

SDTIC
ELECTE
APR 18 1995
C D

NAVAL WAR COLLEGE
Newport, R.I.

LOGISTICS: A PRINCIPLE OF WAR

by

MICHAEL L. OVERFELT

LTC, U.S. ARMY

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Michael L. Overfelt

16 June 1995

EXHIBIT A
Approved for public release
Distribution Unlimited

Paper directed by Captain D. Watson
Chairman, Joint Military Operations Department

DTIC QUALITY INSPECTED 5

19950417 091

1. Report Security Classification: Unclassified			
2. Security Classification Authority: N/A			
3. Declassification/Downgrading Schedule: N/A			
4. Distribution/Availability of Report: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED			
5. Name of Performing Organization: Joint Military Operations Department			
6. Office Symbol: 1C		7. Address: Naval War College, 686 Cushing Rd., Newport, RI 02841-5010	
8. Title (Include Security Classification): LOGISTICS: A PRINCIPLE OF WAR (U)			
9. Personal Authors: LTC MICHAEL L. OVERFELT, USA			
10. Type of Report: Final		11. Date of Report: 13 FEBRUARY 1995	
12. Page Count: 22			
13. Supplementary Notation: A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.			
14. Ten key words that relate to your paper: PRINCIPLES LOGISTICS POWER PROJECTION FORCES OPERATIONAL ART SUSTAINMENT WAR OOTW PEACEKEEPING STRATEGY			
15. Abstract: SEE ATTACHED			
16. Distribution / Availability of Abstract: UNLIMITED	Unclassified	Same As Rpt	DTIC Users
18. Abstract Security Classification: UNCLASSIFIED			
19. Name of Responsible Individual: Chairman, Joint Military Operations Department			
20. Telephone: (401) 841-3414/4120		21. Office Symbol: 1C	

Abstract of
LOGISTICS - A PRINCIPLE OF WAR

Logistics has played a crucial role throughout the course of military history. In the conduct of warfare, the military professional and strategist have compiled and developed a list of principles which are used to conduct warfare. The accepted principles have varied in number over the years from two to the nine we currently regard as the main principals of war. However, the list is incomplete, in that it does not include the concept of logistics. Logistics is critical to every level of warfare: tactical, operational and strategic. However, it is at the operational level of war that logistics is the most important.

Logistics has improved greatly over the years. As we developed new principles of war for such emerging missions including operations other than war(OOTW), we have neglected to include logistics as one of them. This is the case, despite the fact that the majority of operational art endeavors are primarily logistics driven.

The future will require U.S. forces to operate from within our national boundaries with reduced military force structure. This will create significant logistical challenges. To meet the national strategy of power projection and sustainability, logistics must be elevated to the point of recognition as the *sine qua non* of operational art. Logistics must be adopted as a principle of war, not only in conventional jargon but in terms of OOTW, multi-national, and peacekeeping operations.

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
I.	Introduction.....	1
II.	What is a Principle of War.....	2
III.	What is Logistics.....	4
IV.	Logistics - A Historical Perspective.....	5
V.	The Importance of Logistics Today.....	8
VI.	Logistics - Its Contribution to the CINC; OOTW; and Multinational and Peacekeeping Operations.....	9
VII.	Operational Logistics for the Future.....	11
VIII.	Conclusion.....	12
IX.	Notes.....	14
X.	Bibliography.....	17

Accession For	
NTIS CRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

INTRODUCTION

It's [logistics] not a very glamorous task, and is often neglected. Such lack of dedication normally leads to disasters. It's an ancient military maxim that 'amateurs study strategy and tactics, professionals study logistics.'¹

Throughout the course of history, logistics has been critical to the conduct of warfare, an integral part of all levels of war from tactical to strategic. When fighting wars or preparing for them, modern military force has come to depend upon what are called the "principles of war," those maxims whose application has been proven to increase the probability of operational success. Although the number of principles has changed over time, the U.S. Military today accepts nine principles. As found in Joint Pub 3.0, *Doctrine for Joint Operations*, they are: *offensive, mass, economy of force, maneuver, unity of command, security, surprise and simplicity*. The principle of *logistics* has been omitted, even though it is recognized as a crucial element to success.

Logistics and its application in operational art has received serious attention during the past decade. The U.S. military has learned the hard way from numerous logistical failures, both foreign and domestic. However, logistics has not been properly included in the newly emerging forms of operations in which U.S. Forces are increasingly engaged. From operations other than war (OOTW) to peacekeeping operations, logistics plays a key role. In Joint Pub 3.0, six new principles have been

identified for OOTW. Logistics is not among them. Further in Joint Pub 3.0, we find logistics is listed as a "consideration" for multinational operations.

Tomorrow's smaller U.S. force structure faces a difficult task. Power projection in support of national strategies must be sustained over long logistical lifelines from the continental United States. The risk of operational failures due to a lack of a logistical focus is great.

Therefore, this paper will argue that the currently accepted principles of war are incomplete, and logistics must be elevated to the pantheon of the other recognized principles of war. To support this thesis, the terms "principle," [as a military principle of war], and logistics will be defined. Next, a brief review of several logistics failures will be discussed. Then the relative importance of logistics to the operational commander will be reviewed. The discussion will include future logistics considerations and conclude with the recommendation to include logistics as a principle of war.

WHAT IS A PRINCIPLE OF WAR?

Principle is defined as: "(1) an accepted or professed rule of action or conduct; (2) a basic law, axiom, or doctrine."² For the purposes of this paper, however, we need to look at the term "principle" as applied to the principles of war and their historical background.

There is much discussion concerning the essence of the principles of war, much less what they themselves should be. Rear Admiral C.R. Brown, a noted World War II logistician, had trouble defining the term principle in 1949, but finally decided upon the following definition, "a principle is not a 'fundamental truth.' but rather a 'fundamental assumption.'"³

The British Army Field Service Regulations "...mention seven principles...Concentration; Surprise; Mobility; Cooperation; Economy of Force; Security; and Offensive Action."⁴ These are very similar to the nine principles the U.S. military accepts today. Note that there is no mention of logistics in either set. However, Selford Bidwell argued; "...there are really only two 'principles of war'. One is to bring superior numbers to bear. The other is to use them correctly, which means a superior system of control. All others are subordinate."⁵

From the French point of view, Marshall Foch, a hero of World War I, believed, "...whilst admitting the existence of others [principles of war], contents himself with illustrating four principles: - Freedom of Action; Free Disposal of Forces; Economy of Forces; and Security."⁶

The United States Air Force Basic Doctrine, AF Manual 1-1, introduces the principles of war with the following quotation:

"To some, a principle was a law that demanded certain actions. To some, it was a prevailing condition that always led to success in war. To others it was a general truth, an element, or a fundamental inherent in the nature of war, and to still others, a principle was a guide that could sometimes be violated but always had to be considered."⁷

As Rear Admiral Brown pointed out in his 1949 Proceedings article, "...a friend of mine holds that there is only one true principle of war, the principle of the objective...all other so called principles actually become the ways and means of attaining the objective."⁸ Of course Rear Admiral Henry E. Eccles opined that they, "...should be understood but under no circumstances should they be considered as rules."⁹

Therefore, for the purposes of this paper, a principle of war shall be defined as a concept of value, inherent to all levels of war, which should be studied for its lessons. When understood, and properly considered and applied, it significantly enhances the probability of success in the conduct of operational art.

WHAT IS LOGISTICS?

Logistics encompasses a broad field. Historically, "...the term logistics is derived, ...from the title...*major general des logis*...an officer whose duty it formerly was to lodge and camp the troops, to give direction to the marches of columns, and to locate them upon the ground."¹⁰ As discussed by the military historian, Jomini,

"Logistics, or the art of moving armies. It comprises the order and details of marches and camps, and of quartering and supplying troops; in a word, it is the execution of strategical (sic.) and tactical enterprises."¹¹

The U.S. Army War College defines logistics as:

"...a corporate entity consisting of personnel, procedures and machines working within established policy toward the mission of planning, moving, and maintaining U.S. Army forces and other Military Services or Allies,

as designated....includes those activities that support the movement and sustainment of a combat force. "12

It is important here to note that the Air Force once considered Logistics a 'principle of war' in their 1984 draft regulation, AFM 1-1. As recently as 1984, the Air Force listed the principles of timing and tempo, logistics, and cohesion."13 The concept was short lived, however.

Duncan Ballantine provided that,

"the function of logistics is to bridge the gap between two normally alien spheres of activity, to make intelligible to the producer...the needs of the military commander and conversely to infuse into the calculations of the strategist an appreciation of the limits of the materially possible."14

Eccles agreed with Ballantine's concept and added that he considered:

"logistics...the bridge between national economic base and combat employment"15

The short form of the definition found in Joint Pub 4.0, *Doctrine for Logistics Support to Joint Operations*, is:

"...the Science of planning and carrying out the movement and maintenance of forces." 16

LOGISTICS - A HISTORICAL PERSPECTIVE

Logistics has had great impact on the operational commanders throughout history. It has proven to be one of the key elements in warfare. Even Clausewitz, who did not consider logistics an

important issue, at least not sufficiently important to consider it as a singular principle, considered it vital to the art of war.

"The Art of War is the art of making use of the given means in combat; there is no better term for it than the *conduct of war*. To be sure in its wider sense the art of war includes all activities that exist for the sake of war, such as the creation of the fighting forces, their raising, armament, equipment, and training."¹⁷

This is a significant argument on Clausewitz's part. Logistics is implied in several of the tenants he discusses, i.e. the creation of troops, their arming and equipping. These are key logistics issues, important enough to merit his attention. Sun Tzu also considered logistics to be a critical item in warfare; Logistics concepts are included in many of his maxims. For example, he stated, "if you expose the army to a prolonged campaign, the state's resources will be inadequate."¹⁸ This implies logistics at a strategic level. He also considers it better not to carry large quantities of supplies but to feed off the enemy, "If you obtain your equipment from within the state and rely on seizing provisions from the enemy, then the army's foodstuffs will be sufficient."¹⁹ Again, he is concerned with the equipping forces and their sustainment, however this concept is directed at the operational vice strategic level.

History provides many instances where logistics was a key operational factor. In 1630, Swedish King Adolphus, discovered that in his army "...the need to feed men and horses, rather than operational considerations, dictated its movements..."²⁰

Raimondo Montecuccoli, lieutenant general and field marshal of the army of the Austrian Hapsburgs "realized that the size of an army was limited by what one man could conveniently command and what the *logistic* system could sustain."²¹ Napoleon's and Hitler's invasions of Russia are both excellent examples of how logistics limited operational success and turned momentum into failure.

"Jomini had also laid great stress on logistics...the all-inclusive term he used to describe a multitude of supportive military functions."²² "Alfred T. Mahan, for reasons unknown, preferred the word 'communications' instead of logistics"²³ but also laid great stock in logistics and wrote extensively about the importance of naval logistics during the American War of Independence. Even during the height of the cold war, logistics was of intense interest by both the United States and the Soviet Union, as they watched the Arab-Israeli War. "...The rate of expenditure made logisticians on both sides of the Iron Curtain revise their estimates of their own requirements. If half one's inventory could be lost in less than three weeks, how was a long war to be sustained."²⁴

Lastly, when one reviews the most recent operational combat endeavors of the United States and focusses on Desert Storm, one finds another modern indication of the importance of logistics. The fuel required by a modern army division today is as much as an entire field army used during World War II. "During Operation Desert Shield, the defensive phase of the Gulf War, each division

required 345,000 gallons of diesel fuel...During Operation Desert Storm, a 100-hour offensive, a single division consumed 2.4 million gallons of fuel."²⁵

THE IMPORTANCE OF LOGISTICS TODAY

*"One of the recurring issues in the last century has been commanders who have underestimated supply requirements during the early stages of a war."*²⁶

The above historical examples illustrate the importance of logistics. Today's operational commander is faced with significant logistics issues. To explore these briefly, one must review the four key operational art questions, as listed in Joint Pub 3.0, to show how logistics is critical to each.

a. What military (or related political and social) condition must be produced in the operational area to achieve the strategic goal? When considering the desired endstate, the operational commander must be aware of the damage inflicted upon the opponent's infrastructure and what capability remains to sustain that population. This logistics issue must be addressed at the operational level of war as it is the bridge between strategic objectives and tactical operations.

b. What sequence of actions is most likely to produce that condition? Logistics plays a key part in the Course of Action (COA) the operational and the joint force commanders develop and employ to accomplish the mission. As found in Joint Pub 3.0, logistics often drives the COA. Logistics can dictate deployment, sustainability, and feasibility of a COA. Therefore, logistics is

paramount to adequately addressing this question.

c. How should the resources of the joint forces be applied to accomplish that sequence of actions? This question leaves no doubt as to the importance of logistics to operational art. Resources not only represent the military force but the equipment and sustainment necessary for it to be effective. The logistics requirements to accomplish power projection is also central to this issue.

d. What is the likely cost or risk to the joint force in performing that sequence of actions? Although on the surface, the focus here seems to be the risk to life and limb, it also incorporates the risk to the logistics lifeline for that force. Without sufficient logistics, the operational commander risks potential failure.

LOGISTICS - ITS CONTRIBUTION TO THE CINC; OOTW; AND MULTINATIONAL AND PEACE OPERATIONS

Logistics is also a major consideration for the warfighting CINC, specifically mentioned as a command issue. COCOM (combatant command) includes the authority to conduct the function of "logistics" needed for mission success. Combatant commanders can direct all aspects of logistics. It is the key to sequencing operations and developing the phases to conduct operational art. This highlights the importance of logistics. Joint Pub 4.0 states that operational logistics is a "Force Multiplier" in that "it plays a significant role both offensively and defensively, in attaining the leverage potential from a given force

configuration. It does this by increasing the endurance of the force."²⁷ Logistics is also defined as a "deterrent." This is explained as the ability to fight protracted conflict or perhaps the ability to fight and win two separate near simultaneous conflicts. And lastly, the Joint Pub 4.0 lists logistics as a "Contributor to Flexibility" because it allows the commander to tailor his force package.

In regard to UN peacekeeping operations - logistics again plays a major role. The United States supports UN-sponsored peacekeeping operations primarily in two ways; either through logistics or financial support. The United Nations Participation Act of 1945 (public Law 72-264, as amended) authorizes the President to provide logistic support to the UN peacekeeping forces.

In Multinational operations, as defined by Joint Pub 3.0, the following are considerations for their conduct: national goals; unity of effort; doctrine, training and equipment; cultural differences; management of resource (read: logistics & manpower); and national communication."²⁸ Considerations during planning and execution of multinational operations include: ROE; media; local law enforcement; C2; intelligence; logistics; protection."²⁹ These could perhaps become the recognized principles of multinational operations just as the principles of OOTW are different from the nine we now accept today.

The preceding discussion has validated the importance of logistics. Logistics must be considered in the new emerging forms

of operational art. Should the "considerations" for multinational operations become "principles" like the six principles for OOTW? Perhaps, then logistics would become a "principle" by default. That question is beyond the scope of this paper. The more obvious question is why create new principles for each new form of operational art? Another issue to ponder is why logistics was not included in the OOTW principles. After all, many OOTW operational missions are primarily centered on logistics; for example, humanitarian assistance and disaster relief. Peacekeeping operations are also primarily logistics oriented.

OPERATIONAL LOGISTICS FOR THE FUTURE

In the 1992 National Military Strategy logistics issues are interwoven throughout. To execute this strategy with a smaller force in joint and combined operations, in coalition warfare, or in operations other than war, U.S. forces must be able to move rapidly with proper equipment and sustainment. We require logistics to support our ability to maintain a forward presence - one of the four foundations of the defense strategy. Of the strategic principles discussed, logistics is integrated throughout the strategy, i.e. in terms of readiness: 'full bins and magazines'³⁰; in talking about strategic agility and power projection: 'movement of forces'³¹; and our support capabilities: 'transportation and reconstitution'³². Just how important is the need to be able to project our national military power and sustain them? The Gulf War provides an example. "One of the

lessons we should learn from the Gulf War is that the transportation and logistics support needs of power-projection will make significant demands on our resources in the future."³³

President Clinton, in the second chapter of the National Security Strategy, Advancing our Interests through Engagement and Enlargement, discusses the need to maintain a strong defense capability. The subset to this statement is the ability to deal with major regional contingencies. "To do this, we must be able to credibly deter and defeat aggression by projecting and sustaining U.S. power in more than one region if necessary."³⁴ As the recent Bottom-up Review showed, strategic mobility to move our force, or project power, in a timely manner and to sustain the force, is a critical issue.

Conclusion

"An army [read - joint force] cannot preserve good order unless it soldiers [read - military and civilian personnel] have meat in their bellies, coats on their backs and shoes on their feet."³⁵

Letter from Duke of Marlborough to Colonel William Cadogan, 1703

Today's reduced military force and the force of the future will increasingly find itself stationed within the confines of the continental borders of the United States. This force must be able to project power outside this boundary and sustain itself in the conduct of precision operational warfare. Logistics is interwoven throughout military operations of the past, present and future. It is a major consideration at all levels of war, but specifically at the operational level in the conduct of joint operations. When engaged in future operational warfare, one can

draw upon the writings of Toffler and other futurists who claim warfare will be of an accelerated tempo. Perhaps we had a glimpse into the future with Desert Storm -- and we may not have six months to prepare for the next battle. "We ignore such lessons at our peril, for in the words of Admiral Hyman Rickover, "Bitter experience in war has taught the maxim that the air of war is the art of the logistically feasible."³⁶

The operational commander must be aware of the critical part of warfare called logistics and should add it to the critical lists of axioms which he uses to guide his successful operational planning. Our "principles of war" should be periodically revisited and revised when needed. That time is now. Logistics should be added to the current list of the principles of war.

NOTES

1. James F. Dunigan, How to Make War, 3d ed., (New York: Morrow, 1993), p. 459.

2. Laurence Urdang, ed., The Random House Dictionary of the English Language, (New York: Random House, 1968), p. 1053.

3. C.R Brown, "The Principles of War," United States Naval Institute Proceedings, June 1949, p. 623.

4. R.A.E. Voysey, An Outline of the Principles of War (Great Britain: DISS Publishing Co LTD., 1934), p. 2.

5. Shelford Bidwell, Modern Warfare, A Study of Men, Weapons and Theories (London: Allen Lane, 1973), p. 92.

6. Voysey, p. 2.

7. U.S. Air Force, Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, Vol II. (Washington: 1992), p. 9.

8. C.R. Brown, p.623.

9. Henry E. Eccles, Military Concepts and Philosophy (New Brunswick, NJ: Rutgers University Press, 1965), p. 113.

10. C.H. Mendell and W.P. Craighill, The Art of War, by Baron De Jomini, General and Aid-de-Camp of the Emperor of Russia, A New Edition, with Appendices and Maps (Philadelphia: J.B. Lippincott & Co., 1862; reprint ed., Westport, CT: Greenwood Press, 1971), p. 252.

11. Ibid., p. 69.

12. U.S. Army War College, Army Command, Leadership and Management, Theory and Practice, 1994-1995 (Carlise Barracks, PA: 1994), p. 18-1.

13. 13. U.S. Air Force, AFM 1-1, Basic Aerospace Doctrine of the United States Air Force (Washington: 1984), pp. 2-8 through 2-10.

14. 14. Duncan Ballantine, U.S. Logistics in the Second World War (Princeton, NJ: Princeton University Press, 1947), pp. 2-3.

15. 15. Eccles, p. 103.

16. 16. U.S. Joint Chiefs of Staff, JSC Pub 4.0 Doctrine for Logistis Support to Joint Operations (Washington: 1992), p. GL-8.

17. 17. Carl von Clausewitz, On War, ed. and trans., Michael E. Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), p. 127.

18. 18. Ralph D. Sawyer, trans., The Art of War (Boulder, CO: Westview Press, 1994), p. 173.

19. 19. Ibid.

20. 20. Peter Paret, with collaboration of Gordon A. Craig and Felix Gilbert, ed., Makers of Modern Strategy from Machiaveli to the Nuclear Age (Princeton, NJ: Princeton University Press, 1986), p. 49.

21. 21. Ibid., p. 55.

22. 22. Paret, ed., p. 459.

23. 23. Ibid.

24. 24. Ibid., p. 797.

25. 25. U.S. Department of the Army. FM 100-5 (Washington: 1993), p 12-2.

26. 26. Dunnigan, p. 470.

27. 27. Joint Pub 4-0., p. IV-6.

28. 28. Joint Chiefs of Staff. Joint Pub 3.0 Doctrine for Joint Operations (Washington: 1993), pp. VI.2-VI.15.

29. 29. Ibid.

30. 30. The Pentagon. "National Military Security Strategy," (Washington: 1992), p. 8.

31. 31. Ibid., p. 9.

32. 32. Ibid., pp. 24-25.

33. 33. William G. Pagonis and Michael D. Krause, "Observations on Gulf War Logistics." Army Logistician, September-October 1992, p. 5.

34. 34. The White House. "A National Security Strategy of Engagement and Enlargement," (Washington: 1994), p. 6.

35. 35. Trevor Royle, comp., A Dictionary of Military Operations (New York: Simon and Schuster, 1990), p. 7.

36. 36. David C. Rutenburg and Jane S. Allen, The Logistics of Waging War: American Logistics 1774-1985, Emphasizing the Development of Airpower (Bunter Air Force Station, AL: Air Force Logistics Management Center), p. 195.

BIBLIOGRAPHY

Books and Published Works

- Altham, E.A. The Principles of War. Vol. I. London: Macmillan, 1914.
- Dunnigan, James F. How to Make War. 3d ed., New York: Morrow, 1993.
- Ballantine, Duncan. U.S. Naval Logistics in the Second World War. Princeton, NJ: Princeton University Press, 1947.
- Bernhardi, Friedrich Adam Julius v.; Holt, F.A. tran., The War of the Future, In the Light of the Lessons of the World War. 2d ed. London: 1920.
- Brodie, Bernard. The Worth of Principles of War. (From a lecture delivered on 7 March 1957 to the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.) Santa Monica, CA: The Rand Corporation, 1957.
- Eccles, Henry E. Military Concepts and Philosophy. New Brunswick: Rutgers University Press, 1965.
- Gatzke, Hans W., tran./ed., Principles of War. 6th ed. Harrisburg, PA: Telegraph Press, 1948.
- Inter-parliamentary Union. What would be the character of a New War? London: P.S. King & Son, LTD., 1931.
- Sawyer, Ralph D., trans., The Art of War. Boulder: Westview Press, 1994.
- Mahan, A.T. The Major Operations of the Navies in the War of American Independence. n.p.: Little, Brown and Company, 1913; reprint ed., New York: Greenwood Press, 1913.
- Mendell, C. H. and Craighill, W.P., tran., The Art of War by Baron De Jomini, General and Aid-de-Camp of the Emperor of Russia, A New Edition, with Appendices and Maps. Philadelphia: J.B. Lippincott & Co., 1862; reprint ed., Westport, CT: Greenwood Press, 1971.
- Paret, Peter. ed., Makers of Modern Strategy from Machiavelli to the Nuclear Age. Princeton, N.J.: Princeton University Press, 1986.
- Royle, Trevor. comp., A Dictionary of Military Quotations. New York: Simon and Schuster, 1990.

Rutenberg, David C. and Jane S. Allen. The Logistics of Waging War: American Logistics 1774-1985 Emphasizing the Development of Airpower. Gunter Air Force Station, AL: Air Force Logistics Management Center, 1986.

Thorpe, George C. Pure Logistics: The Science of War Preparation. Newport: 1917; reprint ed., Washington: National Defense University Press, 1986.

Thorpe, George Cyrus. War. Newport: 1916.

Toffler, Alvin and Hedi Toffler, War and Anti-War, Survival at the Dawn of the 21st Century. Boston: Little, Brown and Company, 1993.

Voysey, R.A.E. An Outline of the Principles of War. Diss, Great Britain: Diss Publishing Co, LTD., 1934.

Periodicals

Beaumont, Roger A. "The Principles of War Revisited," Military Review, December 1972, pp. 63-69.

Brabham, James A. "Operational Logistics: Defining the Art of the Possible," Marine Corps Gazette, April 1994, pp. 26-31.

Brown, C.R. "The Principles of War," U.S. Naval Institute Proceedings, June 1949, pp. 621-633.

Fletcher, J. "Intelligence: A Principle of War," Military Review, August 1970, pp. 52-57.

Pagonis, William G. and Michael D. Krause. "Observations on Gulf War Logistics," Army Logistician, September-October 1992, pp. 5-11.

Government Publications

Armed Forces Staff College. The Joint Staff Officer's Guide - 1993. Norfolk, VA: n.p., 1993.

Aspin, Les. Report on the Bottom-up Review. Washington: Department of Defense, 1993.

Belanger, Van-George R. Operational Sustainment - Means, Ways, and Ends Governing Joint and Combined Operations. Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 5 May 1989.

Bogart, Frank A. A Military View of Logistics. Ohio State University (National Logistic Conference): February, 1959.

- Eccles, H.E. Logistics Philosophy. U.S. Air Force School of Logistics, n.p.: April, 1959.
- Eccles, H.E. Some Fundamental of Modern War. Newport: U. S. Naval War College, January 1959.
- Eccles, Henry Effingham. Notes of Logistic Aspects of Command. Newport: U.S. Naval War College, November 1954; reprint ed., October 1956.
- Goodin, James A. An Application in the Principles of War: The Schlieffen Plan. Maxwell AFB, AL: U.S. Air Force Air Command and Staff College, April 1984.
- Joint Chiefs of Staff. JCS Pub 0-1, Proposed Final Pub, Basic National Defense Doctrine. Washington: May 1991.
- Joint Chiefs of Staff. JCS Pub 3-0 Doctrine for Joint Operations. Washington: 1993.
- Joint Chiefs of Staff. JCS Pub 3-02 Joint Doctrine for Amphibious Operations. Washington: October 1992.
- Joint Chiefs of Staff. JCS Pub 5-00.2 Joint Task Force Planning Guidance and Procedures. Washington: September 1991.
- Joint Chiefs of Staff. JSC Test Pub 3-07 Doctrine for Joint Operations in Low Intensity Conflict. Washington: October 1990.
- Joint Chiefs of Staff. JCS Pub 4-0 Doctrine for Logistic Support of Joint Operations. Washington: September 1992.
- Joint Chiefs of Staff. National Military Strategy. Washington: Office of the Chairman of the Joint Chiefs, 1992.
- The White House Staff. A National Security Statement of Engagement and Enlargement. Washington: The White House, 1994.
- U.S. Department of the Air Force. Air Force Glossary of Standardized Terms and Definitions. Washington: 1963.
- U.S. Department of the Army. Decisive Victory, America's Power Projection Army. A White Paper. Washington: 1994.
- U.S. Department of the Army. FM 100-5. Washington: 1993.