	60, 61, 79
force protection	23, 40, 56, 66, 68, 87
Fundamental Inputs of Capability.	13, 81, 88

G

globalisation	34, 35, 38, 42
-------------------------	----------------

I

integration	12, 14, 18, 36, 38, 40, 41, 42, 49, 68, 69, 73, 105
intellectual component	12, 73, 74, 75
intelligence	36, 40, 54, 56, 66, 69, 70, 80, 90

J

joint 11, 22, 24, 40, 48, 49, 53, 54, 55, 57, 61, 65,
. 66, 67, 68, 71, 84, 89, 95, 100, 102

K

key functions of capability 13, 23, 84, 85, 86, 87

know 67

knowledge edge 1, 49, 65, 67, 69, 71

L

land power 2, 5, 11, 17, 21, 22, 23, 24, 47, 50, 53, 54, 67

land warfare 2, 5, 6, 17, 18, 19, 20, 22, 25, 27, 30, 34, 60, 83, 97, 99

Law of Armed Conflict 21, 113, 114, 115, 116, 117

leadership 2, 13, 29, 31, 32, 41, 64, 65, 70, 73, 75, 76, 77, 78, 82, 112

LOAC 113, 114, 115, 116, 117, 118

logistics 18, 57, 86

M

manoeuvre 2, 14, 18, 20, 39, 53, 55, 57, 60, 61, 62, 63, 79

manoeuvre theory 13, 60, 62

manoeuvre warfare 14, 60

manoeuvrist approach 6, 11, 13, 14, 48, 54, 59, 60, 62, 64, 65, 67,
69, 70, 71, 82, 109

Military Operations other than Conventional War 23, 50, 51, 52

mission command	14, 64, 65, 70, 71
mobilisation	45, 51, 60, 85, 92, 93
moral component	12, 73, 75, 78
morale	12, 19, 23, 32, 77, 78, 117

O

offensive fire	40, 55
orchestration	14, 64, 65, 71
orders for opening fire	76, 118

P

perception management	62, 63
physical component	12, 73, 74, 79, 81, 88
preparedness	83, 84, 88, 89, 90, 91, 92, 93, 97
Principles of War	19
proactive	107
professional mastery	1, 2, 6, 11, 14, 42, 67, 68, 70, 71, 73, 81, 82

R

reserve forces	88, 92
ROE	76, 117, 118
Rules of Engagement	46, 76, 117

S

shaping	23, 38, 42, 50, 52, 53, 57, 63
shield.	14, 68, 79
shock	14, 61, 62, 79, 110
strategy	6, 34, 43, 47, 48, 57, 84, 105, 106, 107, 113
strike	14, 39, 51, 55, 60, 68
sustain	13, 14, 37, 45, 54, 76, 80, 85, 86, 88, 92, 94
symmetric warfare	21
synchronisation	15, 65

T

technology	1, 20, 24, 32, 34, 35, 36, 37, 41, 42, 69, 84, 101, 117, 109
tempo	15, 20, 30, 36, 64, 102
training	13, 14, 23, 31, 32, 40, 41, 42, 50, 51, 52, 65, 69, 70, 71, 74, 75, 78, 79, 80, 81, 82, 85, 86, 88, 89, 90, 92, 94, 95, 100, 102, 112

V

values	3, 5, 17, 20, 47, 76, 78, 81
------------------	------------------------------

W

warfighting	15, 18, 22, 23, 50, 52, 53, 54, 57, 66, 71, 81, 95
will	18, 20, 28, 29, 32, 60, 62, 63, 64