

Quotes

for the Air Force Logician



The Editors, Air Force Journal of Logistics

Beth F. Scott, Editor

James C. Rainey, Editor-in-Chief

SMSgt Robert A. McGonagle, Editor

Lt Col Gail Waller, Contributing Editor

Capt Wesley Manship, Contributing Editor

Quotes

for the Air Force Logistician

*Air Force Logistics Management Agency
501 Ward Street
Maxwell AFB, Gunter Annex, Alabama 36114-3236
September 2001*

Quotes for the Air Force Logistician is dedicated to every logistician in today's 21st century Air Force who turns a wrench, kicks a box, slings ink at paper, pounds a keyboard, negotiates a contract, gives a briefing, writes a report, or staffs a package.

CONTENTS

<i>Preface</i>	6
<i>Introduction</i>	7
1. <i>Definition of Logistics</i>	9
2. <i>Logistics</i>	13
3. <i>Leadership</i>	41
4. <i>War</i>	63
5. <i>Peace</i>	77
6. <i>Supply</i>	81
7. <i>Technology</i>	85
8. <i>Airpower</i>	91
9. <i>Readiness</i>	101
10. <i>Mobilization</i>	107
11. <i>Contracting</i>	111
12. <i>Transportation</i>	115
13. <i>Victory</i>	117
14. <i>Focused Logistics and Agile Combat Support</i>	121
15. <i>Morale</i>	123
16. <i>Command</i>	125
17. <i>Maintenance</i>	127
18. <i>Rations</i>	129
19. <i>Munitions</i>	135
20. <i>Plans</i>	137
21. <i>Expeditionary Aerospace Force</i>	141

PREFACE

Many people were involved in the production of this book, however, the staff of the Air Force Historical Research Agency deserve special acknowledgment. This book could not have been produced without their efforts and support.

Much of the material in the book is based on primary sources—unpublished personal and professional papers and other resources—maintained by the Air Force Historical Research Agency. Research via the World Wide Web also provided some of the material used in this book. Where allowed, either by the work itself or as prescribed under the provisions of 17 United States Code, limited material came from other sources.

The views expressed in the material contained herein are those of the authors and do not necessarily represent the views or established policy of the Department of Defense, Department of the Air Force, or the Air Force Logistics Management Agency.

INTRODUCTION

I believe that was the general idea that I was trying to convey.

Comdr Leonard "Bones" McCoy, MD (Star Trek)

Why a book of quotations for Air Force Logisticians? An obvious answer is there isn't one. But that's not the only reason, and it's certainly not the most important reason. The primary reason for producing this book was to provide a teaching resource that can be used in classroom, education, training, and mentoring programs for Air Force logisticians. It is a tool that can be used by instructors, teachers, managers, leaders, and students. It is also a tool that can be used in research settings and a resource that should stimulate comment and criticism within educational and mentoring setting. Copies of the book are provided free of charge to any Air Force logistician, educational institution, teacher, instructor, commander, or manager.

What is a quote or a quotation? Quotes or quotations often mean different things to those who hear or read them. For many, it's the repetition of something that conveys authority or illustration. For others, it's the process of citing or bringing forward evidence of a particular point. For still others, quotes are a source of wisdom or inspiration. All of these thoughts, however, share a common thread—communicating an idea. And of perhaps more import, communicating an idea that causes some form of action: think, act, direct, inform, question, or persuade. Further, quotes can, and often do, remove the barriers associated with the written or spoken word.

The wisdom of the wise, and the experience of ages, may be preserved by quotations.

Isaac D'Israeli

Quotes for the Air Force Logistician is a broad collection of words of wisdom, witticisms, and reflections, both humorous and profound, on a wide variety of subjects. And as you might expect, a great many of the quotations deal with military subjects in general and logistics in particular.

A book of quotations . . . can never be complete.

Robert M. Hamilton

By no means is *Quotes for the Air Force Logistician* all encompassing. The criteria used to make selections were purposely broad in form and scope.

All right, they're on our left, they're on our right, they're in front of us, they're behind us . . . they can't get away this time.

Lt Gen Lewis B. "Chesty" Puller.

USMC (when surrounded by eight enemy divisions)

On to the quotes.

DEFINITION OF LOGISTICS

Logistics— which means getting what we need, where we need it, when we need it—is a consideration of critical importance to all aerial strategy.

*The Official Guide
to the Army Air
Forces, 1944*

1.a. In an operational sense, that part of the military activity that provides for the buildup and support of a military force by providing for supplies, equipment, transportation, maintenance, construction and operation of facilities, movement and evacuation of personnel, and other like services, so as to render the military force efficient and effective in both combat and noncombat operations. b. Restrictive. The furnishing of supplies and equipment. 2. In terms of military theory, the art or science of building up a military force and of providing support by the means suggested in sense 1, including aspects of recruitment, training, and assignment of personnel; the practice of this art or science.

Originally, logistics was restricted to the art and practice of quartering, supplying, and transporting troops. By extension, with increasing complexity of warfare, the term in a broad sense came to cover (a) the design and development, procurement, storage, movement, and disposition of materiel; (b) the induction, classification, welfare, training, assignment, movement, transportation, evacuation, and separation of personnel; (c) the acquisition or construction, maintenance, operation, and disposition of facilities; (d) the acquisition or furnishing of services (sometimes



C H A P T E R

including administrative support); (e) the planning and implementation involved in any of these activities.

This broad sense derives from the nature of a military force. This force consists of trained men with materiel (weapons and equipment), likewise of intangibles—a will to endure or fight, and leadership. The processes by which the physical parts of this force (materiel and personnel) are procured, made ready, transported, supplied, served, and maintained are the processes of logistics. Since these processes are inextricably engaged with those of tactics and strategy, their manipulation and control is that of an art or science. However, since they are apart and distinguishable from the things that the force is created to do, they are not in themselves the operation. Instead, they are the helpmates of the operation.

The United States Air Force Dictionary, 1956

Logistics is the careful integration of transportation, supply, warehousing, maintenance, procurement, contracting, and automation into a coherent functional area; in a way that prevents suboptimization in any of these activities; and in a way that permits and enhances the accomplishment of a given goal, objective, or mission.

Lt Gen William G. Pagonis, USA

. . . logistics is essentially moving, supplying, and maintaining military forces. It is basic to the ability of armies, fleets, and air forces to operate—indeed to exist. It involves men and materiel, transportation, quarters and depots, communications, evacuation and hospitalization, personnel replacement, service and administration.

Stanley Falk

Logistics is the bridge between the national economy and the combat forces, and logistics thus operates as “military economics” in the fullest sense of the word. Therefore, logistics must be seen from two viewpoints. Logistics has its roots in the national economy. In this area, it is dominated by civilian influences and civilian authority. On the other hand, the end product of logistics lies in the operations of combat forces. There logistics is dominated by military influence and by military authority. In this area the major criterion of logistics is its effectiveness in creating and sustaining combat forces in action against an enemy.

Adm Henry E. Eccles, USN

. . . the economics of warfare, including industrial mobilization, research and development, funding procurement, recruitment and training, testing, and, in effect, practically everything related to military activities, besides strategy and tactics.

Stanley Falk

Logistics is the art of moving armies.

Jomini



LOGISTICS

My logisticians are a humorless lot . . . they know if my campaign fails, they are the first ones I will slay.

Alexander the Great

Behind every great leader, there was an even greater logistician.

Mathew Cox

Supply and transport stand or fall together; history depends on both.

Winston Churchill

Strange as it may seem, the Air Force, except in the air, is the least mobile of all the Services. A squadron can reach its destination in a few hours, but its establishment, depots, fuel, spare parts, and workshops take many weeks, and even months, to develop.

Winston Churchill

The toughest job was not the production of airframes. The toughest job was production of engines, production of instruments, production of all the other components of the airframes that are required to make it a complete assembly.

Gen Orval R. Cook, USAF

2

C H A P T E R

Strategy decides where to act; logistics brings the troops to this point.

Jomini

Logistics is the bridge between the economy of the nation and the tactical operations of its combat forces. Obviously, then, the logistics system must be in harmony, both with the economic system of the nation and with the tactical concepts and environment of the combat forces.

Adm Henry E. Eccles, USN

The final dictum of history must be that whatever excellence Lee possessed as a strategist or as a tactician, he was the worst Quartermaster General in history, and that, consequently, his strategy had no foundations, with the result that his tactics never once resulted in an overwhelming and decisive victory.

Maj Gen J. C. Fuller, USA

Logistics is the lifeblood of all combat operations.

Lt Gen Henaidy, Royal Saudi Air Force

Air Force logistics must shrink, by design and direction, in its consumption of total Air Force resources.

Gen Earl T. O'Loughlin, USAF

The logistics progression is a system of links, and one must know how they interface. The system could be viewed as a pipeline. You cannot connect a 2-inch pipe to a 10-inch pipe and expect a 10-inch flow out of the 2-inch end. It just won't work. But when properly managed, the interfaces between the links can provide logistics that will produce the intended flow.

Lt Gen Benjamin F. Register, Jr, USA

The purpose of all logistic effort is the creation and continued support of combat forces which may effectively carry out our national strategy. The nature of modern war is such that its effective conduct requires the greatest economy in the provision and support of these combat forces.

Economy of force in any one operation results in the ability to increase the scope and tempo of other operations and thus to increase the overall pressure that is exerted upon enemy forces.

But if the wartime effectiveness of our combat forces is jeopardized by false economy, disaster may ensue. Therefore, all measures affecting the control and coordination of logistics must be judged by their effect on sustained combat effectiveness under war conditions rather than by the sole criteria of peacetime economy. An economy of a million dollars a year may be swept away in the first hour of a war and may cost a billion dollars in the opening of the war, not to mention its possible disastrous effects on the ultimate outcome of the war.

This evaluation is one that requires the finest kind of mature and fully informed professional judgment. It is not an area where amateurs and the use of superficial statistics can contribute to our national security.

Adm Henry E. Eccles, USN

Logistics is traditionally an unglamorous and underappreciated activity. To generalize, when the battle is going well, the strategist and tactician are lionized; it is only when the tanks run out of gas that people go head-hunting for the logisticians.

Lt Gen William G. Pagonis, USA

What's not well known about Operation Overlord is that the direct military objective of Overlord was neither strategic nor tactical, but logistical. The primary objective of the plan read: "To secure a lodgement on the continent from which further offensive operations can be developed." Since it was clear the war would be a battle of industries, we had to be able to rapidly deliver our industrial output to the frontlines. The primary need, then, was for port facilities. The Normandy location was selected because of physical characteristics and its location between two major port groups—Cherbourg and South Brittany. Until ports could be taken, refitted, and opened, the beach had to handle the influx of troops and supplies.

Lt Col David C. Rutenberg, USAF

Be nice to your mother but love your logisticians and communicators.

Gen Charles A. Horner, USAF

Logistics comprises the means and arrangements which work out the plans of strategy and tactics. Strategy decides where to act, logistics brings the troops to that point.

Jomini

The history of war proves that nine out of ten times an army has been destroyed because its supply lines have been cut off

Gen Douglas MacArthur, USA

I don't ever, ever, ever want to hear the term logistics tail again. If our aircraft, missiles, and weapons are the teeth of our military might, then logistics is the muscle, tendons, and sinews that make the teeth bite down and hold on—logistics is the jawbone! Hear that? The JAWBONE!

Lt Gen Leo Marquez, USAF

We must bear the clamor of fools who would pick flaws in a pin while the country hangs in the balance.

Maj Gen Montgomery C. Meigs, USA

Logistics must be simple—everyone thinks they're an expert.

~Anonymous

Gentlemen, the officer who doesn't know his communications and supply, as well as his tactics, is totally useless.

Gen George S. Patton, Jr, USA

When the enemy assesses our forces, he values only those forces which the logistics community has ready for combat, or can get ready in time, and then sustain for a requisite period of combat.

Gen F. Michael Rogers, USAF

Logistics . . . embraces not merely the traditional functions of supply and transportation in the field, but also war finance, ship construction, munitions manufacture, and other aspects of war economy.

Lt Col George C. Thorpe, USMC

Logistics factors played a key role at the very moment of our entry into the fray—the Japanese attack on Pearl Harbor—for it was a logistical error on the part of the Japanese invaders that allowed the sleeping giant to awaken and respond. Had the attackers not missed the opportunity to destroy the logistical machinery of Pearl—the drydocks, shops, and the entire Pacific fuel reserves—it is hard to see how the US fleet could possibly have been restored and sent back out to regain momentum at Midway.

Lt Col David C. Rutenberg, USAF

The first prerequisite for any regular logistics system is, of course, an exact definition of requirements.

Martin van Creveld

Real time targeting requires real time ISR, real time logistics, real time information in the cockpit

XO Brief to CSAF on Allied Force, July 1999

Preplanning, identification of shortfalls, and prepositioning assets in the theater are needed for mobility, chemical warfare, and personal equipment shortages.

Operation Proud Eagle

Any amateur can shove tanks, planes, and infantry around the map; the real business of war is getting gas, ammunition, and spare parts to the people that need them, where they need them . . . the tail, in the form of logistics, will more and more wag the dog . . . logistics will increasingly become the single greatest impediment to have real combat capability.

Edgar Ulsamer

. . . the friction within any machine—human or mechanical—increases in proportion to the number of its parts—a prime example of the law of diminishing returns . . . the speed and range of successive new means of transportation have been largely, if not completely, offset by the enormous increase in friction and, above all, by the quantities of supplies required.

Martin van Crevald

All AAF planes and everything inside the plane, except the men, are equipped from propeller to wing by the Materiel Command of the Army Air Forces. That means from flying suits for keeping our crews warm at 60 degrees below zero to the rescue devices which help to save their lives in the tense moments after forced landings in sea or jungle.

Maj Gen Oliver P. Echols, USAAF

The desert—a tactician's paradise, a quartermaster's nightmare.

Attributed to a German general

Amateurs worry about strategy. Dilettantes worry about tactics. Professionals worry about logistics.

~Anonymous

Seldom will all logistics principles exert equal influence; usually one or two will dominate in any given situation. Identifying those principles that have priority in a specific situation is essential to establishing effective support.

Joint Pub 4-0, Doctrine for Logistics Support of Joint Operations, 25 September 1992

The more I see of war, the more I realize how it all depends on administration and transportation (logistics) It takes little skill or imagination to see where you would like your army to be and when; it takes much knowledge and hard work to know where you can place your forces and whether you can maintain them there. A real knowledge of supply and movement factors must be the basis of every leader's plan; only then can he know how and when to take risks with those factors, and battles are won only by taking risks.

Field Marshal Earl A. P. Wavell, Royal Army

Logisticians are subject to the effects of friction and uncertainty almost every day and, yet, often forget their effects when planning—or conversely, try to anticipate and plan around every possible contingency.

Col Karen S. Wilhelm, USAF

The plan of embarking mules and men in the same ships was, in the first instance, objected to on the grounds that some ships were better able to carry mules than others and that the comfort of the troops would be greater if all animals were placed in separate vessels; but this objection was overruled by the Commander-in-Chief, who stated that he was convinced by history, that the governing principle in preparing such expeditions, was so to embark the force that every portion of it should be able to disembark, completely equipped from the ship or ships conveying it. This, he stated, was absolutely necessary if the landing was likely to be opposed and was the best means of preventing confusion and delay even if there were no opposition.

British Egyptian Expedition, 1882

When it comes down to the wire and the enemy is upon you and you reach into your holster, pull out the pistol, and level it at your adversary, the difference between a click and a bang is logistics.

Editors of Loglines

The ideal for all military forces is to reduce their logistical requirements to necessities only.

*AFM 1-1, Basic Aerospace Doctrine
of the United States Air Force, March 1992*

Logistics sets the campaign's operational limits.

*Joint Pub 1, Joint Warfare of the
US Armed Forces, November 1991*

The goal of the Air Force logistics system is to attain peacetime and wartime aircraft availability goals with the minimum amount of inventory and expense.

Dr Douglas J. Blazer

The keynote of logistics is service, and to ensure adequate logistics service, our thinking must be constantly reviewed.

Maj Gen Thomas H. Chapman, USAF

You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics.

Dwight D. Eisenhower

The army has stood the test of many campaigns, but the want of a good quartermaster general's staff was often felt at headquarters.

Frederick the Great

I don't know what the hell this logistics is that Marshall is always talking about, but I want some of it.

Adm E. J. King, USN

An army cannot preserve good order unless its soldiers have meat in their bellies, coats on their backs, and shoes on their feet.

*The First Duke of Marlborough, letter to
Col William Cadogan, 1703*

Get there first with the most men.

Gen Nathan Bedford Forrest, CSA

Before any plans can be made to provide an army, logistics must be provided first. History has changed a lot, but logistics has been the crux of every one of these changes; the nail that was missing which led to the loss of a country led to a lot of those decisions.

Maj Gen Hugh J. Knerr, USAAF

Logistics . . . as vital to military success as daily food is to daily work.

Alfred Thayer Mahan

Air logistics is defined as that section of military science that embraces the details of planning for, and preparation of, all of the means and facilities required to make a combat force operational and capable of sustaining its action.

Maj Gen Elmer D. Adler, USAAF

The successful commander, in modern warfare, must keep in mind the ever-present problem of logistics.

Maj Gen Elmer D. Adler, USAAF

For the most part, Army schools and the War Department General Staff in peacetime planned, trained for, and studied combat operations. To a great extent, the Army neglected the logistics problems of operation. This was a deficiency that proved to be costly.

Final Report, Army Service Forces, July 1947

We are expected always to have produced tomorrow's equipment yesterday.

Gen Benjamin W. Chidlaw, USAF

It [logistics] is the strong basement structure on which the Air Force house . . . is built.

Gen Benjamin W. Chidlaw, USAF

Just enough but not too much was to be our philosophy.

Gen Benjamin W. Chidlaw, USAF

Logistics is the stuff which if you do not have it the war will not run as well as if.

Maj Gen Daniel F. Callahan, USAF

Our combat operations are no better than the logistics support back of them.

Gen William F. McKee, USAF

Airpower, like military power as a whole, is composed of two parts—materiel and personnel. In other words, machines and men to operate them.

Maj Gen Oliver P. Echols, USAAF

By material, we mean the stuff or goods out of which something is made. Materiel means the finished product, whether it be machineguns, rivets, photographic film, engines, or bombers. So superior materiel is the key to airpower.

Maj Gen Oliver P. Echols, USAAF

Throughout the struggle, it was in his logistic inability to maintain his armies in the field that the enemy's fatal weakness lay. Courage his forces had in full measure, but courage was not enough. Reinforcements failed to arrive, weapons, ammunition, and food alike ran short, and the dearth of fuel caused their powers of tactical mobility to dwindle to the vanishing point. In the last stages of the campaign, they could do little more than wait for the Allied advance to sweep over them.

Dwight D. Eisenhower

We simply must have better, faster, best-value logistical solutions for our military forces to achieve victory.

Lt Gen Henry T. Glisson, USA

As we select our forces and plan our operations, . . . we must understand how logistics can impact on our concepts of operation Commanders must base all their concepts of operations on what they know they can do logistically.

Lt Gen Alfred M. Gray, Jr, USMC

Logistics has a vital position in the total span of military activities because it lies between research and development on one side and operations on the other.

Gen Bruce K. Holloway, USAF

Professional logistics management means playing a good, solid game of hardball, even when the other side sometimes gets to write the rules—and the spectators bring rocks and bottles to throw when you drop the ball.

Gen Earl T. O'Loughlin, USAF

A key to winning the first battle, as well as the second and the last battle, is an adequate sustaining capability.

Chief of Staff White Paper, 1980

The sinews of support are a basic ingredient for the US Army's combat muscle.

Chief of Staff White Paper, 1980

The essence of flexibility is in the mind of the commander, the substance of flexibility is in logistics.

Adm Henry E. Eccles, USN

The path to glory cannot be followed with much baggage.

Gen Richard S. Ewell, CSA

The Logistician's Burden

Logisticians are a sad, embittered race of people, very much in demand in war, who sink resentfully into obscurity in peace.

They deal only with facts but must work for men who traffic in theories. They emerge during war because war is very much fact.

They disappear in peace, because in peace, war is mostly theory.

The people who trade in theories and who employ logisticians in war and ignore them in peace are generals.

Logisticians hate generals.

Generals are a happily blessed race who radiate confidence and power. They feed only on ambrosia and drink only nectar.

In peace, they stride along confidently and can invade a world simply by sweeping their hands grandly over a map, pointing their fingers decisively up terrain corridors, and blocking defiles and obstacles with the sides of their arms.

In war, they must stride more slowly, because each general has a logistician riding on his back and he knows that, at any moment, the logistician may lean forward and whisper, "No, you can't do that!"

Generals fear logisticians in war, and in peace, generals try to forget logisticians.

Romping along beside generals are strategists and tacticians.

Logisticians despise strategists and tacticians.

Strategists and tacticians do not know about logisticians until they grow up to be generals—which they usually do—although sometimes generals will discipline errant strategists and tacticians by telling them about logisticians.

This sometimes gives strategists and tacticians nightmares, but deep down in their hearts, they do not

really believe the stories—especially if the general lets them have an occasional drink of his nectar.

Sometimes a logistician gets to be a general.

In such a case, he must associate with generals whom he hates. He has a retinue of strategists and tacticians whom he despises, and on his back is a logistician whom he fears.

That is why logisticians who become generals are a fearsome and frustrated group who wish they were anywhere else, beat their wives, get ulcers, and cannot eat their ambrosia.

Rear Adm Isaac Campbell Kidd, USN

To be blunt, delivering the required equipment, in the right hands, at the right place, and at the right time, remains the overriding challenge for any logistic organisation.

Air Commodore Peter Dye, RAF



Good logistics is combat power.

Lt Gen William G. Pagonis, USA

We're looking to the business community and asking, "What are you doing? How do you achieve this 'just in time' instead of 'just in case' so we can eliminate some of these storehouses that we have, these warehouses stacked with equipment that may never be used." We want to have the kind of system where we can get something that's needed to the field just in time—the right place, the right time, and the right equipment. We're doing that.

William S. Cohen, Secretary of Defense

Vulnerability lies in the equipment chain, from manufacturing to employment, and other similarly interdependent systems such as fuel and pilot training . . . logistics might well be considered the real center of gravity.

Air Commodore Peter Dye, RAF

Every unit that is not supported is a defeated unit.

Marshal General of France Hermann Maurice de Saxe

A little neglect may breed mischief; for want of a nail, the shoe was lost; for want of a shoe, the horse was lost; and for want of a horse, the rider was lost.

Benjamin Franklin

Shifting national priorities, intense international competition, and a very dangerous world situation are all sending us a clear and unmistakable message: improve the quality of our process across the board or be left behind.

Gen Alfred G. Hansen, USAF

Service support and sustainability add a combat multiplier to our total battlefield capability.

Gen Edward C. Meyer, USA

The concept of inspecting, repairing, and resupplying possible future military satellites in orbit poses a radically different logistics problem.

Gen William F. McKee, USAF

Maximum quantity of weapons of maximum quality produced by methods which lend themselves to maximum progress in military effectiveness—all tuned to a minimum time requirement—these are the very essence of successful mechanized war.

*O. E. Hunt, Vice President,
General Motors, 1942*

Without lowering the level of our earthbound logistics support, we are preparing for the day when we will be called upon to perform our mission far beyond the earth's atmosphere.

Gen William F. McKee, USAF

The tonnage shipped in the peak month to Vietnam exceeded that of World War II and Korea.

Gen Henry A. Miley, Jr, USA

Successful land warfare requires that the Army pursue balanced improvements across all the functional areas: people, equipment, supplies, procedures

Gen Edward C. Meyer, USA

Being able to deliver essential supplies anywhere, anytime, is only part of the answer. Reducing the need to deliver so much is just as critical.

F. Whitten Peters, Secretary of the Air Force

This is not a war of ammunition, tanks, guns, and trucks alone. It is as much a war of replenishing spare parts to keep them in combat as it is a war of major equipment.

Ernie Pyle

What throws you in combat is rarely the fact that your tactical scheme was wrong . . . but that you failed to think through the cold hard facts of logistics.

Gen Mathew B. Ridgeway, USA

There is a golden rule; just in time, not just in case. He who breaks this rule loses his gold.

Group Capt David J. Foster, RAF

The nations bid for billets that they want, so everybody bids for the good ops billets, and nobody bids for the logistics billets

Lt Gen Michael C. Short, USAF

Strategy, like politics, is said to be the art of the possible; but surely what is possible is determined not merely by numerical strengths, doctrine, intelligence, arms, and tactics, but in the first place, by the hardest facts of all: those concerning requirements, supplies available and expected, organization and administration, transportation and arteries of communication.

Martin van Creveld

A real knowledge of supply and movement factors must be the basis of every leader's plan; only then can he know how and when to take risks with those factors, and battles are won only by taking risks.

Field Marshal Earl A. P. Wavell, Royal Army

We have come a long way since the days when entering the logistical net meant asking the supply sergeant, "Got any?" "Gonna get any?"

Gen John A. Wickham, USA

Nobody ever heard of a quartermaster in history.

Nathanael Greene, letter to George Washington, refusing to be appointed Quartermaster General of the Continental Army, 1778

The general must know how to get his men their rations and every other kind of stores needed for war.

Field Marshal Earl A. P. Wavell, Royal Army

The soldier cannot be a fighter and a pack animal at one and the same time, any more than a field piece can be a gun and a supply vehicle combined.

Maj Gen J. F. C. Fuller, Royal Army

Without munitions of war, my armies cannot fight; without food they cannot live. You are helping to send these things to them each day, and in doing so, you are hurling your spears at the enemy.

King George V, address to the South African Native Labour Corps, 1917

There are five things the soldier should never be without: his firelock, his ammunition, his knapsack, his provisions, (for at least 4 days), and his entrenching tool. The knapsack may be reduced to the smallest size possible, but the soldier should always have it with him.

Napoleon

The line that connects an army with its base of supplies is the heel of Achilles—its most vital and vulnerable point.

John S. Mosby, 1887

Articles of provision are not to be trifled with or left to chance; and there is nothing more clear than that the subsistence of the troops must be certain upon the proposed service, or the service must be relinquished.

The First Duke of Wellington

In order to make assured conquests it is necessary always to proceed within the rules: to advance, to establish yourself solidly, to advance and establish yourself again, and always prepare to have within reach of your army your resources and your requirements.

Frederick the Great

It is very necessary to attend to all this detail and to trace a biscuit from Lisbon into a man's mouth on the frontier and to provide for its removal from place to place by land or by water, or no military operations can be carried out.

The First Duke of Wellington

We have a claim on the output of the arsenals of London as well of Hanyang, and what is more, it is to be delivered to us by the enemy's own transport corps. This is the sober truth, not a joke.

Mao Tse-tung

From a logistician's standpoint, the military is a structure that depends both on flexibility and on rigidity. It is both loose and tight, to use contemporary management jargon.

Lt Gen William G. Pagonis, USA

The first essential condition for an army to be able to stand the strain of battle is an adequate stock of weapons, petrol, and ammunition. In fact, the battle is fought and decided by the quartermasters before the shooting begins.

Field Marshal Erwin Rommel

The mere readiness of the troops is nothing in comparison with the preparations required for the departs of the Service [logistics].

The First Duke of Wellington

The products of the machine—shells, bullets, fuel, sophisticated engineering materials—had finally superseded those of the field as the main items consumed by armies, with the result that warfare, this time shackled by immense networks of tangled umbilical cords, froze and turned into a process of mutual slaughter on a scale so vast as to stagger the imagination.

Martin van Creveld

Reduction of logistics troops is called “cutting out the fat” in press releases.

Gen Carter B. Magruder, USA

Romantically heroic politicians and gung-ho generals notwithstanding, the aim of a military organization is not to make do with the smallest number of supporting troops but to produce the greatest possible fighting power. If, for any given campaign, this aim can only be achieved by having more than a hundred pump fuel, drive trucks and construct railways behind each combatant, then 100:1 is the optimum ratio.

Martin van Creveld

The successful logistic support of contingency plans depends primarily on recognizing far enough in advance all requirements in the transportation field and any special requirements for service troops or materiel beyond those provided with a balanced force organized and equipped in the standard manner.

Gen Carter B. Magruder, USA

Tacticians are reluctant to forecast combat operations far enough in advance to provide for procurement of items with long lead times. Logisticians themselves are inclined to make the whole procedure prohibitively laborious by going into a degree of detail that is unjustified given the inaccuracies that always accompany long-range tactical estimates. Budget specialists oppose procurement of items for which proof of need is tenuous.

Gen Carter B. Magruder, USA

A city might have walls of iron and be surrounded by moats of boiling water, but if it is inadequately provisioned, even a Chiang T'ai-kung or a Mo Ti would be unable to defend it.

Sun Tzu

No one with any knowledge of logistics thinks that the building up of excesses can be avoided. Lt Gen Wilhelm D. Styer, Chief of Staff of Army Service Forces in World War II, was asked how excesses could be avoided, he is reported to have answered that he did not know but one thing he did know was that the side that won this war was going to end up with great excesses and the side that came out without excesses was going to be the side that had lost.

Gen Carter B. Magruder, USA

Among military matters, logistics is particularly complex. Decision should be made at those points where there is understanding, and only on the broadest logistic subjects is there understanding at a high level

Gen Carter B. Magruder, USA

The whole of military activity must relate directly or indirectly to the engagement. The end for which a soldier is recruited, clothed, armed, and trained, the whole object of his sleeping, eating, drinking, and marching is simply that he should fight at the right place and the right time.

Clausewitz

But in its relation to strategy, logistics assumes the character of a dynamic force, without which the strategic conception is simply a paper plan.

Commodore C. Theodore Vogelgesang, USN

The “feeding” of an army is a matter of the most vital. One of the most effective ways of impeding the march of an army is by cutting off its supplies; and this is just as legitimate as to attack in line of battle.

Col John S. Mosby, 1887

The history of war proves that nine out of ten times an army has been destroyed because its supply lines have been cut off We shall land at Inchon, and I shall crush them.

Gen Douglas MacArthur, USA

The sinews of war are five—men, money, materials, maintenance (food) and morale.

Bernard M. Baruch

When the Duke of Cumberland has weakened his army sufficiently, I shall teach him that a general’s first duty is to provide for its welfare.

Marshal General of France Hermann Maurice de Saxe

I believe that the task of bringing the force to the fighting point, properly equipped and well-formed in all that it needs is at least as important as the capable leading of the force in the fight itself In fact, it is indispensable, and the combat between hostile forces is more in the preparation than the fight.

Gen Sir John Monashy

[Logistics] . . . the crux of generalship—superior even to tactical skill.

Field Marshal Earl A. P. Wavell, Royal Army

I have prevailed upon Lord Clive to appoint a Commissary of Store Matters can now be brought into some shape, and we shall know what we are about, instead of trusting to the vague calculations of a parcel of blockheads who know nothing and have no data.

The First Duke of Wellington

A fighting revolutionary spirit and class self-awareness are the crucial factors in a revolutionary war, but revolutionary spirit alone without the necessary equipment cannot be victorious in modern war.

*Marshal of the Soviet Union
Mikhail N. Tukhachevskiy*

The great problem of warfare in the Pacific is to move forces into contact and maintain them. Victory is dependent upon the solution of the logistics problem.

Gen Douglas MaArthur, USA

The war has been variously termed a war of production and a war of machines. Whatever else it is, so far as the United States is concerned, it is a war of logistics. The ways and means to supply and support our forces in all parts of the world—including the Army—have presented problems nothing short of colossal, and have required the most careful and intricate planning It is no easy matter in a global war to have the right materials in the right place at the right times in the right quantities.

Adm E. J. King, USN

. . . the good quartermaster general cannot fail to make his fortune, since he will gain, by practice, all the skills needed by an army general.

Frederick the Great

A piece of paper makes you an officer, a radio makes you a commander.

Gen Omar N. Bradley, USA

Logistic considerations belong not only in the highest echelons of military planning during the process of preparation for war and for specific wartime operations, but may well become the controlling element with relation to timing and successful operation.

Vice Adm Oscar C. Badger, USN

It is no great matter to change tactical plans in a hurry and to send troops off in new directions. But adjusting supply plans to the altered tactical scheme is far more difficult.

Gen Walter Bedell Smith, USA

It appalls me to think how many failures occur in this very last link of the logistic chain. Equipment is manufactured at great expense. It is shipped 5,000 miles by train, ship, and truck. It is issued to the troops and eventually, with great labor, carried to the top of a mountain in Korea. How many times, at that last point, has this whole enormous effort been thrown away, as carelessly as a burnt match, by the happy-go-lucky negligence of the very people whose lives depend on keeping the stuff in shape.

Lt Gen W. B. Palmer, USAF

The commander must understand the cause-and-effect relationships which exist in logistics in order that he may estimate how the gain or loss of efficiency in any particular technical function will influence the efficiency of the other functions which in combination determine his overall combat effectiveness.

Adm Henry E. Eccles, USN

Mobility is the true test of a supply system.

B. H. Liddell Hart

Success in battle stems in great degree from superiority in the means of mobility and its employment for effective maneuver.

Gen Earle G. Wheeler, USA

When Hitler put his war on wheels, he ran it straight down our alley. When he hitched his chariot to an internal combustion engine, he opened up a new battle front—a front that we know well—it's called Detroit.

Maj Gen Brehon B. Somervell, USA

I know how you defeated us. You piled up the supplies and then let them fall on us.

Captured German Soldier

Our support forces must be responsive, deployable, and be able to sustain our combat environment. Efficiency and flexibility will replace the massive inventories we used to deploy.

CMSAF Eric W. Benken



LEADERSHIP

Leadership is about motivating human resources. Management is utilising resources to their most efficient, desired output. But the human labour stock needs to be motivated, convinced of its work, and this is what leadership is about.

One can be a very good manager with very little leadership ability. A leader can have excitement, vision, and emotion but lack the management abilities to carry out his vision.

Philip Ralph Johnson

A true leader has the confidence to stand alone, the courage to make tough decisions, and the compassion to listen to the needs of others. He does not set out to be a leader, but becomes one by the quality of his actions and the integrity of his intent.

~Anonymous

Every incentive must be given to encourage select individuals to volunteer for careers in the Air Forces, in commissioned as well as enlisted grades.

Gen Henry H. Arnold, USAAF

In war, the moral is to the physical as three is to one.

Napoleon

Fairness, diligence, sound preparation, professional skill, and loyalty are the marks of American military leadership.

Gen Omar N. Bradley, USA

3

C H A P T E R

If one could only come to mastery of things inside him, nothing outside could get the better of him.

Col Raynal C. Bolling, US Army Air Service

In today's army, it is not enough that a man be sturdily equipped, skillfully trained, to make him a good soldier. To show the strong heart that comes from deep-rooted convictions, the soldier must know and understand the greatness of this democracy and grasp the important role he fills as a part of its armed forces.

Gen Omar N. Bradley, USA

The success of the commander does not arise from following rules or models. It consists in an absolutely new comprehension of the dominant facts of the situation at the time, and all the forces at work

Winston Churchill

Many officers and noncommissioned officers have the attitude of "Don't do as I do, do as I say." This type is not a leader. Men look to the leader for their model. A leader sets the proper example. Do everything you can to increase the personal pride of your men by your example. Cleanliness, neatness, and orderliness are evidence of personal pride. A proud outfit is a good outfit.

Lt Gen M. S. Eddy, USA

If men can naturally and without restraint talk to their officers, the products of their resourcefulness becomes available to all. Moreover, out of the habit grows mutual confidence, a feeling of partnership that is the essence of esprit de corps.

Dwight D. Eisenhower

Another type General Marshall disliked was the truculent personality—the man who confused firmness and strength with bad manners and deliberate discourtesy. He also avoided those with too great a love of the limelight. Moreover, he was irritated by those who were often in trouble with others or who were too stupid to see that leadership in conference, even with subordinates, is as important as on the battlefield.

Dwight D. Eisenhower

The capacity of soldiers for absorbing punishment and enduring privations is almost inexhaustible so long as they believe they are getting a square deal, that their commanders are looking out for them, and that their own accomplishments are understood and appreciated.

Dwight D. Eisenhower

Techniques and tactics is the business of staffs; the leader himself should furnish the spirit and the morale.

Marshal of France Ferdinand Foch

We aren't no thin red heroes, and we aren't no blackguards too, but single men in barracks most serviceable like you.

Rudyard Kipling

In everyone's life, either business or professional, there comes a time when he must take stock of his assets and liabilities. If he does not, he soon finds himself on a toboggan. Periodical self-analysis, critical and impartial, is oftentimes most beneficial and illuminating.

Gen Walter Krueger, USA

It goes without saying that the average soldier, by faith or by indoctrination, American to the core, functions more intelligently, more happily and with a thousand-fold more initiative when he has a working acquaintance with the situation.

Likewise, it goes without saying that knowing “why” something is required or directed makes it much more interesting and much less difficult. It, in consequence, contributes no end to the effectiveness of its execution.

Gen Walter Krueger, USA

First in importance will be the development of high morale and the building of a sound discipline, based on wise leadership and a spirit of mutual cooperation throughout all ranks. Morale engendered by thoughtful consideration for officers and enlisted men by their commanders will produce a cheerful and understanding subordination of the individual to the good of the team. This is the essence of the American standard of discipline, and it is the primary responsibility of leaders to develop and maintain such a standard.

Gen George C. Marshall. USA

Wars are fought and won by men, not weapons. In the last analysis, it is the knowledge and courage of the men who fight and the officers who lead them that wins victories. Take care of your men first, last, and always.

Revista Militar

Leadership must be established from the top down.

Senator Sam Nunn

Leadership is the sine qua non of the military professional
Lt Gen Raymond B. Furlong, USAF

Our soldier has always been distinguished for his sense of personal responsibility. His concern for abstract theory is not strikingly keen, but he feels the strongest obligation to those who are serving beside him, whose fortunes are the same as his. He is determined not to let them down. Where they go, he is bound to go, too. It may be in the air, on a bombing mission hundreds of miles into the enemy's territory. It may be on the ground, in an attack on the village over the next hill. Wherever it is, the fact that the others are going is enough for him.

Robert P. Patterson, Secretary of War

Never tell people how to do things. Tell them what to do, and they will surprise you with their ingenuity.

Gen George S. Patton, Jr, USA

To get the best out of your men, they must feel that you are their real leader and must know that they can depend upon you. They just have confidence in you. Do not hold yourself aloof from your men, but keep in close touch with them. Let them feel that you are doing the very best you can for them under all circumstances, not only in providing their personal wants, in looking forward to a regular supply of food and clothing, but that, as their leader, you are directing them wisely in the trying conditions of battle.

Gen John J. Pershing, USA

In the end, the methods of leadership are good to the exact extent that they encourage human devotion and cooperative response.

If the policies of the leaders quicken the desires of the men, advance their interests, protect their rights, heighten their pride and self-respect—if they accomplish these things, he is observing the principle of leadership, and the result is irresistible.

Col Richard M. Sandusky

You learn far more from negative leadership than from positive leadership. Because you learn how not to do it. And, therefore, you learn how to do it.

Gen Norman Schwarzkopf, USA

Leadership is a potent combination of strategy and character. But if you must be without one, be without the strategy.

Gen Norman Schwarzkopf, USA

Do what is right, not what you think the higher headquarters wants or what you think will make you look good.

Gen Norman Schwarzkopf, USA

It doesn't take a hero to order men into battle. It takes a hero to be one of those men who goes into battle.

Gen Norman Schwarzkopf, USA

The badge or rank which an officer wears on his coat is really a symbol of servitude—servitude to his men.

Gen Maxwell D. Taylor, USA

Never destroy or decrease a man's self-respect by humiliating him before others. If his self-respect is destroyed, his usefulness will be seriously diminished. A man who is called down in the presence of others can hardly help resenting it. Frequent standing down of your men is an all-too-common mistake, and a very detrimental one. Do not let the state of your liver influence your attitude toward men.

Adm William S. Sims, USN

Command implies the existence of a club—legal authority to lead. Leadership implies a less authoritative hold over people—a natural appeal—and not much of a club.

Maj Gen Dale O. Smith, USAF

He is a better leader whose command is well behaved through hard work and the habit of order, rather than he who must force his men to work through fear of punishment.

Flavius Vegetius

A good commander is a man of high character (that is the most important attribute), with power of decision that next most important attribute. He must have moral backbone, and this stems from high character; and he must be physically courageous, or successfully conceal the fact that he is not. He must know the tools of his trade, tactics, and logistics. He must be impartial. He must be calm under stress. He must reward promptly and punish justly. He must be accessible, human, humble, patient, forbearing. He should listen to advice, make his own decision, and carry it out with energy.

Gen Joseph W. Stilwell, USA

Regard your soldiers as your children, and they will follow you into the deepest valley; look on them as your own beloved sons, and they will stand by you even unto death. If, however, you are indulgent, but unable to make your authority felt; kindhearted, but unable to enforce your commands; and incapable, moreover, of quelling disorder; then your soldiers must be likened to spoilt children; they are useless for any practical purpose.

Sun Tzu

A leader is the man who has the ability to get other people to do what they don't want to do, and like it.

Harry S. Truman

Impress upon the mind of every man, from the first to the lowest, the importance of the cause and what it is they are contending for.

George Washington

A competent leader can get efficient service from poor troops; while, on the contrary, an incapable leader can demoralize the best of troops.

Gen John J. Pershing, USA

Once you pick up the burden of leadership, you can never put it down again as long as you live. Sergeant or general, we all carry the same load.

Gen Williston B. Palmer, USA

In speaking to a Prussian major, his superior commented, “His majesty made you a major because he believed you would know when not to obey his orders.”

~*Anonymous*

One of the true tests of leadership is the ability to recognize a problem before it becomes an emergency.

Arnold Glasow

Remember this: the truly great leader overcomes all difficulties, and campaigns and battles are nothing but a long series of difficulties to be overcome. The lack of equipment, the lack of food, the lack of this or that are only excuses; the real leader displays his qualities in his triumph over adversity, however great it may be.

Gen George C. Marshall, USA

You can't lead anyone else further than you have gone yourself.

Gene Mauch, Baseball Coach

The *leadership* goal and the *management* goal occasionally become confused in the minds of our officers. In an effort to simplify the difference, let me say that your success will be a function of your ability to lead people and manage resources.

Gen Edward C. Meyer, USA

Soldiers usually win the battles and generals get the credit for them.

Napoleon

Leadership is solving problems. The day soldiers stop bringing you their problems is the day you have stopped leading them. They have either lost confidence that you can help or concluded you do not care. Either case is a failure of leadership.

Karl Raimund Popper

It is a terrible thing to look over your shoulder when you are trying to lead—and find no one there.

Franklin D. Roosevelt

Power corrupts. Absolute power corrupts absolutely.

Lord Acton

He who makes ten men work is greater than he who does the work of ten men.

~Anonymous

If I advance, follow me! If I retreat, kill me! If I die, avenge me!

Francois de la Rochefoucauld

Pull the string, and it will follow wherever you wish. Push it, and it will go nowhere at all.

Dwight D. Eisenhower

I see mentoring as a fundamental responsibility of all Air Force officers.

Gen Ronald R. Fogleman, USAF

The General ardently wishes it were now in his power, to conduct the troops into the best winter quarters. But where are these to be found? Should we retire to the interior parts of the States, we should find them crowded with virtuous citizens, who, sacrificing their all, have left Philadelphia, and fled thither for protection. To their distresses, humanity forbids us to add. This is not all, we should leave a vast extent of fertile country to be despoiled and ravaged by the enemy, from which they would draw vast supplies, and where many of our firm friends would be exposed to all the miseries of the most insulting and wanton depredation. A train of evils might be enumerated, but these will suffice. These considerations make it indispensably necessary for the army to take such a position, as will enable it most effectually to prevent distress and to give the most extensive security; and in that position, we must make ourselves the best shelter of our power. With activity and diligence, huts must be erected that will be warm and dry. In these, the troops will be compact, more secure against surprises than if a divided state and at hand to protect the country. These cogent reasons have determined the General to take post in the neighborhood of his camp, and influenced by them, he persuades himself, that the officers and soldiers, with one heart, and one mind, will resolve to surmount every difficulty, with a fortitude and patience, becoming their profession, and the sacred cause in which they are engaged. He himself will share in the hardship, and partake of every inconvenience.

*George Washington in an order to his troops,
17 December 1777*

Leadership is vital to determine *what* should be done and *where* to go, but in order to *get* there, you need people who will do a good job of managing systems and resources.

Luticia Hook

If you are going to report on something, don't take the word of other people. Go out and eyeball it and see and talk to people. You get a far different feeling for the problem and the situation.

Gen Edward G. Lansdale, USAF

A leader must be one who can be looked up to, whose personal judgement is trusted, who can inspire those he leads, gaining their trust and confidence.

Field Marshal Viscount Bernard L. Montgomery

The intellectual definition of leadership is the capacity and the will to rally men and women to a common purpose, and the character which will inspire confidence.

Field Marshal Viscount Bernard L. Montgomery

God grant that men of principle shall be our principal men.

Thomas Jefferson

A good horse should be seldom spurred.

Thomas Fuller, 1732

Get your major purpose clear, take off your plate all which hinders that purpose and hold hard to all which helps it, and then go ahead with a clear conscience, courage, sincerity, and selflessness.

Field Marshal Viscount Bernard L. Montgomery

[Paraphrased] Leadership is based on truth and character. A leader must have the force of character necessary to inspire others to follow him with confidence. Character is knowing what you want to do and having the determination to do it, in a way which will inspire confidence in those around you or for whom you are responsible.

Field Marshal Viscount Bernard L. Montgomery

The ability to concentrate is essential in a leader; the constant exercise of this ability makes him a disciplined human being, enabling him to simplify a problem, to discover the essentials upon which all action must be based and the details which are unimportant.

Field Marshal Viscount Bernard L. Montgomery

Whatever you can do or dream you can do, begin it. Boldness has magic, power and genius in it. Commitment is everything.

W. H. Murphy

One of the best ways to persuade others is with your ears—by listening to them.

Dean Rusk, Secretary of State

If you lose your integrity, you've lost everything.

Gen Bruce K. Holloway, USAF

It is always a good thing to persuade the soldier that what you want him to do is right.

Field Marshal Viscount Bernard L. Montgomery

A leader's private life must be above all reproach. The most powerful factor is the sincerity of the man, his example and influence. If a man's private life is not above reproach, those he leads will cease to respect him, will withdraw their confidence so that his leadership loses its effectiveness.

Field Marshal Viscount Bernard L. Montgomery

Military command is, fundamentally, a great human problem, and no good results will follow unless there is mutual confidence and sympathy between the known commander and the regimental officers and men—the former being seen frequently in the forward area by the soldiery.

Field Marshal Viscount Bernard L. Montgomery

One can be a very good manager with very little leadership ability. A leader can have excitement, vision, and emotion but lack the management abilities to carry out his vision.

Field Marshal Viscount Bernard L. Montgomery

Leadership is motivation to create business, management the skill to retain it. You manage things, you lead people.

Field Marshal Viscount Bernard L. Montgomery

There is a great deal of talk about loyalty from the bottom to the top. Loyalty from the top down is even more necessary and much less prevalent.

Gen George S. Patton, Jr, USA

All my life, whenever it comes time to make a decision, I make it and forget about it.

Harry S. Truman

If we can't get them to salute when they should salute and wear the clothes you tell them to wear, how are you going to get them to die for their country?

Gen George S. Patton, Jr, USA

Perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do, when it ought to be done, whether you like it or not. This is the first lesson to be learned.

Thomas H. Huxley

Unless each officer and noncommissioned officer has capabilities greatly in excess of the responsibility he holds, he is basically an unprofitable part of a military machine.

Gen Omar N. Bradley, USA

. . . officers can never act with confidence until they are master of the profession

Gen Henry Knox, USA

It is the part of a good general to talk of success, not of failure.

Sophocles

Men are neither lions nor sheep. It is the man who leads them who turns them into either lions or sheep.

Jean Doutard

A professional is one who does his best work when he feels the least like working.

Frank Lloyd Wright

. . . reason and calm judgement, the qualities specially belonging to a leader.

Tacitus

I don't want any yesmen around me. I want everyone to tell me the truth—even though it costs him his job.

Samuel Goldwyn

Only mediocrities rise to the top in a system that won't tolerate wave making.

Lawrence J. Peter

The man who occupies the first place seldom plays the principal part.

Johann Wolfgang Goethe

There are no bad regiments, only bad colonels.

Napoleon

Trust men and they will be true to you.

Ralph Waldo Emerson

The general must be first in the toils and fatigue of the army. In the heat of summer, he does not spread his parasol nor in the cold of winter don thick clothing. In dangerous places, he must dismount and walk. He waits until the army's wells have been dug and only then drinks; until the army's food is cooked before he eats; until the army's fortifications have been completed, to shelter himself.

~Anonymous

A piece of spaghetti or a military unit can only be led from the front end.

Gen George S. Patton, Jr, USA

Correction does much, but encouragement does more.
Encouragement after censure is as the sun after a flower.

Johann Wolfgang Goethe

If officers desire to have control over their commands, they must remain habitually with them, industriously attuned to their instruction and comfort, and in battle lead them well.

Gen Stonewall Jackson, CSA

No one can be exact and just, and be loved at the same time as feared. Severity must be accompanied by kindness, but this should not have appearance of pretense, but of goodness.

Marshal General of France Hermann Maurice de Saxe

No matter what may be the ability of the officer, if he loses the confidence of his troops, disaster must sooner or later ensue.

Gen Robert E. Lee, CSA

Nothing gives one person so much advantage over another as to remain always cool and unruffled under all circumstances.

Thomas Jefferson

The task of leadership is not to put greatness into humanity, but to elicit it, for the greatness is already there.

John Buchan

The first thing a young officer must do when he joins the Army is to fight a battle, and that battle is for the hearts of his men. If he wins that battle and subsequent similar ones, his men will follow him anywhere; if he loses it, he will never do any real good.

Field Marshal Viscount Bernard L. Montgomery

The leader must himself believe that willing obedience always beats forced obedience, and that he can get this only by really knowing what should be done. Thus, he can secure obedience from his men because he can convince them that he knows best, precisely as a good doctor makes his patients obey him. Also, he must be ready to suffer more hardships than he asks of his soldiers, more fatigue, greater extremes of heat and cold.

Xenophon, Cryopaedia

These problems brought forcefully to my mind the incidental responsibilities a military leader gathers when he tries to do the job he was sent out to do. He often finds he has to handle the incidentals first, before he can even get on with the primary task.

Lt Gen William H. Tunner, USAF

I have found over the years that American soldiers and airmen thrive on competition.

Lt Gen William H. Tunner, USAF

Making myself available to the pilots and crew members, seeking them out and listening to their complaints, gave me an insight into the true operations of the lift that I could never have gotten sitting at my desk reading filtered and secondhand reports. Frequently, I learned of an accident before the commander of the base on which it had occurred. The opportunity to report to him what was going on at his own base was extremely valuable, especially when I dragged him out of bed to do so. It tended to shake him up and keep him on his toes.

Lt Gen William H. Tunner, USAF

The best executive is the one who has sense enough to pick good men to do what he wants done, and self-restraint enough to keep from meddling with them while they do it.

Theodore Roosevelt

Excellence is to do a common thing in an uncommon way.

Booker T. Washington

When there is no bond with the soldiers but punishments are meted out, they will be disobedient; if disobedient, they will be difficult to use. When there is a bond with the soldiers, but punishments cannot be meted out, they still will be useless. So, unite them through benevolence and regulate them through strictness—these ensure internalized discipline.

Sun Tzu

Leadership in a democratic army means firmness, not harshness; understanding, not weakness; justice, not license; humaneness, not intolerance; generosity, not selfishness; pride, not egotism.

Gen Omar N. Bradley, USA

In any moment of decision, the best thing you can do is the right thing, the next best thing is the wrong thing, and the worst thing you can do is nothing.

Theodore Roosevelt

Example is not the main thing in influencing others. It is the only thing.

Albert Schweitzer

I'm a great believer in luck, and I find the harder I work the more I have of it.

Thomas Jefferson

Whether you think you can or think you can't—you're right.

Henry Ford

A genius paramount in force and originality, manifested in the character of a general, animates the operations of the army with one impulse It impresses an opinion of superiority on the mass: everyone views himself in the splendour of his commander, assimilates, in idea, with his excellence, and being superior in opinion, soon becomes so in reality.

Robert Jackson, 1804

The personality of the general is indispensable, he is the head, he is the all of an army. The Gauls were not conquered by the Roman legions, but by Caesar. It was not before the Carthaginian soldiers that Rome was made to tremble, but before Hannibal. It was not the Macedonian phalanx which penetrated to India, but Alexander. It was not the French army which reached the Weser and the Inn, it was Turenne. Prussia was not defended for seven years against the three most formidable European powers by the Prussian soldiers, but by Frederick the Great.

Napoleon

First and foremost, take care of the troops; make sure they are getting everything they need. If you don't get that done, nothing else counts.

Gen Norman Schwarzkopf, USA

I hold the view that the leader must know what he himself wants. He must see his objective clearly, and then strive to attain it; he must let everyone else know what he wants and what are the basic fundamentals of his policy. He must, in fact, give firm guidance and a clear lead.

Field Marshal Viscount Bernard L. Montgomery

Here lies one who knew how to get around him men who were cleverer than himself.

Andrew Carnegie's tombstone

We have good corporals and good sergeants and some good lieutenants and captains, and those are far more important than good generals.

Gen William T. Sherman, USA

In my opinion, the fundamental key to being an effective leader—and the key to all successful human interaction—is to know yourself. You've got to be in tune with what makes you happy. You have to understand what you're good at. And every once in a while, you've got to sit down and take a brutally honest look at your shortcomings. And since people are a moving target, this process of self-analysis should go on constantly throughout one's career, formally and informally.

Lt Gen William G. Pagonis, USA

A leader is best
When people barely know he exists,
Not so good when people obey and acclaim him,
Worse when they despise him.
But of a good leader, who talks little,
When his work is done, his aim fulfilled,
They will say:
We did it ourselves.

Lau-tzu

When a war starts, many more decisions have to be made and made quickly than can be made by the top officials. If the lower echelons have not been used to making decisions in peace, they won't make them in war.

Gen Carter B. Magruder, USA

Everyone who manages resources—which is everyone—needs to remember that every time you make a resource decision in one area, it impacts other areas.

Robert Maxwell

WAR

God and the soldier we adore
In time of danger, not before.
The danger passed and all things righted,
God is forgotten, and the soldier slighted.

Marlborough Veteran

*Know the enemy
and know
yourself; in a
hundred battles,
you will never be
in peril.*

Sun Tzu

How to end the Vietnam War: just fly a
plane load of German and Japanese bankers
to Hanoi and let them explain to the North
Vietnamese leaders what happens to a
country that loses a war to the United
States.

Art Buchwald

I venture to say no war can be long carried
on against the will of the people.

Edmund Burke

War does not determine who is right, only
who is left.

Duncan Caldwell

In time of war, the first casualty is truth.

Boake Carter

4

If you desire peace, prepare for war.

Old Roman saying

C H A P T E R

The longer we fight the war, the more permanently self-sufficient we shall become.

It brightens my heart in a dark hour to know that in fighting the Japanese we are also fighting to free ourselves forever from future economic threats from overseas.

John Chamberlain, 1942

War is the science of destruction.

John Abbott, Prime minister of Canada

We cannot hope to win a future war on the basis of manpower and resources. We will win it only through superior technology and superior strategy.

Maj Gen Orvil Anderson, USAF

Nothing ever changes in the basic nature of war. The constants stay constant.

Gen George C. Marshall, USA

To use the word defence would be misleading, because the word carries with it the idea of a thing to be defended, which would divert attention to local defence instead of fixing it on the force from which attack is to be expected.

Memorandum on Sea Power and the Principles Involved in It, Colonial Conference, 1902

If you wish for peace, understand war.

~Anonymous

In order for a war to be just, three things are necessary. First, the authority of the sovereign Secondly, a just cause Thirdly . . . a rightful intention.

Thomas Aquinas, Christian Saint

The purpose of all war is peace.

Augustine, Christian Saint

In a democracy like ours, wars are made by statesmen and fought by soldiers.

Newton D. Baker, Secretary of War, WWI

In war, there is no second prize for the runner-up.

Gen Omar N. Bradley, USA

In total war, it is quite impossible to draw any precise line between military and nonmilitary problems.

Winston Churchill

In wartime, truth is so precious that she should always be attended by a bodyguard of lies.

Winston Churchill

Arms are my ornaments, warfare my repose.

Don Quixote

Are bombs the only way of setting fire to the spirit of a people? Is the human will as inert as the past two world-wide wars would indicate?

Gregory Clark

War is a special violent form of political action.

Clausewitz

The destruction of the enemy is what always matters most.

Clausewitz

I don't know whether war is an interlude during peace, or peace is an interlude during war.

Georges Clemenceau

Wars are due to poverty, hunger, and barriers of trade, language, and in general, failure to understand the other fellow's viewpoint and his problems. These are the things that make dictators, who make wars.

Maj Gen Oliver P. Echols, USAAF

We cannot afford to lose a war regardless of cost.

Maj Gen Oliver P. Echols, USAAF

I don't know what will be used in the next world war, but the fourth will be fought with stones.

Albert Einstein

The essence of war is violence. Moderation in war is imbecility.

Adm John A. Fisher, Royal Navy

War is much too serious a matter to be entrusted to the military.

French Proverb

The art of war is simple enough. Find out where your enemy is. Get at him as soon as you can. Strike at him as hard as you can and as often as you can and keep moving on.

Gen Ulysses S. Grant, USA

Wartime equilibrium refers to that short period at the peak between rearmament instability and demobilizational instability when the war economy has been fully developed and crisis has been accepted as the norm. The other equilibrium is peacetime when money rather than time dominates.

Dr Robin Higham

The belief in the possibility of a short decisive war appears to be one of the most ancient and dangerous of human illusions.

Robert Lynd

It is fatal to enter any war without the will to win it.

Gen Douglas MacArthur, USA

The history of failure in war can be summed up in two words: TOO LATE, too late in comprehending the deadly purpose of a potential enemy, too late in realizing the mortal danger, too late in uniting all possible forces for resistance, too late in standing with one's own friends.

Gen Douglas MacArthur, USA

You must not fight too often with one enemy, or you will teach him all your art of war.

Napoleon

To withdraw is not to run away.

Miguel de Cervantes

Power is not revealed by striking hard or often, but by striking true.

Honore de Balzac

In war, we can come to the place where there is no tomorrow unless there is success today.

Dwight D. Eisenhower

The Civil War is not ended: I question whether any serious civil war ever does end.

Thomas Stearns Eliot

The tragedy of war is that it uses man's best to do man's worst.

Henry Emerson Fosdick

Even a believer in nonviolence has to say between two combatants which is less bad or whose cause is just.

Mahatma Gandhi

A time of conflict is a time for greatness—for men of knowledge, wisdom, dedication, and responsibility.

Gen Bruce K. Holloway, USAF

Older men declare war. But it is youth that must fight and die. And it is youth that must inherit the tribulation, the sorrow, and the triumphs that are the aftermath of war.

Herbert Hoover

The past is prophetic in that it asserts loudly that wars are poor chisels for carving out peaceful tomorrows.

Martin Luther King, Jr

War is, at first, the hope that one will be better off; next, the expectation that the other fellow will be worse off; then, the satisfaction that he isn't any better off; and, finally, the surprise at everyone's being worse off.

Karl Kraus

There is no such thing as an inevitable war. If war comes, it will be from failure of human wisdom.

Andrew B. Law

It is well that war is so terrible—we should grow too fond of it.

Gen Robert E. Lee, CSA

And then we said, too, that it was better that the war should end in a tie. Had there been a victory, we said, no matter by which side, the world would remember that a victory was possible, and be about the hideous business again sometime.

Eugene P. Lyle, Jr

Politics is war without bloodshed while war is politics with bloodshed.

Mao Tse-tung

In war, there are no unwounded soldiers.

Jose Narosky

If your country's worth living in, it's worth fighting for . . . you can't fight a war without losing lives. Although no one wants killing, sometimes it has to be. To keep your country free sometimes you have to fight and die. It was to be a great honour to us.

*Shankill Road, 1916 Somme victim of the
36th (Ulster) Division*

We are not retreating—we are advancing in another direction.

Gen Douglas MacArthur, USA

War must have a political objective, it must result in a more peaceful world. If it does not, we merely substitute one enemy for another.

Field Marshal Viscount Robert L. Montgomery

It is a well-established maxim of war never to do what the enemy wishes you to do.

Napoleon

No man can think clearly when his fists are clenched.

George Jean Nathan

May God have mercy upon my enemies, because I won't.

Gen George S. Patton, Jr, USA

Wars may be fought with weapons, but they are won by men.

Gen George S. Patton, Jr, USA

To inquire if and where we made mistakes is not to apologize. War is replete with mistakes because it is full of improvisations. In war, we are always doing something for the first time. It would be a miracle if what we improvised under the stress of war should be perfect.

Adm Hyman G. Rickover, USN

War is cruelty. There is no use trying to reform it. The crueler it is, the sooner it will be over.

Gen William T. Sherman, USA

Service in the Armed Forces is a duty and a privilege

John O. Marsh, Jr., Secretary of the Army

I am tired and sick of war. Its glory is all moonshine. It is only those who have neither fired a shot, nor heard the shrieks and groans of the wounded who cry aloud for more blood, more vengeance, more desolation. War is hell.

Gen William T. Sherman, USA

Modern wars are fought by entire populations.

Gen Carl A. Spaatz, USAF

It will be all right if it turns out all right.

Gen Ulysses S. Grant, USA

The supreme excellence is not to win a hundred victories. The supreme excellence is to subdue the armies of your enemies without having to fight them.

Sun Tzu

War, therefore, is an act of violence to compel our opponent to fulfil our will.

Clausewitz

No army can be efficient unless it be a unit for action; and the power must come from above, not from below

Gen William T. Sherman, USA

“Not in vain” may be the pride of those who survived and the epitaph of those who fell.

Winston Churchill

Nothing is easy in war. Mistakes are always paid for in casualties, and troops are quick to sense any blunder made by their commanders.

Dwight D. Eisenhower

Rapidity is the essence of war; take advantage of the enemy’s unreadiness, make your way by unexpected routes, and attack unguarded spots.

Sun Tzu

There are only three principles of warfare—audacity, audacity, and AUDACITY!

Gen George S. Patton, Jr, USA

There never was a good war or a bad peace.

Benjamin Franklin

The sinews of war are infinite money.

Marcus Tullius Cicero

The enemy says that Americans are good at a long shot but cannot stand the cold iron. I call upon you instantly to give a lie to the slander. Charge!

Gen Winfield Scott, USA

My religious belief teaches me to feel as safe in battle as in bed. God has fixed the time for my death. I do not concern myself about that, but to always be ready, no matter when it may overtake me.

Gen Thomas J. "Stonewall" Jackson, CSA

It has never been politically desirable to determine the value of a casualty.

Gen Carter B. Magruder, USA

Find the enemy and shoot him down, anything else is nonsense.

Manfred Baron von Richthofen

We don't want any more wars, but a man is a damn fool to think there won't be any more of them. I am a peace-loving Quaker, but when war breaks out every damn man in my family goes. If we're ready, nobody will tackle us

Smedley Butler

Never in the field of human conflict was so much owed by so many to so few.

Winston Churchill

Wars frequently begin 10 years before the first shot is fired.
K.K.V. Casey, Testimony of DuPont director to the Nye-Vandenburg Investigations

In war, Resolution; in defeat, Defiance; in victory,
Magnanimity.

Winston Churchill

We will either find a way or make one.

Hannibal

Philanthropic souls might easily imagine that there is an artistic way of disarming or overthrowing our adversary without too much bloodshed and that this was what the art of war should seek to achieve. However agreeable this may sound, it is a false idea which must be demolished. In affairs so dangerous as war, false ideas proceeding from kindness of heart are precisely the worst.

Clausewitz

War is a series of catastrophes which result in victory.

Georges Clemenceau

No soldier starts a war—they only give their lives to it. Wars are started by you and me, by bankers and politicians, excitable women, newspaper editors, clergymen who are ex-pacifists, and Congressmen with vertebrae of putty. The youngsters yelling in the street, poor kids, are the ones who pay the price.

Francis P. Duffy

I hate war as only a soldier who has lived it can, only as one who has seen its brutality, its futility, its *stupidity*.
Dwight D. Eisenhower

Nothing is more important than to war on war.
Leo XIII

War cannot be divorced from politics for a single moment.
Mao Tse-Tung

When war is declared, Truth is the first casualty.
Arthur Ponsonby

Worse than war is the fear of war.
Seneca (the Younger), Thyestes

You cannot qualify war in harsher terms than I will. War is cruelty, and you cannot refine it.
Gen William T. Sherman, USA

Our peace must be a peace of victors, not of the vanquished.
Marshal of France Ferdinand Foch

Another such victory and we are undone.
Pyrrhus

Get 'em skeered, and then keep the skeer on 'em.
Gen Nathan Bedford Forrest, CSA

Nobody should be in doubt that war stands between our prevailing need and our coming fortune. But war is today no more a fresh and frolicsome campaign, with regimental music and victorious colors and a cornucopia of decoration; it is a bloody battle, and in particular a contest of *materiel*

Ewald Banse

In combat, actions taken to drive up the adversary's friction are as vital to success as those taken to minimize your own.

Lt Col Barry D. Watts, USA

. . . and to the planning of future expenditures so as to buy the most with the least.

Gen Benjamin W. Chidlaw, USAF

The army used to have all the time in the world and no money; now we've got all the money and no time.

Gen George C. Marshall, USA



PEACE

No responsible member of the Armed Forces desires anything so much as an enduring peace in which ultimately military establishments can with safety be regulated and reduced.

Gen Samuel E. Anderson, USAF

*The more you
sweat peace, the
less you bleed in
war.*

*Adm Hyman G.
Rickover, USN*

Reconciliation should be accompanied by justice; otherwise, it will not last. While we all hope for peace, it shouldn't be peace at any cost but peace based on principle, on justice.

Corazon Aquino

The people who remained victorious were less like conquerors than conquered.

St Augustine, Christian Saint

I like to believe that people in the long run are going to do more to promote peace than our governments. Indeed, I think that people want peace so much that one of these days governments had better get out of the way and let them have it.

Dwight D. Eisenhower

5

C H A P T E R

One thing stands out clearly against the background of my experience: the winning of peace is much more difficult than the winning of even a global war The principles of yesterday no longer apply. Air travel, airpower, air transportation of troops and supplies have changed the whole picture. We must think in terms of tomorrow Let us give the people of the United States the best, the most efficient, the most modernly equipped armed forces possible, using as determining factors, our foreign policy and the capabilities and limitations of our enemies.

Gen Henry H. Arnold, USAAF

No more wars, no more bloodshed. Peace unto you.
Shalom, salaam, forever.

Menachem Begin

The pens which write against disarmament are made with the same steel from which guns are made.

Aristide Briand

Those who can win a war well can rarely make a good peace, and those who could make a good peace would never have won the war.

Winston Churchill

We must be prepared to make heroic sacrifices for the cause of peace that we make ungrudgingly for the cause of war. There is no task that is more important or closer to my heart.

Albert Einstein

We seek peace, knowing that peace is the climate of freedom.

Dwight D. Eisenhower

The peace we seek, founded upon decent trust and cooperative effort among nations, can be fortified—not by weapons of war—but by wheat and by cotton; by milk and by wool; by meat and by timber; and by rice.

Dwight D. Eisenhower

The first human being who hurled an insult instead of a stone was the founder of civilization.

Sigmund Freud

The pursuit of peace and progress cannot end in a few years in either victory or defeat. The pursuit of peace and progress, with its trials and errors, its successes and setbacks, can never be relaxed and never abandoned.

Dag Hammarskjold, UN General Secretary

Every man ought to endeavor Peace, as farre as he has hope of obtaining it; and when he cannot obtain it, that he may seek, and use, all helps, and advantages of Warre

Thomas Hobbes

Peace is not merely a distant goal that we seek, but a means by which we arrive at that goal.

Martin Luther King, Jr

Nobody dislikes war more than warriors, but we value the causes of peace so highly that we will not duck a war in an effort to get a lasting peace.

Gen Daniel "Chappie" James, Jr, USAF

We must have a wider choice than humiliation or all-out nuclear act

John F. Kennedy

It is an unfortunate fact that we can secure peace only by preparing for war.

John F. Kennedy

Make peace you fools!

Field Marshal Karl von Rundstedt

But peace does not rest in the charters and covenants alone. It lies in the hearts and minds of all people. So let us not rest all our hopes on parchment and on paper, let us strive to build peace, a desire for peace, a willingness to work for peace in the hearts and minds of all of our people. I believe that we can. I believe the problems of human destiny are not beyond the reach of human beings.

John F. Kennedy

If they want peace, nations should avoid the pin-pricks that precede cannon shots.

Napoleon

SUPPLY

Surely one of the strangest things in military history is the almost complete silence upon the problem of supply.

G. C. Shaw

The fate of any army may depend on a buckle.

*Maj Gen
George H. Thomas*

Sure we paid We would have paid horse prices for sheep if sheep could have pulled artillery It's all right now to say we bought too much vinegar or too many cold chisels, but we saved the civilization of the world Hell and Maria, we weren't trying to keep a set of books. We were trying to win a war.

Brig Gen Charles G. Dawes, USA

There must be great care taken to send us munitions and victual withersoever the enemy goeth.

Francis Drake

You realize when shoeing the horse that the shoe may be thrown—possibly causing the horse to run, so you have a mule on standby to get the rider to war.

Capt John P. Laverdure, USAF

6

The onus of supply rests equally on the giver and the taker.

Gen George S. Patton, Jr, USA

C H A P T E R

The supply of armies seldom receives the plaudits of the crowd. It lacks the glamour, the dramatics of action on the battlefield. Great quartermasters die almost unnoticed; none of us, I suppose, could say who Napoleon's Chief of Supply was. Yet an army can never be better than its supply system.

Robert P. Patterson, Secretary of War

If you don't have my army supplied, and keep it supplied, we'll eat your mules up, sir.

Gen William T. Sherman, USA

What makes the general's task so difficult is the necessity of feeding so many men and animals. If he allows himself to be guided by the supply officers, it will never work and his expedition will fail.

Napoleon

Without supplies no army is brave.

Frederick the Great

Protection must be afforded to the sutlers, especially in a country whose inhabitants are fled, and where provisions cannot be had for money. At such a time we are justified in not being over nice with respect to the peasantry.

Frederick the Great

What I want to avoid is that my supplies should command me.

Comte de Guibert

If quartermasters and civilian officials are left to take their own time over the organization of supplies, everything is bound to be very slow. Quartermasters often tend to work by theory and base all their calculations of precedent, being satisfied if their performance comes up to the standard which this sets. This can lead to frightful disasters when there is a man on the other side who carries out his plans with greater drive and thus greater speed.

Field Marshal Erwin Rommel

So long as the fleet is able to face the enemy at sea, communications mean, essentially, not geographical lines . . . but supplies which the ships cannot carry in their own hulls beyond a limited amount.

Alfred Thayer Mahan

Supply cannot be achieved without command.

Winston Churchill

Without supplies neither a general nor a soldier is good for anything.

Clearchus of Sparta, 401 BC

Without supplies, no army is brave.

Frederick the Great

You can't have any more of anything than you can haul.

Col Monroe Johnson, USA

The commander who fails to provide his army with necessary food and other supplies is making arrangements for his own defeat, even with no enemy present.

The Emperor Maurice, 600

[Supply] forms the basis on which rests the whole structure of war; it is the very foundation of Tactics and Strategy.

G. C. Shaw

In my opinion, there is no one single piece of foresightedness that helped our war effort more than the policy that kept our depots intact and operating on an efficient basis.

Maj Gen Oliver P. Echols, USAAF



TECHNOLOGY

I see no reason why the range of the military aeroplane should ever exceed 3 days' march by infantry.

World War I General Officer

Knowledge is power!

Francis Bacon

We are living in a fast-moving age where today's fantasy becomes tomorrow's reality.

Gen William F. McKee, USAF

Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur.

Giulio Douhet

The changing conditions of war can always be anticipated by the engineer or the drafting board or the procurement agencies of the government Certain designs . . . have to be maintained in a partially flexible state to permit incorporation of features necessary to counter the enemies' innovation in the art of warfare.

Maj Gen Oliver P. Echols, USAAF

In the 21st century, technology will make it possible to find, fix or track, and target anything that moves on the surface of the Earth.

Gen Ronald R. Fogleman, USAF

7

C H A P T E R

We hear stories that the next war will be fought with atom bombs and the one after that with bows and arrows—or another version is that the next war will be fought with atomic missiles and the one after that will be interplanetary.

Maj Gen Oliver P. Echols, USAAF

The only thing harder than getting a new idea into a military mind is getting an old one out.

B. H. Liddell Hart

There is nothing permanent except change.

Heraclitus of Greece, 513 BC

Since the character of contemporary weapons is such that their production as well as their use can dislocate whole economies, it is probably not too much to suggest that the survival of entire cultures may hinge upon an ability to perfect superior weapons and exploit them fully. Survival itself, then, appears to depend on speed in both the development and the utilization of weapons.

I. B. Holley, Jr

Change is not necessarily progress, but there can be very little progress without change.

Gen Bruce K. Holloway, USAF

We must adjust our minds and our methods to the fact that weapons of war are subject to continuous change.

*O. E. Hunt, Vice President,
General Motors, 1942*

The Great Wall of China is no longer a protection to anyone; it is a monument to the dead who built it!

Maj Gen Alfred F. Kalberer, USAF

Nothing is more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things.

Machiavelli

The largest problem I see is getting people to acknowledge the “ultimatum” nature of Air Force R&M 2000. Many skeptics are pondering the question, “Why this time when many previous efforts floundered?”

The answer, in my mind, is very simple. We are saddled with a force structure and support infrastructure that we have inherited from the realities of a different era, one where sanctuary and an abundance of people were given. The world is not the same, and we must react to that reality now.

Lt Gen Robert P. McCoy, USAF

Man—with his brain, his will, and his soul—is not going to be replaced by mechanical miracles.

Gen William F. McKee, USAF

There cannot be a revolution in military affairs without there first being a revolution in military logistics.

Gen Dennis J. Reimer, USA

You can't say civilizations don't advance . . . in every war they kill you in a new way.

Will Rogers

A new idea must have three qualities:

First, it must have dynamic novelty to spark the imagination; something never tried before. It must overcome the entrenched opposition.

Second, it must be feasible of fulfillment, by new means either available or potential.

Third, it must promise overwhelming capacity to alter the course of history.

Gen Carl A. Spaatz, USAF

The hardest thing to change is organizations that have been successful and have to change anyway.

John White, Deputy Secretary of Defense

New conditions require, for solution—and new weapons require, for maximum application—new and imaginative methods. Wars are never won in the past.

Gen Douglas MacArthur, USA

The creative leader is the one who will rewrite doctrine, employ new weapons systems, develop new tactics and who pushes the state of the art.

John O. Marsh, Jr, Secretary of the Army

You can see things, and you say, “Why?” but I see things that never were and I say, “Why not?”

George Bernard Shaw

Weapons change but man who uses them changes not at all.

*Gen George S. Patton, Jr,
letter to his son, 6 June 1944*

Prejudice against innovation is a typical characteristic of an Officer Corps which has grown up in a well-tryed and proven system.

Field Marshal Erwin Rommel

Science is in the saddle. Science is the dictator, whether we like it or not. Science runs ahead of both politics and military affairs. Science evolves new conditions to which institutions must be adapted. Let us keep our science dry.

Gen Carl M. Spaatz, USAF

I was told by Mr Charles King, when president of Columbia College, that he had been present in company with [Admiral Stephen] Decatur at one of the early experiments in steam navigation. Crude as the appliances still were, demonstration was conclusive and Decatur, whatever his prejudices, was open to conviction. "Yes," he said gloomily, to King, "it is the end of our business; hereafter any man who can boil a tea-kettle will be as good as the best of us."

Alfred Thayer Mahan

Obsolete weapons do not deter.

Margaret Thatcher

The problem with deep, fast, and rampant innovation is not getting people to accept the new but to surrender the old. Most will flirt with the future, but few want to embrace it at the expense of the comfortable past.

Adm William A. Owens, USN

The distinguishing feature of the development of the means of armed combat, under present day conditions is the appearance of qualitatively new types of weapons and military equipment and their rapid mass introduction in the armed forces, which sharply increased in fighting capabilities of the latter and led to a fundamental break in the organization forms of the armed forces and the means for carrying out military operations in every scale. In military strategy, in military art, in military affairs as a whole, a revolution has taken place.

*Marshal of the Soviet Union
V.D. Sokolovsky*

The past had its inventions and when they coincided with a man who staked his shirt on them the face of the world changes. Scythes fixed to the axles of war chariots; the moving towers which overthrew Babylon; Greek fire; the short bow, the cross-bow, the Welsh long bow and ballistra; plate armour, the Prussian needle gun the Merrimac and Ericsson's marvellous coincidental reply. The future is pregnant with invention

Gen Sir Ian S. Hamilton, Royal Army

The historical examples of experience are the products of men.

Maj Gen Orvil Anderson, USAF

We cannot hope to win a future war on the basis of manpower and resources. We will win it only through superior technology and superior strategy.

Maj Gen Orvil Anderson, USAF

AIRPOWER

The only real security upon which our military principles can rely is that you must be master of your own air.

Winston Churchill

Why can't we buy just one aeroplane and let the aviators take turns flying it?

Calvin Coolidge

Sir, the Air Force can deliver anything.

Maj Gen Curtis E. LeMay, USAF

There is no such thing as an all-purpose airplane.

Maj Gen Oliver P. Echols, USAAF

If we lose the war in the air, we lose the war, and we lose it quickly.

Field Marshal Viscount Bernard L. Montgomery

Without copper, America could not hope for aerial supremacy. And without aerial supremacy, the war is lost.

Maj Gen Oliver P. Echols, USAAF

A good landing was a landing in which the pilot could walk away from the airplane.

*Maj Gen Benjamin D. Foulois,
US Army Air Corps*



Don't take the machine into the air unless you are satisfied it will fly.

Never leave the ground with the motor leaking.

Don't turn sharply when taxiing. Instead of turning short, have someone lift the tail around.

Never get out of the machine with the motor running until the pilot relieving you can reach the engine controls.

Pilots should carry hankies in a handy position to wipe off goggles.

Riding on the steps, wings, or tail of a machine is prohibited.

Do not trust altitude instruments.

If you see another machine near you, get out of its way.

No machine must taxi faster than a man can walk.

Before you begin a landing glide, see that no machines are under you.

Hedgehopping will not be tolerated.

No spins on back or tail slides will be indulged in, as they unnecessarily strain the machine.

Pilots will not wear spurs while flying.

If an emergency occurs while flying, land as soon as possible.

Rules presented by Lockheed Southern Star in 1920

After some 2 years with the Air Service in the AEF and a year or so at Kelly Field, I thought that airplanes came from Sears-Roebuck—right out of the catalogue—or else the stork brought them—I wasn't sure which and didn't care too much.

Maj Gen Oliver P. Echols, USAAF

Space has given a new dimension to our problems as well as a new dimension to our opportunities.

Gen William F. McKee, USAF

The unique characteristics of air and space power—speed, range, flexibility, precision and global perspective—will result in our nation’s leaders often turning to the Air Force as the first weapon of choice in a crisis or conflict. Our people must be intellectually prepared to respond with war-winning air and space capabilities.

Gen Ronald R. Fogleman, USAF

The nation expects the Air Force, as the air and space experts, to be prepared to defend US interests in space when necessary.

Gen Ronald R. Fogleman, USAF

Air superiority is not the God-given right of Americans. It doesn’t just happen. It takes a lot of people working hard to produce the capabilities that provide it for US forces.

Gen Ronald R. Fogleman, USAF

His being out there on the end of a rope reminds me of my second flight when I needed a rope just to hold me into the plane.

*Maj Gen Benjamin D. Foulois,
US Army Air Corps*

I made my first solo, my first landing, and my first crackup—all the same day.

*Maj Gen Benjamin D. Foulois,
US Army Air Corps*

The missile will never replace the man.

Gen William F. McKee, USAF

I found it necessary to spend some \$300 out of my own pocket in order to keep US Army Airplane No. 1 in the air.

*Maj Gen Benjamin D. Foulois,
US Army Air Corps*

I can't understand why the tactical air forces of the United States, in an era which we're sending people to the moon, can't fight when the weather is bad.

Lyndon B. Johnson

If we maintain our faith in God, love of freedom and superior global airpower, the future of America looks pretty good.

Gen Curtis E. LeMay, USAF

The hallmark of airpower in every war since airpower's emergence has been mission flexibility—and that flexibility is being eroded away by dependence on highly trained specialists and complex intermediate shops. You must reckon with this reality as you bring on board the systems of the future. People and expensive training are no longer easily replenished resources.

Lt Gen Leo Marquez, USAF

. . . aerospace describes the continuous and indivisible operational medium which extends outward from the space of the globe.

Gen William F. McKee, USAF

We cannot allow space to be dominated by those who would use it to dominate earth.

Gen William F. McKee, USAF

We Americans had developed the best system of air fighting that the world had ever seen.

*Brig Gen William "Billy" Mitchell,
US Army Air Corps*

Our capacity to rapidly project power over long distances has been a godsend to our allies, and has struck fear in the hearts of our adversaries.

F. Whitten Peters, Secretary of the Air Force

The interesting thing is that now you will never hear about airpower separately from space power. When the Air Force talks about what it brings to the [joint] fight, the first thing is air and space power. The bottom line is, everything on the battlefield is at risk without air and space superiority.

Gen Thomas S. Moorman, Jr, USAF

. . . Allied Force remains the most accurate air campaign in history, but it was a logistics masterpiece that orchestrated the opening and operation of 20 barebases and the beddown and maintenance of more than 1,000 US and allied fighters, bombers, support and reconnaissance aircraft, and helicopters.

F. Whitten Peters, Secretary of the Air Force

The enemy air superiority is terrific and smothers almost every one of our movements. Every movement of the enemy, however, is prepared and protected by its air force. Losses in men and equipment are extraordinary.

Field Marshal Gunther von Kluge

Aerospace: a word without hyphenation or discontinuity, which says that airpower and space power are indivisible or that the latter is an unavoidable extension of the former.

Gen Thomas D. White, USAF

Airpower may be considered as an indivisible trinity of air force, air commerce, and air industry.

Maj Gen James F. Whisenand, USAF

The layman tends to associate air superiority with destruction of enemy aircraft . . . it is not the only approach. A potentially vulnerable sequence of events (the aircraft chain) must take place before an aircraft fires a missile or drops a bomb . . . it is possible to eliminate an air force by successful attacks on any point in this chain.

Col John Warden III, USAF

It is probable that future war will be conducted by a special class, the air force, as it was by the armored knights of the middle ages.

*Brig Gen William "Billy" Mitchell,
US Army Air Corps*

Perhaps the failure of the German airlift at Stalingrad was one of the factors in the early Russian reaction to the American-British airlift into Berlin. The Russians had never had an airlift themselves, and they didn't take ours seriously until it was too late The Russians did not understand instrument flying themselves and therefore did not believe that we could maintain the airlift during the long European winter.

Lt Gen William H. Tunner, USAF

Airpower is the ability to do something in or through the air, and, as the air covers the whole world, aircraft are able to go anywhere on the planet Aircraft have set aside all ideas of frontiers

*Brig Gen William "Billy" Mitchell,
US Army Air Corps*

The military mind always imagines that the next war will be on the same lines as the last. That has never been the case and never will be. One of the great factors in the next war will be aircraft obviously.

Marshal of France Ferdinand Foch

I have a mathematical certainty that the future will confirm my assertion that aerial warfare will be the most important element in future wars, and that in consequence not only will the importance of the independent Air Force rapidly increase, but the importance of the army and navy will decrease in proportion.

Giulio Douhet

The advent of airpower, which can go straight to the vital centers and either neutralize or destroy them, has put a completely new complexion on the old system of making war. It is now realized that the hostile main army in the field is a false objective, and the real objectives are the vital centers.

*Brig Gen William "Billy" Mitchell,
US Army Air Corps*

Tom, you've never believed in air. Never get out from under the air umbrella; if you do, you'll be for it. And as you flutter up to heaven all you'll say is—"My gosh, some sailor laid a hell of a mine for me!"

*Air Marshal Sir Arthur Harris to
Adm Tom Phillips, 1947*

Whereas to shift the weight of effort on the ground from one point to another takes time, the flexibility inherent in air forces permits them without change of base to be switched from one objective to another in the theatre of operations.

Field Marshal Viscount Bernard L. Montgomery

To conquer the command of the air means victory; to be beaten in the air means defeat and acceptance of whatever terms the enemy may be pleased to impose.

Giulio Douhet

In our victory over Japan, airpower was unquestionably decisive. That the planned invasion of the Japanese Home islands was unnecessary is clear evidence that airpower has evolved into a force in war co-equal with land and sea power, decisive in its own right and worthy of the faith of its prophets.

Gen Carl A. Spaatz, USAF

One of the outstanding characteristics of air-power proved to be its flexibility and the terrific concentration made possible by a unified air command—a unity only achieved by a faith born of mutual understanding between all branches and ranks of the air forces.

Air Chief Marshal Lord Tedder, RAF

Air warfare cannot be separated into little packets; it knows no boundaries on land and sea other than those imposed by the radius of action of the aircraft; it is a unit and demands unity of command.

Air Chief Marshal Lord Tedder, RAF

Anyone who has to fight, even with the most modern weapons, against an enemy in complete command of the air, fights like a savage against modern European troops, under the same handicaps and with the same chances of success.

Field Marshal Erwin Rommel

Because of its independence of surface limitations and its superior speed—superior to any other known means of transportation—the airplane is the offensive weapon par excellence.

Giulio Douhet

The idea that superior air power can in some way be a substitute for hard slogging and professional skill on the ground in this sort of war is beguiling but illusory. Air support can be of immense value to an army; it may sometimes be its salvation. But we must have a care not to misread the lessons of . . . the closing years of World War II. The truth that we should take to heart is that armies can fight—and not only defensively—in the face of almost total air superiority . . . All this is cold comfort for anyone who hopes that airpower will provide some cheap short cut to victory.

Air Marshal Sir John Slessor, RAF

Air strikes are so tempting, so swift, so seemingly surgical. We might be able to win a war by air, though, so far, no one had. “The trouble with airpower,” I had warned the President, “is that you leave the initiative in the hands of your enemy. He gets to decide when he’s had enough.” We were planning a full campaign—air, land, sea, and space—to remove the decision from Saddam’s hands.

Gen Colin Powell, USA

The airplane has complete freedom of action and direction; it can fly to and from any point of the compass in the shortest time—in a straight line—by any route deemed expedient. Nothing man can do on the surface of the earth can interfere with a plane in flight, moving freely in the third dimension. All the influences which have conditioned and characterized warfare from the beginning are powerless to affect aerial action.

Giulio Douhet

During periods of apparent calm, it is only prudent to maintain a watchful and inquisitive eye on the technical horizon, probing for those rare discoveries and advancements in technology that would give either side a strategic advantage if exploited.

Gen William F. McKee, USAF

READINESS

You may favor peace, but did you ever see anybody escape a tornado by merely favoring good weather.

Lion

A man without a stick will be beaten even by a sheep.

Hindu Proverb

The success of future military alliances or coalitions will depend on a degree of cooperation that goes beyond a “division of labor.” It will require developing and implementing common doctrine, training, and the ability to operate smoothly as a combined, integrated force, much as the US military services operate jointly today.

National Defense Panel, 1997

We did not train as we actually went to war.

*Describing Vietnam, Just Cause,
and Urgent Fury*

You can't expect the Rapid Reaction Force to be ready immediately.

*Military spokesman on
preparations for IFOR*

*To be prepared
for war is one of
the most
effectual means
of preserving
peace.*

*George
Washington*



C H A P T E R

National security is endangered by an Air Force whose doctrine and techniques are tied solely to the equipment and processes of the moment. Present equipment is but a step in progress, and any air force which does not keep its doctrines ahead of its equipment, and its vision far into the future can only delude the nation into a false sense of security.

Gen Henry H. Arnold, USAAF

Training is not a luxury; it's a necessity!

Col Gary Buis

To be prepared is half the victory.

Miguel de Cervantes

We are unable to buy back time with dollars.

Gen Benjamin W. Chidlaw, USAF

The months slip by rapidly. If we delay too long in repairing our defences, we may be forbidden by superior power to complete the process.

Winston Churchill

What does the future hold? No one knows, but I do know that the F-15 sitting cocked and ready to defend freedom is a useless piece of equipment without the human to maintain it and fly it. This applied equally to ships, tanks, and all other military equipment.

Gen Charles L. Donnelly, Jr, USAF

Deterrence doesn't work when it relies on ambiguous, halfway measures. Deterrence requires a likelihood of real punishment, a genuine capability, and a will to hurt an aggressor.

Gen Russell E. Dougherty, USAF

The programs of training and exercises form the final test of logistics readiness. Since the majority of junior officers and enlisted men in the logistics services are specialized in a technical field, sound technical training is their fundamental preparation for war. In addition, however, specific attention must be paid to the development of fundamental discipline, leadership, and personal versatility which are so vital to efficient service under wartime conditions.

Adm Henry E. Eccles, USN

No study is possible on the battlefield; one does simply what one can in order to apply what one knows.

Marshal of France Ferdinand Foch

Covenants without swords are but words.

Thomas Hobbes

Only when our arms are sufficient beyond doubt can we be certain beyond doubt that they will never be employed.

John F. Kennedy

Peace must be enforced, and weakness never enforced anything.

Gen William F. McKee, USAF

To prepare for war in time of peace is impracticable to commercial representative nations, because the people in general will not give sufficient heed to military necessities or to international problems to feel the pressure which induces readiness.

Alfred Thayer Mahan

You win not by chance, but by preparation.

Roger Maris, Baseball Player

Deterrence is the effect produced in the minds of potential enemies when they understand the enormous striking power of our military forces and when they understand that it is our national will and intention to use this striking force swiftly and decisively if the need should arise.

Gen William F. McKee, USAF

Those who expect to reap the blessings of freedom must like men, undergo the fatigue of supporting it.

Thomas Paine

Our security is not a matter of weapons alone. The arm that wields them must be strong, the eye that guides them clear, the will that directs them indomitable.

Franklin D. Roosevelt

The art of war teaches us to rely not on the likelihood of the enemy not coming, but on our own readiness to receive him

Sun Tzu

There is rank due to the United States among nations, which will be withheld, if not absolutely lost, by the reputation of weakness—if we desire to avoid insult, we must be ready to repel it; if we desire to secure peace, one of the most powerful institutions of our rising prosperity, it must be known that we are at all times ready for war.

George Washington

The intensity of that war serves to underline the need for holding large stocks of expensive war materials if one is contemplating war or intending to deter a potential aggressor. Such stocks offer little appeal to most politicians with their eyes on the electorate; not to those who wish to cut defense spending for moral or economic reasons, or, indeed, to those who wish to be seen to have their country's defense interests at heart, by building up the shop window with men and equipment. All too often, that shop window has pitifully small stocks of war reserves behind it, simply because to cut back on the holdings of war reserves represents an easy and invisible path to economy. Yet, to deter, stocks need not only to exist but be seen to exist.

Maj Gen Julian Thompson, Royal Marines

God grants liberty only to those who live it and are always ready to guard and defend it.

Daniel Webster

Better people, more and better equipment, better training and sustainment, and solid support from the Congress and the American people . . . means improved force readiness.

Gen John A. Wickham, USA

Again and again, we have owed peace to the fact that we were prepared for war.

Theodore Roosevelt

We can do without butter, but, despite all our love of peace, not without arms. One cannot shoot with butter, but with guns.

Josef Goebbels

There must be no tendency to excuse incomplete readiness for war on the premise of future acquisition of trained personnel or modernized material . . . personnel shall be trained and rendered competent . . . existing material shall be maintained and utilized at its maximum effectiveness at all times.

Adm E. J. King, USN

I think the necessity of being ready increases. Look to it.

Abraham Lincoln

When a crisis hits, the forces must go to war as they are, not as they'd like to be.

F. Clinton Berry

Lean forward. It's always better to fall on your face than on your backside.

Mathew Cox

Experience has taught me that manufacturers are now as necessary to our independence as to our comfort.
Thomas Jefferson

10

CHAPTER

MOBILIZATION

We must assume that if future aggressor nations have learned anything from World Wars I and II it will be that they must never let the US industrial power get under way. They must destroy it at the outset if they are to win.

*“Survival in the Air Age,”
President’s Air Policy Commission,
3 January 1948*

Our military programs must always be geared in delicate balance with the civilian economy.

Gen Benjamin W. Chidlaw, USAF

Perhaps the most significant lesson of World War II is that the military potential of a nation is directly proportional to the nation’s logistic potential. The first hard fact to be faced in applying that lesson is that our resources are limited. The next is that the slightest delay or inefficiency in harnessing our logistic resources may cost us victory.

Gen Orval R. Cook, USAF

Defense is a form of continuing national mobilization, because military power is but one element of an indivisible whole.

Gen Bruce K. Holloway, USAF

Let nothing swerve you from the American policy of highest quality in the greatest abundance of which your best efforts are capable, to the end that our way of life may prevail and our nation maintain its position of leadership in the upward march of civilization.

Maj Gen Oliver P. Echols, USAAF

I want to make it clear that it is the purpose of the nation to build now with all possible speed every machine, every arsenal, every factory that we need to manufacture our defense material. We have the men—the skill—the wealth—and above all the will.

Franklin D. Roosevelt

. . . economic capabilities limit the combat forces which can be created. At the same time logistic capabilities limit the forces which can be employed in combat operations. Thus, it is obvious that economic-logistic factors determine the limits strategy. The economic art of industrial mobilization is related to the grand strategy. The operational logistics action is related to specific strategic plans and to specific tactical operations.

Adm Henry E. Eccles, USN

As the link between the war front and the home front, the logistic process is at once the military element in the nation's economy and the economic element in its military operations.

Duncan S. Ballantine

World War II was a logisticians war. Its outstanding characteristics were the totality with which manpower and resources were mobilized and the vigor with which the belligerents attempted to destroy each other's material resources for war.

*Dir of the Service, Supply, and Procurement Div,
War Dept Gen Staff*

I want to tell you from the Russian point of view, what the President and the United States have done to win the war. The most important things in this war are machines The United States . . . is a country of machines. Without the use of those machines . . . we would lose this war.

Joseph Stalin



CONTRACTING

If contractors leave their jobs during a crisis or hostile situation, the readiness of vital defense systems and the ability of the Armed Forces to perform their assigned missions would be jeopardized.

DoD Inspector General, 1991

Competition is the greatest spur to action and accomplishment that the human race has ever discovered.

O. E. Hunt, Vice President, General Motors

If the old adage that war is too important to be left to the generals holds a nugget of truth, it is also true that military privatization is too important to be left to civilian accountants.

Col R. Philip Deavel, USAF

If support personnel, from flight surgeons to mechanics, are effectively told their services are needed only if they cost out at less than the private sector equivalents, is it realistic to expect they will place service before self in assessing the loyalty they owe the DoD?

Col R. Philip Deavel, USAF

The award-term incentive is a genuine innovation and one with great potential to forever alter the landscape of Government service contracting.

Vernon J. Edwards



C H A P T E R

We are proceeding into the future with astonishing velocity, so we have to continue tearing down archaic barriers and burdens, and harness the full potential of private industry, and to continue to answer enduring challenges with novel solutions. That's really the spirit behind defense and acquisition reform.

William S. Cohen, Secretary of War

I have encountered many illustrations of the advantages to the United States of local procurement overseas . . . the use of local labor was of major importance in reducing requirements for American logistics troops.

Gen Carter B. Magruder, USA

. . . effective procurement for national defense calls for a high order of leadership. Those who buy the nation's armament must develop sound political insight, a keen understanding of the arts of organization, and, no less than the officers who lead troops in the field, must display unusual courage.

I. B. Holley, Jr

We expect to achieve greater successes from every person, dollar, and hour we expend to acquire and sustain our current and new weapon systems.

Darleen Druyun, Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management

New terms came into the aviation language—mass production, tooling up, freezing designs—and our old enemy “no more change orders” reared its ugly head.

Maj Gen Oliver P. Echols, USAAF

. . . and to the planning of future expenditures so as to buy the most with the least.

Gen Benjamin W. Chidlaw, USAF

I look to you not only to protect your country but to protect your country's purse

Lyndon B. Johnson



TRANSPORTATION

We have learned and must not forget that, from now on, air transport is an essential of airpower, in fact, of all national power.

Gen Henry H. Arnold, USAAF

A [soldier] has one item that can't be neglected. His feet. They are his wheels, his mechanised warfare.

Leon Uris

In a tale of war, the reader's mind is filled with the fighting. The battle—with its vivid scenes, its moving incidents, its plain and tremendous results—excites imagination and commands attention. The eye is fixed on the fighting brigades as they move amid the smoke, on the swarming figures of the enemy, on the general, serene and determined, mounted in the middle of his staff. The long trailing line of communications is unnoticed. The fierce glory that plays on red, triumphant bayonets dazzles the observer, nor does he care to look behind to where, along a thousand miles of rail, road, and river, the convoys are crawling to the front in uninterrupted succession. Victory is the beautiful, bright coloured flower. Transport is the stem without which it could never have blossomed.

Winston Churchill

Build no more fortresses, build railways.

Field Marshal Helmuth von Moltke

12

C H A P T E R

It is this beat, this precise rhythmical cadence, which determines the success of an airlift. This steady rhythm, constant as the jungle drums, became the trademark of the Berlin Airlift, or any airlift I have operated.

Lt Gen William H. Tunner, USAF

Even if an entirely new and unprecedentedly effective means of transport were to appear tomorrow, it is to be expected that only a small fraction of its maximum theoretical capacity will ever be utilized in practice, and that its effect on the speed of mobile operations will therefore be marginal.

Martin van Creveld

. . . courage would have availed nothing without the patient toil, continued day and night, to the last limit of their strength, on the part of the men to whose efforts were due the regular arrival of the reinforcements, of munitions, and of food, and the evacuation of wounded: the truck drivers along the Sacred Way, the railroad engineers, the ambulance force.

Marshal of France Henri Phillipe Petain

Vehicles are maintained properly by tools, elbow grease, and dirty hands, not by pencils and forms.

Gen Lesley J. McNair, USA

If the transportation system will support, or can be developed in time to support, the forces necessary to carry out the operations plan, the rest of the logistics can usually be brought into line within a reasonable time.

Gen Carter B. Magruder, USA

VICTORY

If the human race wishes to have a prolonged and indefinite period of material prosperity, they have only got to behave in a peaceful and helpful way toward one another.

Winston Churchill

There is no substitute for victory.

Gen Douglas MacArthur, USA

Victory at all costs, victory in spite of all terror, victory however long and hard the road may be; for without victory, there is no survival.

Winston Churchill

In the Air Corps, teamwork is a must—cooperation among members of the plane crew, between fliers and ground crew, between officers and enlisted men. It is teamwork that produces victory.

Maj Gen Oliver P. Echols, USAAF

If you have the most men and can train and equip them in a manner superior to the enemy, you win!

Maj Gen Oliver P. Echols, USAAF

... as to being prepared for defeat, I certainly am not.

Adm David G. Farragut, USN

13

C H A P T E R

He conquers twice who conquers himself in victory.

Jyrus

You know how to conquer, Hannibal, but not how to profit by your victory.

Macherbal

The most dangerous moment comes with victory.

Napoleon

How can a man fail if he places everything subordinate to success?

Gen George S. Patton, Jr, USA

Winning is overemphasized. The only time it is really important is in surgery and war.

Dr Laurence J. Peter

America never lost a war or won a conference.

Will Rogers

Nothing succeeds like success.

Harry S. Truman

I would rather lose in a cause that will some day win, than win in a cause that will some day lose!

Woodrow T. Wilson

In war, victory is to the strong and to the swift.

Gen Maxwell D. Taylor, USA

It is no use saying, “we are doing our best.” You have got to succeed in doing what is necessary.

Winston Churchill

Victory will come to the side that outlasts the other.

Marshal of France Ferdinand Foch

Victory, speedy and complete, awaits the side that employs airpower as it should be employed.

Air Marshal Sir Arthur Harris, RAF

In our day wars are not won by mere enthusiasm, but by technical superiority.

V. I. Lenin



FOCUSED LOGISTICS AND AGILE COMBAT SUPPORT

We move on time lines that simply will not work if we have to wait for support for our expeditionary forces.

Gen Ronald R. Fogleman, USAF

Agile combat support is a vital part of what the Air Force provides the nation.

Gen Ronald R. Fogleman, USAF

Focused logistics was derived directly from pioneering the Air Force has done with lean logistics. Agile combat support reaches outside of pure logistics. It includes functions like force protection, Red Horse engineers, services, contingency medical care and other combat support functions.

Gen Ronald R. Fogleman, USAF

Streamlined infrastructure, time-definite delivery, total asset visibility, and a reduced mobility footprint are the four overarching planks of agile combat support. They're all focused on being able to "get out of Dodge" rapidly with resupply and sustainment starting as the force is ready to engage.

Lt Gen William P. Hallin, USAF

Logistics needs to move from expensive and inefficient logistics mass practices to agile combat support where logistics is light, lean, and tailored to meet the operational requirement.

Gen John W. Handy, USAF

14

C H A P T E R

The Air Force logistics system is large and complex, but agile logistics has already shown us how we can improve our support to our warfighters.

Lt Gen William P. Hallin, USAF

Agile combat support allows combat commanders to improve the responsiveness, deployability and sustainability of their forces. The efficiency and flexibility of agile combat support will substitute responsiveness for massive deployed inventories.

Sheila E. Widnall, Secretary of the Air Force

The name of the game is still highly trained and dedicated people, operational superiority, agile logistics, superior information and effective weapons.

F. Whitten Peters, Secretary of the Air Force

Focused Logistics comes from the idea that in the past spare parts were relatively inexpensive, but transportation to move them was expensive or in short supply. The way we overcame this problem was simple. Before beginning any major military operation, we would move forward a massive stockpile of spare parts, equipment, and munitions. If we consumed all those materials in the stockpiles, that was all well and good. If we did not, we would end up giving them away or pushing them into the ocean because it was more expensive to move them back to the United States than it was to destroy them in the field.

Gen Ronald R. Fogleman, USAF

It is mighty difficult to fight a “hot” military logistics war under a national “cold war” frame of mind.

Gen Benjamin W. Chidlaw, USAF

MORALE

. . . a meal makes morale, and morale often means the difference in battle.

Lt Gen William G. Pagonis, USA

It is remarkably easy, particularly when morale is low and nobody gives a damn, to fail to requisition a vital part . . . the best cure for lack of supplies, for improper maintenance, for all the other ailments that caused loss of life, loss of planes, and loss of tonnage, was high morale.

Lt Gen William H. Tunner, USAF

It is hard enough to get necessities to the troops without giving space to their candies, pies, soft drinks, and gee-gaws.

Maj Gen Montgomery C. Meigs, USA

All men require 2 pounds of food a day. Vegetable food is less convenient than animal food, the last walking with you.

The First Duke of Wellington

No soldier can fight unless he is properly fed on beef and beer.

The First Duke of Marlborough

You can have all the material in the world, but without morale, it is largely ineffective.

Gen George C. Marshall, USA

15

C H A P T E R

Morale was quite low in some parts of the Division, particularly in the Assam Valley among the ground personnel Living conditions were generally bad Men lived crowded in tents or bamboo huts which frequently had dirt floors and insect-ridden thatched roofs. This in a land of heat, high humidity, almost constant rain, and mud everywhere. Supplies of just about everything were short—plumbing fixtures, lumber, water pumps, and wiring. These shortages reached a stage where efficiency and proper functioning of the base were affected. The latrines of ICD will probably be remembered longest for the shortage of toilet paper After mail call when newspapers and magazines from home came in, the motto of the day was “Read ‘em and wipe.”

Lt Gen William H. Tunner, USA



COMMAND

Far from being a handicap to command, compassion is the measure of it. For unless one values the lives of his soldiers and is tormented by their ordeals, he is unfit to command.

Gen Omar N. Bradley, USA

*Remember, you
have been
appointed [to
command]—
not anointed!*

*Lt General
Julius W.
Becton, Jr*

Businessmen are not required to take care of their employees on a 24-hour basis. They do not face the tough living conditions, the shortage of food, clothing, PX articles, and the rest, which the pipeline from the States had been supplying in only a trickle. Then the executive of a civilian airline has no reason to concern himself with what his employees do between 5 PM and 9 AM the next day, so long as they stay reasonably well out of trouble and scandal, and show up in satisfactory condition to do a day's work. But a military commander is responsible for his personnel, and their activities and facilities, around the clock Any officer who has commanded troops, be they soldiers or airmen, sailors or marines, knows that when his men are proud to be Americans, proud to be part of their service, proud to be themselves, he has his problem more than licked.

Lt Gen William H. Tunner, USAF

16

C H A P T E R

No man is fit to command another that cannot command himself.

William Penn

Pay well, command well, hang well.

Sir Ralph Hopton

The fundamental responsibility of a commander is to take care of the people.

Sheila Widnall, Secretary of the Air Force

The commander should practice kindness and severity, should appear friendly to the soldiers, speak to them, visit them, ask if they are well cared for, and alleviate their needs, if they have any.

Frederick the Great

But this stern supervision is only a small proportion of the function of command. It's not a one-way street. While the lower echelons work for the mission of the commander, he must work for them.

Lt Gen William H. Tunner, USAF



MAINTNENANCE

I knew full well that the maintenance I was going to get would determine the success or failure of the operation. I must get the maximum performance out of the planes assigned to my command, or I would fail to do the job.

Lt Gen William H. Tunner, USAF

In this unhappy and unclean environment lived the mechanics to whose maintenance were entrusted the lives of our fliers, the supply men whose job to was to keep spare parts on hand and available, and all the other members of that huge complex necessary to keep planes flying—and flying safely.

Lt Gen William H. Tunner, USAF

The very serious responsibility for maintaining what we are given is based on the hard reality that we will never have all the equipment, supplies, facilities, and funds we require. On the battlefield, we will be short because of combat losses, accidents, interruptions in the supply system, or just insufficient resources to fill all needs. Thus, a well-trained soldier must be taught to maintain and conserve what he has—in peace and in war.

Gen John A. Wickham, USA

We cannot separate training from maintaining. We have . . . to recognize that training and maintaining must go hand in glove. We have to exercise in the field and at the same time maintain our equipment.

Gen John A. Wickham, USA



C H A P T E R

If one were to be asked what an internal combustion engine disliked most, high on the list would come sand, salt, heat, and humidity.

Air Chief Marshal Sir David Lee, RAF

We build our equipment to military specs that are pretty tough. Sure, we have to change filters on engines. Sure, there will be a certain amount of corrosion on helicopter blades. Yes, we will have to change engines on aircraft more often, but we know how to do all that. We know how to maintain our equipment. I absolutely do not expect to see huge breakdowns of equipment all over the kingdom.

My aide-de-camp said it is like flossing your teeth. If you forget it once, your teeth are not going to fall out. If we are smart about it, we are not going to have that sort of problem.

Gen H. Norman Schwarzkopf, USA



RATIONS

When one army is full and another starving, lead and steel are hardly needed to decide the victory.

Sir John Fortescue

Famine makes greater havoc in an army than the enemy, and is more terrible than the sword.

Flavius Vegetius

Understand that the foundation of any army is the belly. It is necessary to procure nourishment for the soldier wherever you assemble him and wherever you conduct him. This is the primary duty of a general.

Frederick the Great

The soup makes the soldier.

French proverb

The stomach carries the feet.

Miguel de Cervantes

Give them great meals of beef, and iron and steel, and they will eat like wolves and fight like devils.

Shakespeare

18

CHAPTER

Have a keen eye in all ends and places of our duchy that the beer is not overcharged, also that bread and other victuals and all things else that man cannot forgo in his undertakings are brought and kept to a cheap rate.

Albrecht von Wallenstein

I hope your excellency is doing all in Your power to supply your half Starved Fellow Citizens. Flour, Rum, and Drovers of Bullocks, should without Delay be forwarded to this Army or the Southern Department will soon want one to defend it.

Horatio Gates

I know not which way to deal with the mariners to make them rest contented with sour beer.

Lord Howard of Effingham

If you want the soldiers to perform great fatigue-duties and do not furnish anything to sustain them, it will come about that, human bodies not being made out of iron, they will leave you on the road, or if you come to battle they will be so weak that they can serve you only very little. But if you carry refreshments with you and accompany them with remonstrances, you will not only make them march but run if you desire.

Blaise Montluc

You can always tell an old soldier by the inside of his holsters and cartridge boxes. The young men carry pistols and cartridges; the old ones, grub.

George Bernard Shaw

Convoys for the army should ever be followed by herds of cattle, for the support and nourishment of the soldier.

Frederick the Great

Soldiers' stomachs always serve them well.

William Shakespeare

An army marches on its stomach.

Napoleon

Few victories are won on an empty belly.

Sir John Hawkwood

A starving army is actually worse than none. The soldiers lose their discipline and their spirit. They plunder even in the presence of their officers.

The First Duke of Wellington

FOOD, FOOD, FOOD! Without it, there is no limit to the horrors this undisciplined mass of men may bring upon the town.

Napoleon

There is an enemy I dread much more than the hostile Creek . . . that meagre-monster "Famine."

Andrew Jackson

There is no subordination with empty stomachs.

Napoleon

The person selected to feed the army was a metaphysical dyspeptic, who it was said, lived on rice-water, and had a theory that soldiers could do the same. A man, to fill such a position well, should be in sympathy with hungry men, on the principle that he who drives fat oxen must himself be fat.

Col John S. Mosby, CSA

Nothing undermines morale more decisively than hunger; quickest of all is the effect of any digestive upset. That was strikingly demonstrated in the late summer of 1918, when the moral slump of the German troops became most marked at a moment when stomach disorders, due to bad food, were rife among them. The old saying that “an army marches on its stomach” has a wider and deeper application than has yet been given to it. An army fights on its stomach, and falls if its stomach is upset.

B. H. Liddell Hart

The troops will have observed the extreme difficulty of supplying them with bread in this part of the country, and the necessity that exists, that they should take care of that which is issued to them, and make it last for the time specified in General Orders; for want of attention to this object, and care of their bread, the best operations are necessarily relinquished.

The First Duke of Wellington

Understand that the foundation of any army is the belly. It is necessary to procure nourishment for the soldier wherever you assemble him and wherever you wish to conduct him. This is the primary duty of a general.

Frederick the Great

The “FEEDING” of an army is a matter of the most vital importance, and demands the earliest attention of the general intrusted with a campaign. To be strong, healthy, and capable of the largest measure of physical effort, the soldier needs about three pounds gross of food per day, and the horse or mule about twenty pounds. When a general first estimates the quantity of food and forage needed for any army of fifty to one hundred thousand men, he is apt to be dismayed, and here a good staff is indispensable, though the general cannot throw off on them the responsibility. He must give the subject his personal attention, for the army reposes in him alone, and should never doubt the fact that their existence overrides in importance all other considerations. Once satisfied of this, and that all has been done that can be, the soldiers are always willing to bear the largest measure of privation.

Gen William T. Sherman, USA

Anyone who tries to maintain that wretched food makes no difference to an army . . . is not taking a dispassionate view of the subject. Ability to endure privation is one of the soldier’s finest qualities; without it an army cannot be filled with a genuine military spirit. But privation must be temporary; it must be imposed by circumstances and not by an inefficient system or a niggardly abstract calculation of the smallest ration that will keep a man alive. In the latter case it is bound to sap the physical and moral strength of every man.

Clausewitz



MUNITIONS

. . . ammunition, life's blood of the artillery.

Col F. F. Parry, USMC

The most precious thing when in contact with the enemy is ammunition.

Gen Kurt Student, Luftwaffe

*Put your trust in
God, my boys,
and keep your
powder dry.*

Oliver Cromwell

There can never be too many guns, there are never enough of them.

Marshal of France Ferdinand Foch

The amount of ammunition required for any operation is not subject to very accurate determination. Generally speaking, the more ammunition that is fired, the easier it is for us to advance and the lower are our casualties.

Gen Carter B. Magruder, USA

You don't kill men with guns you're not using.

Gen Matthew B. Ridgway, USA

19

C H A P T E R



PLANS

No plan survives contact with the enemy
Field Marshal Helmuth von Moltke

The combination of slower modernization rates and a rapidly changing threat environment makes long-range planning more difficult and more important.

Gen John Shalikashvili, USA

Once you've decided, don't delay. The best is the enemy of the good . . . a good plan violently executed now is better than a perfect plan next week.

Gen George S. Patton, Jr, USA

Logistics planning—the wisdom to realize when your working on plan A, you'll run into conflicts in executing plan B and being properly prepared, and successfully executing plan E.

Capt John P. Laverdure, USAF

Planning is everything—plans are nothing.
Field Marshal Helmuth von Moltke

The main thing is to have a plan; if it is not the best plan, it is at least better than no plan at all.

Gen Sir John Monash

In spite of, or perhaps because, of the fact that the plans for Overlord made detailed provisions for the last prepacked unit of

20

C H A P T E R

fuel, they quickly turned out to be an exercise in conservatism, even pusillanimity, such as has not often been equalled. Not only did the actual development of the campaign have little in common with the plans, but the logistic instrument itself functioned very differently from what had been expected. Consequently, it would hardly be an exaggeration to say that the victories the Allies won in 1944 were due as much to their disregard for the preconceived logistic plans as to their implementation. In the final account, it was the willingness—or lack of it—to override the plans, to improvise and take risks, that determined the outcome.

Martin van Crevald

The fact that Korea was fought without the prior provision of materiel and logistic troops does not prove that contingency planning is unnecessary.

Gen Carter B. Magruder, USA

Plan is what you do at night and carry out your decisions during the day. One cannot plan and act at the same time.

The Emperor Maurice, AD 600

Long and careful deliberation promises great safety in war, whereas hasty and impetuous generals usually commit serious blunders.

The Emperor Maurice, AD 600

The enemy is welcome to know my forces and positions, provided I know his, and he be ignorant of my plans.

Napoleon

In war, nothing is achieved except by calculation. Everything that is not soundly planned in its details yields no results.

Napoleon

Nothing succeeds in war except in consequence of a well prepared plan.

Napoleon

Be audacious and cunning in your plans, firm and persevering in their execution, determined to find a glorious end.

Clausewitz

In forming the plan of a campaign, it is requisite to foresee everything the enemy may do, and to be prepared with the necessary means to counteract it.

Plans of campaign may be modified *ad infinitum* according to circumstances, the genius of the general, the character of the troops, and the features of the country.

Napoleon

War plans cover every aspect of a war, and weave them all into a single operation that must have a single, ultimate objective in which all particular aims are recorded.

Clausewitz

It may be of interest to future generals to realize that one makes plans to fit circumstances and does not try to create circumstances to fit plans. That way lies danger.

Gen George S. Patton, Jr, USA

You think out every possible development and decide on the way to deal with the situation created. One of these developments occurs; you put your plan in operation, and everyone says, “What genius...” whereas the credit is really due to the labor of preparation.

Marshal of France Ferdinand Foch

Let us now discuss the question of planning. Because of the uncertainty peculiar to war, it is much more difficult to prosecute war according to plan than is the case with other activities. Yet, since “preparedness endures success and unpreparedness spells failure,” there can be no victory in war without advance planning and preparations.

Mao Tse-tung

The plan was smooth on paper, only they forgot the ravines.

Russian Military Proverb

In all war situations, the actions and decisions of command, whatever the level, are based on a blend of strategical, logistical, and tactical plans.

Adm Henry E. Eccles, USN

The enemy of our games was always Japan—and the courses were so thorough that after the start of WW II—nothing that happened in the Pacific was strange or unexpected. Each student was required to plan logistic support for an advance across the Pacific—and we were well-prepared for the fantastic logistics efforts required to support operations during the war.

Adm Chester W. Nimitz, USN

EXPEDITIONARY AEROSPACE POWER

We need to continue the transition from a threat-based Cold War garrison force, focused on containment, to a capabilities-based expeditionary force focused on responsiveness.

Gen Michael Ryan, USAF

The Expeditionary Air Force idea was born of a need to be able to react quickly. It was to get back to the rapid part of deployment. It was something we did very well back in the mid-1950s.

Gen John P. Jumper, USAF

Teamwork allows us to be an effective fighting force—a rapid expeditionary force capable of deploying anywhere in the world in a minimum of time and in austere conditions—not operating from where we are stationed, but from where we are needed, not when we can, but when we must.

Gen Michael Ryan, USAF



21

C H A P T E R



Quotes

for the Air Force Logician

Air Force Logistics Management Agency