

A HISTORICAL ANALYSIS OF MULTINATIONAL LOGISTICS
AND THE CONCEPT OF NATIONAL RESPONSIBILITY
IN COALITION MILITARY OPERATIONS

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ABSTRACT

A HISTORICAL ANALYSIS OF MULTINATIONAL LOGISTICS AND THE CONCEPT OF NATIONAL RESPONSIBILITY IN COALITION MILITARY OPERATIONS by Major Philip M. Pugh, Jr., USA, 90 pages.

This study investigates the concept of national responsibility as it relates to providing logistics to nations participating in coalition operations. This concept is the cornerstone of current NATO logistics doctrine. However, recent NATO peacekeeping and offensive peace enforcement operations in the former Yugoslavia challenged the validity of national responsibility as the preeminent logistical principle to sustain and maintain multinational forces in the military operations.

To gain insight into current multinational logistics doctrine, this study provides a historical view of the manner in which logistics was provided during World War II, the Korean War, and in Operation Uphold Democracy in Haiti. These operations provided classic examples of total war, limited war, and operations other than war respectively.

The study further reveals that the challenges associated with providing logistics for multinational forces, despite the type of military operation, were similar. In all of these historical examples, the nations with the greatest logistical capability provided that majority of the logistical support for the participating coalition forces. The problems associated with different terminology, cultures, traditions and religions were present each of the coalition operations examined.

Lastly this study offers recommendations for military logisticians of both the US and its allies for consideration in future operations.

PREFACE

This research embraces the historical challenges associated with providing effective logistical support to military forces in multinational operations. My interest in this particular research topic is the result of my service as a forward logistics officer for the North Atlantic Treaty Organization, NATO peace implementation force (IFOR) located in Sarajevo, Bosnia-Herzegovina. I served in this capacity from November 1995 to August 1996, playing a major role in coordinating base logistical support for this multinational headquarters. Base logistical support entailed coordinating billeting, laundry, subsistence, transportation, morale and welfare activities, and other related base services for the headquarters. The IFOR headquarters consisted of military staff primarily representing the countries of Great Britain, the United States, Turkey, Greece, Germany, and Italy. As a forward logistics officer, I was responsible for planning these provisions, but the individual nations, according to NATO policies and procedures, were given the primary responsibility of providing and paying for these supplies and services. However, to efficiently function as a multinational command headquarters, it was necessary to provide common support to the international staff. As a result, the headquarters established common contracts for base support related logistical services. The individual nations were required to pay for these services, or a particular country was designated to provide common logistical base support services on reimbursable bases. When selecting these services, every nation's cultural sensitivities and fiscal rules had to be taken into consideration. Thus I experienced a myriad of complexities associated with providing effective logistical for a multinational headquarters within the framework of

NATO policies and procedures. Hence, the NATO policy to designate logistics as primarily a national responsibility seemed to be inconsistent with the manner in which the IFOR headquarters actually operated. Therefore, I felt that a historical analysis of the manner in which logistics has been provided within coalitions in modern history could provide insights into successful and unsuccessful applications of logistics and the genesis of current NATO policies. A historical analysis, coupled with my practical experience, could provide useful information to military logisticians and operational planners in multinational staff positions.

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ABBREVIATIONS

AAFES	Army, Air Force Exchange Service
ADCON	Continental Advance Section, Southern Lines of Communication
AFSOUTH	Allied Forces Southern Europe.
CALL	Center for Army lessons learned
CAO	The Chief Administrative Officer for United Nations peacekeeping operations who has overall responsibility for logistics operations.
CBI	China, Burma, India theater of Allied military operations during World War II.
CCS	Combined Chiefs of Staff during World War II
CGSC	The US Army Command and General Staff College
CINC	Commander-in-Chief
CLO	The chief logistics officer who manages the daily logistics functions for United Nations peacekeeping operations.
COMZ	Communications Zone
COSSAC	Chief of Staff to the Supreme Allied Commander (designate)
C-SPT	Commander for Support. This organization was formed plan and organized logistics support for NATO forces in Operation Joint Endeavor
DOD	Department of Defense
DOS	Department of State
ETOUSA	European Theater of Operations, US Army
FALD	The force logistics support group in United Nations peacekeeping operations.
IFOR	The NATO Implementation Force that initially implemented the terms of the Dayton Peace Accords for peace in Bosnia-Herzegovina.

LMAB	Munitions Assignment Board in London organized during World War II to allocate British and US munitions production.
MAB	Munitions Assignments Board in Washington, DC organized during World War II to allocated British and US munitions production.
MNF	The Multinational Force organized to stabilize Haiti in order to restore President Aristide during Operation Uphold Democracy.
MOOTW	Military operations other than war
NAMSA	North Atlantic Treaty Organization Maintenance and Supply Agency
NATO	North Atlantic Treaty Organization
ROK	Republic of Korea
RSN	Role Specialist Nation. The NATO nation assigned this role provides support to all members deployed to a particular theater of operations
SHAPE	Supreme Headquarters Allied Powers Europe
SOS	Services of Supply sections organized during World War II
STANAG	NATO Standardization Agreement
TRADOC	US Army Training and Doctrine Command
UN	United Nations
USSR	United Soviet Socialist

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CHAPTER 1

INTRODUCTION

Context

Recent history suggests that the US and its allies will participate in future multinational operations to maintain international stability in various areas of mutual interest around the world. The success of NATO's first deployment of ground forces in Bosnia-Herzegovina illustrated the viability of this type of cooperative military operation. The 1999 NATO offensive operations in Kosovo further exemplify the trend to conduct alliance and coalition campaigns. The high cost of military operations, reduced military budgets after the cold war, global economies, and the need for international legitimacy will probably make multinational operations a necessity in the future. Thus it is imperative that the lessons learned from these recent experiences be captured and incorporated in the doctrine of multinational alliances. The magnitude of the deployment of the NATO and non-NATO participating countries required detailed planning and coordination. The key to success was an eventual understanding of NATO rules, regulations, and procedures by all of the NATO participating countries.

Currently there are various methods of conducting multinational operations with respect to command and control. Some of these various approaches include a "lead nation" option, a "parallel" option and a "regional alliance" option. The first option entails one nation taking the lead or the majority of the responsibility for conducting military operations. In this case, the other nations are placed under the operational control of the lead nation. The lead nation generally approves the composition of the

force and provides the commander. A coalition operation, such as the Korean War, used this type of command relationship. In this war, the US was the lead nation with other nations serving as subordinate commands within the US command structure. Another multinational command and control method is the parallel option. Under this option, “the force commander has operational control of forces of the multinational partner, but generally to a lesser degree.”¹ Each country maintains a greater degree of control of their forces. Operation Desert Storm in the Persian Gulf best represents this structure where nations formed a coalition for a common effort, with many nations retaining control of their own forces. There can also be a multinational operation based on combination of the above option with two or more nations exercising control of other countries using a parallel structure. NATO is an example of another common and effective option, which is a regional alliance. Typically, the nation with the most forces and equipment serves as the alliance commander. In this option the alliance has its own policies, procedures, and doctrine. In all of these command relationships, whether in war or military operations other than war (MOOTW), one of the most complex functions is providing the logistical support to sustain the military campaign.

One of the most complex aspects of conducting multinational operations, both in war and operations other than war, is providing the logistical support to sustain the military campaign. Currently NATO has maintained that logistics is primarily a national responsibility. The essence of NATO policy is outlined in the following excerpt from a 1998 NATO Standardization Agreement (STANAG) concerning procedures for mutual logistics assistance among NATO nations:

1. The forces of NATO nations providing logistic assistance to the forces of another NATO nation will observe the procedures contained herein, in as much as they do not conflict with existing bilateral or multilateral agreements between NATO nations.
2. Nothing in this agreement shall be taken to detract from the principle that the provision of logistic support is a national responsibility. Each nation bears ultimate responsibility for ensuring the provision of logistic support for its forces allocated to NATO, which may be discharged in a number of ways, including agreements with other nations or with NATO. This agreement does not in itself entitle the forces of a NATO nation/international headquarters/multinational formations to obtain logistic assistance. These procedures are to be used to complement, but don't replace, national supply procedures.
3. The procedures laid down in this STANAG should be applicable also for operations other than war in a multinational environment.
4. The procedures laid down in this STANAG should be tested periodically during exercises and updated accordingly.²

Thus NATO has delegated a broad responsibility to the individual nations that will be expected to form a cohesive, effective military organization. NATO defines logistics as "the science of planning and carrying out the force movement and maintenance functioning."³ This comprises four main tasks:

- a. design and development , acquisition, storage, transport, distribution, maintenance, evacuation, and disposition of material
- b. transport of personnel
- c. acquisition or construction, maintenance, operation and disposition of facilities;
- d. acquisition or furnishing of services; and medical and health support.⁴

Thus logistics will encompass the above NATO definition for the purposes of this study.

Operation Joint Endeavor provided an opportunity to validate the effectiveness of NATO logistical policies for ground forces. The deployment of the NATO southern headquarters, AFSOUTH (Allied Forces Southern Europe) to Sarajevo was its first ever. Thus providing logistical support, to include deployment to the theater of operations,

proved to be a difficult challenge. Logistical support for the entire peacekeeping operation was the responsibility of the IFOR Commander for Support (C-SPT) who was based in Zagreb. The C-SPT was responsible for the sustainment, movements, medical, engineering, and contracting operations of the national logistics elements. Common fund contract management was conducted by the NATO Maintenance and Supply Agency (NAMSA) located in Luxembourg. NAMSA eventually established a field office in Split, Croatia. Lastly national support elements were established to provide a framework for logistics for the three respective sectors in Bosnia-Herzegovina. The British were located in Split; the French in Ploce, Croatia; and the Americans in Kaposvar, Hungary. Therefore, the logistics support system initially established was consistent with NATO policies. However, by February 1996, the US provided all fuel within the Bosnia-Herzegovina theater. In December 1995, the US accepted the Supreme Headquarters Allied Powers Europe (SHAPE) request that it supply fuel to the entire multinational IFOR. In this case, the US served as the role specialist nation (RSN) for providing fuel. This was the concept of having one nation provide the bulk of a particular aspect of support because of that nation's unique strength or capability would provide economies of scales and limited competition for limited resources from deployed nations.

With respect to the NATO IFOR headquarters staff, where American, French, British, Italian, German, Turkish, Greek, and Canadian troops worked together, a nationalistic approach to logistics quickly proved to be very cumbersome and inefficient. The AFSOUTH Commander's international staff required a common logistical support system to efficiently function.

Personal experience as the IFOR forward logistics officer provides an illustration of the complexity associated with providing base support for this diverse staff. One example was the planning of billeting. As the IFOR forward logistics officer, I was responsible for coordinating the billeting for the IFOR commander's multinational staff in Zagreb, Croatia, and Sarajevo, Bosnia-Herzegovina, even though this aspect of logistics was a national responsibility. The IFOR headquarters temporarily moved to Zagreb, Croatia, and subsequently moved to Sarajevo.

After the move of the headquarters to Sarajevo, the vast majority of the logistical and other support staff remained in Zagreb. The IFOR staff occupied the former UN military headquarters located within the city of Zagreb. Due to the location of the headquarters, the most feasible means of billeting headquarters personnel was in the various hotels within Zagreb and the surrounding areas. The hotel prices varied according to the quality. Because each nation's fiscal policies varied concerning the amount of money to pay for lodging, several military organizations insisted that hotel price conform to their government's established fiscal constraints. There was no structure in place to allow each nation to make its own logistical arrangements. Because local competition and other economic factors governed hotel prices and each nation had different fiscal policies, this task would have been practically impossible to resolve by taking a purely nationalistic approach. Fortunately, a mechanism was quickly established to get temporary national approval for funding this support. The problem of providing base support logistics for the AFSOUTH CINC's headquarters was one of many encountered during this operation.

In addition to the recent multinational military operations other than war (MOOTW), whether humanitarian or peacekeeping operations, and to the Persian Gulf War, history provides excellent examples of alliance and coalition logistical operations. World War II and Korea illustrate the complexities of fielding and sustaining large land combat forces comprising many different nations. In large-scale war, poor logistical planning and interoperability can be extremely costly in terms of human life and mission accomplishment.

During World War II, the French and Americans formed a joint logistical structure in Italy and Southern France where each nation depended on the other for certain aspects of logistical support. For example, the US provided rations to the French, and the French provided transportation and construction engineering support for US forces. Furthermore, in the Korean War, the Republic of Korea (ROK) forces near the border with North Korea were equipped with US ordnance and materiel, and most of the non-British commonwealth nation received supplies from the US.

According to Secretary of Defense George C. Marshall, the precedents that were being established in Korea “should become landmarks for future collective military action under the United Nations.”⁵ Replete with illustrations of the challenges associated with providing logistics to multinational combat forces, World War II and Korea, coupled with an analysis of the recent military operations other than war in Haiti, will form the bases of this study.

This study will also include lessons learned from the late Lieutenant General Joseph M. Heiser’s personal memoirs from his experiences in World War II and Korea. General Heiser served with the Southern Base Section Command in the European Theater

of Operations during World War II and with the 7th Infantry Command in the Korean War. His book, *Soldier Supporting Soldiers*, written for the US Center of Military History, provides valuable insights and recommendations on the future of NATO logistics. His view of the direction NATO logistics should take with respect to the concept of national responsibility in the late 1970s was shaped by his previous experiences in World War II, Korea, and other major military conflicts prior to his retirement from the Army in 1973. His recommendations to Department of Defense, while serving as a consultant, proved to be prophetic, given the NATO's newly adopted offensive and expeditionary role in maintaining European security. According to Heiser, "membership into NATO as in any military alliance, demands that each nation relinquish some of its authority in order to gain the objectives of the whole alliance. Each nation and its citizenry must understand this commitment."⁶ He further stresses the need of NATO to break the paradigm of national responsibility. This bold suggestion during the cold war period was unpalatable for most NATO countries. Heiser (1991) asserts that "to be successful, such an alliance demands that its members allocate much of their resources to provide a logistical base. But the sixteen nations of NATO have resisted delegating control of their national logistics. One of the greatest problems in NATO is the common perception that logistics remains a national responsibility"⁷

Problem Statement

The problem under study embraces the historical challenges associated with providing effective logistical support to military forces in multinational operations. In the NATO operations in Bosnia-Herzegovina, logistical support needed to be streamlined

in order to become more efficient. This often involved one country providing the majority of a particular aspect of logistical support. Despite this approach, current NATO policy advocates that logistics be a national responsibility. A historical analysis of logistics sustainment of multinational forces in World War II, Korea, and recent peacekeeping and humanitarian operations could provide insight into the determination of the most appropriate logistical policy for NATO and other military alliances and coalitions. Thus this study focuses on whether the cornerstone of NATO logistics doctrine, which advocates that logistics is a national responsibility, is adequate given recent and past multinational military operations.

Subproblem

To provide an effective analysis of the research problem, the following questions must be addressed.

1. How did the Allies provide logistical support for its multinational alliance during World War II?
2. How was logistical support provided for the United Nations coalition during the Korean War?
3. How has logistical support been provided during recent multinational peacekeeping and other military operations other than war (MOOTW)?
4. What is current NATO logistics doctrine?
5. What conclusions concerning logistical support to coalition operations can be drawn from both past and present military operations?

Scope of Problem

This study encompasses the manner in which logistics was provided to alliances and coalitions in World War II and Korea. It will further investigate multinational military operations other than war, such as the UN in Haiti, and the numerous operations related to the conflict in the former Yugoslavia. Lastly, the study will examine the doctrine of other multinational military organizations such as the UN.

Definition of Key Terms

The following definitions are key terms, which will be used throughout this study.

Alliance. The “result of formal agreements between two or more nations for broad, long-term objectives. The NATO is one example. These alliance operations are technically combined operations, though in common usage combined is often used as synonym for all multinational operations”⁸

Coalition force. “A force composed of military elements of nations that have formed a temporary alliance for some specific purpose”⁹

Implementation Force. The name given to the NATO-led multinational force to establish peace in Bosnia-Herzegovina. Following the signing of the signing of the Bosnian Peace Agreement in Paris on 14 December 1995, NATO was given a mandate by the UN, on the basis of UNSCR 1031, to implement the military aspects of the Peace Agreement.

Lend-Lease Act. As of 11 March 1941 this act was the principal means for providing US military aid to foreign nations during World War II. Lend-lease authorized the president to transfer arms or any other defense materials for which congress

appropriated money to any country whose defense the president felt was vital to the defense of the United States.

Multinational Operations. “A collective term to describe military actions conducted by forces of two or more nations, typically organized within the structure of a coalition or alliance”¹⁰

National Responsibility. A concept developed by the UN and NATO directing nations participating in a coalition operation to be responsible (self-sufficient) for certain aspects of logistical support.

Operation Joint Endeavor. The NATO mission to implement the peace terms of the Dayton Accords which established peace in Bosnia- Herzegovina.

Operation Uphold Democracy. The UN sanctioned peacekeeping mission in Haiti to restore stability and security in the country so that freely elected, exiled President Jean-Bertrand Aristide could be reinstated to his position as President of Haiti.

Peace Operations. “The umbrella term encompassing peacekeeping, peace enforcement and any other military, paramilitary, or non military action taken in support of a diplomatic process”¹¹

Importance of Study

Current US doctrine emphasizes the importance of US leaders being prepared to operate in a multinational environment. In accordance with a US joint military doctrine publication, Joint Pub 3-0, *Doctrine for Joint Operations*, “the Armed Forces of the United States should be prepared to operate within the framework of an alliance.”¹²

Operation Provide Promise, Deny Flight, Joint Endeavor, Deliberate Force, Sharp Guard

and Allied Force are a few of the multinational operations conducted by NATO in the Balkan region within the past six years. The frequency and apparent success of these operations suggests that future operations will be conducted in this manner.

To be successful, these future multinational operations should be well planned and coordinated, especially in terms of logistical support. This joint regulation identifies logistical considerations and challenges, such as “differences in logistics doctrine, stockage levels interoperability, infrastructure, competition between coalition or alliance members for support, and natural resource limitations.”¹³ Other US military and NATO literature suggests a gradual shift from the traditional notions of logistics support being primarily a national responsibility.

The 1997 *NATO Logistics Handbook* suggests the following logistical principles when planning multinational operations:

1. That the provision of appropriate logistic resources is fundamentally a national responsibility, and should be assured either individually or by cooperative arrangements.
2. That the NATO Commanders have an indispensable coordinating authority for the overall logistic planning.
3. That decisions on and planning for the implementation of different modes of logistical support, such as commonly funded resources and the lead nation principle need to be undertaken at an early stage of operation planning and in close coordination between NATO and nations.
4. That national components should be logistically self-sufficient for an initial period, with continued follow-on support by responsible nations as agreed between nations and NATO commanders.
5. That appropriate authority should be given to the NATO Commander to control certain logistics assets, as made available by nations and as agreed between nations and NATO commanders.¹⁴

The US Joint article captures the need to continue improving logistics doctrine and procedures to conduct effective and efficient operations in a multinational environment. Issues that were previously within the purview of a few need to be understood by all to deal with various political, cultural, religious and geographical limitations that they pose. Detailed logistical planning by the joint logistics staff is a necessity. The challenges I experienced while serving as a forward logistics officer for the IFOR Headquarters Command in providing base logistics for the IFOR staff reflect many of the challenges delineated in this joint publication.

Furthermore, and most importantly, the end of the cold war forced the NATO alliance to drastically change its way of thinking. The multinational operations discussed earlier are a manifestation of the changes in the international environment. NATO's position of maintaining logistics as a national responsibility is consistent with the defensive strategy of the Cold War era. Today, NATO's expeditionary role requires different logistical capabilities than it did in the static environment of the previous fifty years. In the days of the Cold War, a significant portion of the logistical support was provided by host nation support. A policy relying on national support appeared appropriate, for the various country headquarters location included primarily national forces. Today elements of NATO headquarters are required to move from their traditional static headquarters to forward locations within a theater of operations as was seen in the IFOR AFSOUTH's move to Sarajevo. The fast pace of events has not allowed NATO the benefit of having a period of transition. New logistical policies are being written as a result of the recent NATO operations in the former Yugoslavia. Logistics within NATO is currently evolving into a shared relationship between NATO

and the countries participating in the military operation. In light of these recent changes within NATO, this study serves as a timely subject for military professionals of both the US and its allies.

¹Department of Defense, Joint Publication 3-07, *Joint Doctrine for Military Operations Other than War* (Washington, DC: Joint Staff Pentagon, 1995), IV-5.

²NATO, STANAG 2034, *NATO Standard Procedures for Mutual Assistance* (Brussels: NATO, 1998), 2-3.

³NATO, NATO Fact Sheet No. 23, *NATO Logistics* (Brussels: NATO Publications, 1997), 1.

⁴*Ibid.*

⁵James A. Huston, *Guns and Butter, Powder and Rice, U.S. Army Logistics in the Korean War* (London and Toronto: Associated University Press, 1989), 314.

⁶Joseph M. Heiser, *A Soldier Supporting Soldiers* (Washington, DC: Office of the Chief of Military History, 1991), 217.

⁷*Ibid.*

⁸Department of Defense, Joint Publication 3-0, *Doctrine for Joint Operations* (Washington, DC: Joint Staff Pentagon, 1995), GL-4.

⁹*Ibid.*, GL-4.

¹⁰*Ibid.*, GL-10.

¹¹Department of Defense, Joint Publication 3-0, *Doctrine for Joint Operations*, GL-11.

¹²*Ibid.*, GL-4.

¹³*Ibid.*, VI-1.

¹⁴NATO, *NATO Logistics Handbook* (Brussels: NATO Publications), 1301.

CHAPTER 2

WORLD WAR II

World War II, with its new weapons of mass destruction, consumed huge quantities of ammunition, fuel, equipment, and other allied resources needed to conduct and sustain an offensive war against the Axis Powers (Germany, Japan, and Italy). The nature of this war required extensive movement of materiel and men to the European continent. In 1945, to sustain the ninety allied divisions in Northwest Europe required 63,000 tons daily. "Both Field-Marshal Viscount Montgomery and General Eisenhower draw attention on several occasions in their reports of the campaign in North-West Europe to the dependence of operations on the solution of logistical problems confronting their respective commands."¹

World War II was fought on a global basis involving the world's major economic and industrial nations. Allied military plans included operations in the Pacific, continental Asia, continental Europe, the Middle East, and North Africa. Providing logistics for operations worldwide was extremely complex. Not only were plans considered for supplying campaigns of the major allies (the US, Britain, and Russia), but plans were made to supply resistance and patriot groups, like the Free French forces in North Africa under General Charles de Gaulle. This section will examine the strategic policies that affected logistical provisioning and the manner in which logistics was planned and executed in selected theaters of operation in World War II.

The complexity of the logistics requirements for these potential operations necessitated centralized planning at the highest levels with the various military staffs

taking a worldwide look at the availability of resources. To gain an appreciation of tactical logistical arrangements among the allies, primarily Britain and the US, one must understand the strategic as well as operational arrangements made to conduct the various military operations in this worldwide conflict. Therefore strategic decisions by the US, such as the Lend-Lease Act of 1941, and the various support agreements (such as reciprocal aid) between the US and Britain are central to any discussion on multinational logistics during World War II.

Starting with Germany's invasion of Poland, the US only monitored the European situation without any intentions of sending troops. In 1940 many US military observers were sent to embassies in Europe to keep abreast of activities. However, by December 1940, Germany had defeated France, the Netherlands, Denmark, Norway, and Belgium, leaving only Britain to face the threat from Germany and Italy.

As a result, in 1941, the US took concrete steps to aid Britain in her struggle against the Axis powers. One of those steps was the Lend-Lease Act of 1941. This act was enacted "to provide war materials for the democracies of the world"² and empowered the US president to sell, lend, lease, and transfer materiel under whatever terms he deemed necessary. The act initially involved providing a fund of \$7 billion for this purpose. Eventually total lend lease aid exceeded \$50 billion with virtually all the allies receiving aid. In all, more than thirty-five foreign governments received aid through this program including China, the Netherlands, and the Soviet Union.

By the beginning of 1942, the American president and British Prime Minister had agreed on a policy structured around creating a common pool of resources to be allocated on the basis of strategic and operational needs. As a corollary, the British and American

leadership established munitions and other joint boards to determine the proper allocation of resources and production to the war effort. The two ammunition assignment boards, the MAB in Washington, and the LMAB in London worked under the control of the Combined Chiefs of Staff (CCS). Each board had representation from both countries. Initially, the British production in munitions exceeded that of the US substantially. They were more far more experienced in wartime industrial organization and production. The British felt that the common pool policy should be interpreted strictly, for their contributions (especially in terms of manpower) to the war effort was substantial. They were the only country left fighting against the Germans, and proportionally their country had more of its population in the military than any other of the allies. Inevitably, as the Americans became more experienced with wartime production and began to move soldiers in the various theaters of operations, the British influence on munitions distribution decreased significantly. By mid-1943, US wartime production was four times as much as British production. Therefore, Americans began to resist any British attempts to direct the use of its production. The MABs lost their influence and the decisions were made by the US Joint Chiefs of Staff (JCS). "By the fall of the year, when the time came to delineate a definite munitions program for US industry in 1943, the Americans insisted on formulating the program on a unilateral basis and the British were not permitted to participate."³ Nevertheless, the British were dependent on US production, for they had made the strategic decision in 1940 to receive as much equipment, materiel and supplies as possible from the US despite any severe economic consequences.

In 1943-1944, Britain and its Commonwealth of Nations had received approximately 61 percent of their total military supplies through lend-lease. "During 1943 British Empire forces received 24.5 percent of their total munitions supplies from US lend-lease and in 1944, 27.2 percent."⁴ In addition to the Lend-Lease Act, the US and Britain signed the Master Agreement in 1942. Both countries agreed to provide the other the necessary logistical support to the extent of their capability for the proper execution of the war. Initially the US military relied heavily on the British for logistical support. The US established a purchasing board for the purpose of negotiating agreements with the British. Eventually the US purchased almost every class of supply from the British to include the unpopular British rations, which primarily consisted of mutton, potatoes, bread, and tea.

In Volume 1 of Ruppenthals' (1985) *Logistical Support of the Armies*, the extent of initial British support for US troops is outlined.

In the first half of the reciprocal aid program, from June to December 1942, US forces procured the equivalent of 1,120,000 measurement tons of supplies and equipment from the British. The largest portion of these supplies-almost 600,000 tons-consisted of quartermaster items, including subsistence clothing coal, and other supplies. Other agreements were made where the US received certain clothing items from the British, and the British received the same items from the US for its units in the Middle East. Additionally the British provided the US 15,000 bombs, 70,000 rounds of artillery ammunition and several million rounds of small arms ammunition, 4,250,000 antitank mines 5,000,000 hand grenades, 10,000 parachutes, several hundred thousand camouflage nets, plus hundreds of other items if all classes.⁵

Britain and the US also provided logistical support to the USSR. The US provided lend-lease support and, as early as 1941, the British began developing plans to establish lines of communication to Russia via the Middle East. However, boards such as the MAB and CCS did not manage the support provided. Moreover, the support provided to

the USSR was not tied to specific Soviet operational plans, as was logistical support to the British. Logistics was provided merely because the USSR was contributing to the defeat of Germany on the eastern front, for the Allies believed that providing support accelerated the defeat of Germany. The US also established a program to rearm eight French Divisions in North Africa. To the US, arming the French divisions would reduce its need for more manpower; US industry was requesting the “release additional soldiers for work in tire and heavy ammunition plants.”⁶ Thus, the collective responsibility of providing logistics is evident; management and the sharing logistics resources were extensive and integrated. As seen at the strategic level, logistical operations were combined out of necessity. Britain with its limited manpower and depleted resources could not have continued to fight the Germans without US logistics support. Consequently, a nationalistic approach to supplying its army was inconceivable.

Operation Overlord, the 1944 allied invasion of the European continent in Northwest France and Operation Dragoon, the invasion of Southern France, serve as examples of the logistics planning and execution at the operational level during World War II. Both of these operations illustrate the successful integration of Allied staffs to manage and distribute a common pool of logistical resources to its invading forces. An analysis of the logistical integration for these operations is provided in the following paragraphs.

Planning for the invasion of Northwest France in 1943 began at the Allied level with the Chief of Staff to the supreme allied commander (to be designated) called the COSSAC. The head of the COSSAC was a British general with an American deputy. The highest US headquarters in this theater was the ETOUSA, the European Theater of

Operations, US Army, located in Great Britain. This headquarters consisted of three subordinate commands in 1943: Ground forces (V Corps), the Services of Supply (SOS), and the Eighth Air forces. The SOS was the primary agency for field administration and logistics in this theater during the buildup of supplies, men, and equipment in Great Britain for the impending invasion of the continent. Eventually, the SOS and ETOUSA were merged; the US organized all ground forces into an army and established army group headquarters. The group headquarters then controlled all operational planning, and the SOS-ETOUSA became the communications zone (COMZ). The COMZ organized the delivery of supplies to subordinate logistical organizations. These organizations were subdivisions known as base sections and advanced sections (ADCONs). The base sections were static depots, which provided large-scale storage and wholesale distribution. ADCONs were mobile, located between the COMZ and the combat units. "The European theater ultimately included two advance sections: the Advance Section (ADSEC) which landed in Normandy in June 1944 and supported the 12 Army Group and the Continental Advanced Section, Southern Line of Communications (CONAD), which landed in southern France two months later."⁷

Once appointed as the Supreme Allied Commander, General Eisenhower organized his invasion forces in the following manner. The Allied Expeditionary Air Force (AEAF) and the Allied Naval Expeditionary Force (ANXCF) were directly under the command of the supreme commander. Command and control of ground operation was divided into two phases. During the first stage of the invasion, the British 21 Army Group, which consisted of the Second British Army and the First Canadian Army, commanded all ground forces on the continent. To provide administrative support for the

US forces under the British command, a small contingent of US soldiers was attached to the 21 Army Group. Consistent with a principle of separate national logistics systems, the COMZ provided logistical support for the US First Army. Once the US Third Army moved on the continent, General Bradley commanded all US ground forces and British Field Marshal Montgomery commanded the 21 Army Group. An advanced COMZ was also formed on the continent to provide logistical support to US forces.

General Eisenhower appointed himself as the COMZ commander, thus serving as the US conduit to the War department. He delegated his authority to a deputy COMZ commander to manage all aspects of logistics operations. Unlike the US, the British lines of communication fell under the 21 Army Group instead of being a separate command. "The general policy was, that after January, 1944, all units passes under the command of the 21 Army group one week after they completed mobilization."⁸ Figure 1 illustrates the command relationships formed for Operation Overlord.

Once on the continent, logistic execution was primarily along national lines with the US COMZ and the British lines of communications under 21 Army Group. The 21 Army Group forwarded its demands for supplies to the Supply and Transport section (S.T.2) of the British War Office. Each nation had its own supply and transport structure on the continent. However, strategic and operational planning and the allocation of supplies were shared. For example, the American and British staff began planning fuel distribution in the European theater as early as 1943. The data from the British War department seen in table 1 illustrate the allocation of responsibilities for the provision, supply and distribution of fuel and serves as an example of how other supplies were typically managed.

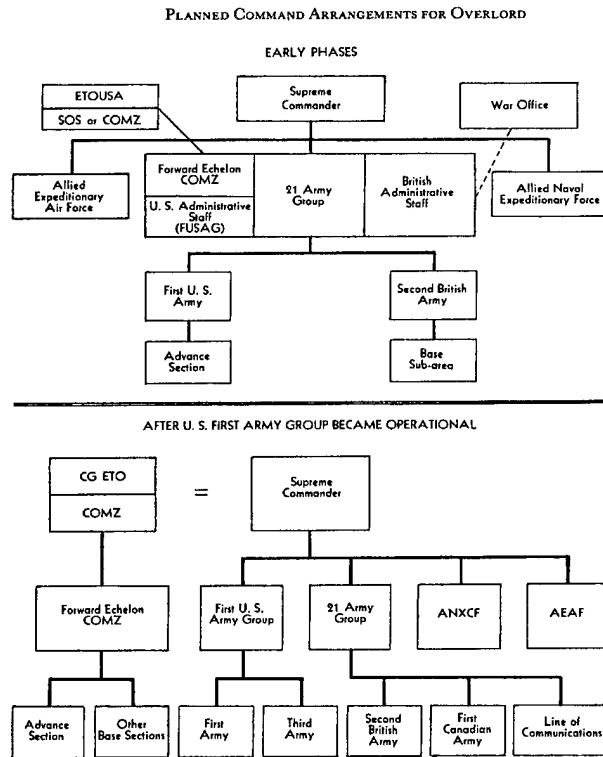


Figure 1. Ronald Ruppenthal, *Logistical Support of the Armies*, Vol.1 (Washington, DC: Office of the Chief of Military History, US Army 1985), 225.

Table 1. Planning for Bulk Supply

Type of Product	Department Responsible
Fuels and lubricants of Naval Supply	Admiralty [British]
All M.T. [Mechanical transport] fuels, lubricants, fog oil kerosene and flame thrower fuels, consigned to US controlled ports on the continent.	European theater of Operations, United States Army (ETOUSA)
All M.T. fuels, lubricants, fog oil, and F.T. F., consigned to British controlled ports on the continent	War Office
All aviation fuels an aircraft engine lubricants for both British and US controlled ports	Air Ministry [British]

Source: Great Britain War Office, *Supplies and Transport*, vol. 1 (Great Britain: War Office, 1954), 304.

A further example of the cooperative logistical planning between the US and the Britain and the collective approach taken to providing logistics is the management of solid fuels for Operation Overlord. Based on the German actions in World War I, the US and Britain feared that the Germans would destroy coalmine shafts. Coal was allocated based on priority of use; train engines were given the top priority. Coal fuel was also used as heating apparatuses for bakeries and cold weather stoves and for many other military uses. Therefore,

The British "War Office, through its appropriate branch, S. T. [Supply and Transport] 7, was responsible from D-day to May, 1945, for the supply of all solid fuel to both the British and American forces taking part in 'Overlord.' It had been decided that this should be a S.T. responsibility on the principle that the largest user should assume responsibility for coal overseas."⁹

This combined section, created to manage coal, eventually evolved into a staff consisting, not only of British and American military members, but of French, Belgian, and Dutch. The section for coal management grew to over 400 men with subsections working in each of the liberated countries (France, Holland, and Belgium) to arrange coal allocations.

The above example is one of many, which illustrate Allied logistics cooperation. Arguably, the most representative example of a successful collective approach to solving the complex problem of logistically supporting a multinational force is the French and American cooperation in Southern France. The integrated logistical operations of the Continental Advance Section in Southern France can provide a blueprint for future multinational logistical operations.

In support of Allied Operation Dragoon, the French and Americans formed the Coastal Base Section (CBS) in Naples, Italy, in 1944, which did much of the initial planning. The organization was later renamed the Continental Advance Section (as

discussed in Operation Overlord) during and after the US First Army relinquished control of the beachheads in southern France. In preparation for supporting this operation, French officers were sent to logistical commands in the US Seventh Army to learn US logistical policies and procedures. The majority of the supplies for this operation were to be provided by the US to French units. Therefore a French operational section was developed to coordinate getting the American supplies to the French combat units. This French operation section was called Base 901; its organization was based on a US supply structure and was created under the direction of US officers. Members of the CBS and Base 901 were attached to US units in support of the Southern France invasion. Members of Base 901 worked with the general and special staff of the US Seventh Army once ashore in France, thereby familiarizing themselves with US plans and operations. Consequently, when the Seventh Army handed over command of the beaches to CBS (including the Base 901), the CBS and French sections were fully prepared to assume the mission of logistical support. As combat units advanced in France, the name of the CBS was changed to the Continental Advance Section of the Southern lines of communication (ADCON). The ADCON's task was challenging; its mission included supporting the Seventh Army, the First French Army and other forces under the command of the Sixth Army Group. The task of supplying the First French Army was even more daunting, for the French Army (organized in North Africa) was composed of North Africans, Senegalese and, Madagascans as well as French nationals from all over the world. The following excerpt of general orders given by the French commander to the First French Army outlines the formal mechanism to be used to ensure successful American and French logistical integration:

1. The following general orders, Headquarters, First French Army, is published for the information of all concerned:

23 October 1944

LETTER OF APPOINTMENT

The Commanding General, Continental Advance Section, U. S. Army, having assumed direct responsibility for the supply of the French First French Army, will have authority to decide so far as he will deem expedient on the assignment of French Officers of Base 901, whom he will appoint to the various branches, headquarters of command group of that Continental Advance Section.

These provisions will apply as long as the First French will Army is fighting as part of the U. S. 6th Army Group and on the French soil; they may be reconsidered on the other side of the Rhine River.

2. For operational purposes only, the Headquarters of the Continental Advance Section will, effective 20 October 1944, be composed of American and French officers and enlisted personnel closely integrated within the General and Special Staff section. Authority for necessary attachment of French personnel is contained in communication quoted above, American and French officers will assume equal status as to authority and responsibility in the discharge of all duties appropriate to their respective staff assignments,

3. Such officers of 901 Base (French) as may be required to assist in the logistical support of the First Army (French) and for supply of French service troops employed by the Continental Advance Section, will be placed on detached service with Continental Advance Section by the Commanding General, 901 (French) Base.

J de LATTRE
Commanding General, First French Army¹⁰

The above general order created a framework from which to build an effective logistical support apparatus. However, the execution of this agreement involved close coordination and interaction between French and American staffs. The French formed a command group within the ADCON to advise section personnel on the First French Army's operations and on French supply problems. This group provided assistance to the First French Army on US supply policies and procedures. "In the same way, it was this group consulting with the ADCON staff which pointed out that the French Army had its own

directives with which it had to comply and that a compromise, at times, must be made.”¹¹ Furthermore, the ADCON consisted of French and American officers, where French officers were appointed to head several supply sections. In addition to the ADCON, the French Base 901 formed a separated command to take care of the administrative functions purely French and to purchase items locally in France. Base 901 also supported the members of the French Forces of the Interior (FFI) who had been recruited by the First French Army as they drove north from southern France. “By April 1945, there were 39 French officers in the headquarters of the Continental advance Section and 34 French units comprising over 6500 men assigned to Base 901 and available for use in the Continental Advance Section area.”¹² Both French and American officers assigned to ADCON were directed to provide maximum support to the Sixth Army Group combat units regardless of nationality.

The multinational logistical operations conducted between the French and Americans provided many lessons learned for the US Army and its allies after World War II. French military understanding of US supply procedures, especially requisitioning, was critical to the efficiency achieved in supplying the First French Army. The ADCON ensured that the French forces were able to fit US supply procedures within the established French structure. A significant portion of the French officers assigned to the ADCON had served with the Corps Expeditionnaire Francaise, which was part of the United States Fifth Army in Italy. This experience enabled them to better solve logistical problems when they occurred. For example, French quartermaster officers ensured that only certain American rations were sent to French colonial soldiers (because of cultural and religious preferences). This increased efficiency by reducing backhauls of unwanted

food items, and also reduced waste. French and American soldiers worked together to repair damaged materiel and equipment from both nations. The ADCON also provided a French colonel to head movement and transportation operations because of his knowledge of the French railway and highway system. Moreover, the French assigned played a critical role in planning force protection for the various support installations established in southern France. These examples of French-American cooperation in Operation Dragoon and American-British cooperation in Operation Overlord illustrate that logistics was truly a collective effort.

A collective effort can also be seen in the Asian theater of operations. Allied action to fight Japan in the Chinese-Burma-India theater (Southeast Asia) included strategic decisions, which also forced an international approach to logistics. In this theater, the quantity of logistical support and the manner in which it was provided to the coalition forces against the Axis power Japan proved to be very contentious and complex. The objectives in the Chinese-Burma-India (CBI) theater were centered on defending India from the Japanese and driving the Japanese from Burma, Indochina, and the Chinese mainland. Southeast Asia was important to the allies because of its vast resources (tin, rubber, oil, etc.) needed for the war effort. Because Britain and the US decided to place emphasis on first defeating the German threat, the allied forces in Southeast Asia were not given priority of resources.

Before the US and Britain began operations against Japan, the Chinese had been defending against Japanese aggression on the Chinese mainland for over four years. The US had been supporting the Chinese in their efforts against Japan by providing them lend-lease assistance for aircraft and materiel to support ground forces. With the

increased likelihood of France and Britain not being able to hold on to their Asian possessions by the end of the war, the US believed that a strong China would prevent the Soviet Union from filling the potential power vacuum in Southeast Asia . “With the attacks on Pearl Harbor and Malaya, the United States and Great Britain were drawn into the Sino-Japanese struggle.”¹³ Ultimately, the US desire to aid the Chinese conflicted with the British, especially in terms of the limited logistical support offered from US lend-lease. The British wanted to ensure the emphasis was placed on the European theater. Moreover, the US wanted the Chinese nationalist leader Chiang-Kai-shek to direct the war instead of the British General Sir Archibald Wavell.

Nevertheless, allied leaders formulated a strategy that was purely defensive and continued supporting Chiang against Japan as well as holding the line against further advances into Burma and India.

Chiang’s strategic and operational importance was as a base to defend Burma, India, and the Malay-Java barrier and possibly as “jumping off” point for retaking Indochina. In order to reduce the friction between Chiang and the British (whom Chiang believed imperialistic), the War department would take responsibility for China while Southeast Asia command assumed responsibility for Burma.¹⁴

In December 1941, British Prime Minister Churchill and US President Roosevelt offered Chiang command of all UN forces in the China Theater and US Lieutenant General Joseph W. Stilwell was named chief of staff for the allied staff. General Stilwell arrived in the CBI theater in March of 1942. “After the Japanese occupied Burma in May 1942 and destroyed the last line of communications between China and her allies, Stilwell faced a problem that required a multiple solution if he was to carry out his orders from General George C. Marshall, Chief of Staff, US Army, to support China.”¹⁵ Stilwell stressed that the Chinese Army needed, in addition to training, to be well

supplied with food, arms, munitions, and other equipment in order to launch an effective offensive against the Japanese. To achieve this end, he maintained that the allies needed to retake Burma and subsequently open a supply line to support from Rangoon (a major port in southern Burma) to Kummning in China.

General Stilwell planned to open a supply line through Burma to supply the Chinese forces in their effort to defeat the Japanese in the Chinese mainland. The US wanted Chiang to reorganize his army into sixty divisions. Thirty divisions would be used to retake North Burma (X and Y forces) and thirty divisions (Z forces) would be used to defend East China. The ultimate aim was to drive the Japanese out of China. The Chinese were to continue to receive supplies for these divisions under the US lend-lease policy. However, Chiang's inability to restructure and consolidate his Yunnan ("Y") forces in order to initiate the drive between Salween to Burma forced General Stilwell to convince the US government to use lend lease as a leverage for his inability to act. Only the Chinese "X" forces were to be trained and equipped by the winter of 1943. These "X" forces received clothing and rations from the British and materiel from the US.

Before this plan was approved by the various governments "Stilwell in July 1942 organized the US airforce and service troops in China, Burma and India into an American theater of operations, US Army Forces in China, Burma, and India."¹⁶ Thus the loss of Burma forced Stilwell and the Allies to conduct aerial resupply of Ameican, British, Chinese, and Indian soldiers over the Himalayas in norhtern Burma.

The British however, disagreed with any plans to divert needed logistics and manpower to the CBI theater because it would divert critical resources needed in Germany. Barbara Tuchman (1970) in *Stilwell and the American Experience in China*,

1911-45, writes that Chiang felt that "Britain would try to "preempt the lend-lease arms that were piling up in Burma on consignment to China and wanted American leadership to keep British from taking his goods."¹⁷ Additionally there were disagreements between Stilwell and the Commander of the Fourteenth US Air Force in China Major General Chennault.

Despite all of these problems, strategy concerning supply to forces in this theater was eventually resolved. After the Quadrant Conference, the CCS agreed to launch several limited offensives to drive the Japanese from the Asian mainland. CBI had gained importance because it fixed substantial Japanese forces in China, preventing them from reinforcing other forces in the Pacific theater. In accordance with the results of the Quadrant Conference, the allies seized Myitkyina an area in north Burma to take key airstrips from the Japanese. The CCS pointed out that in order to break the blockade in China, the CBI forces must "carry out operations for the capture of Upper Burma in order to improve the air route and establish overland communications with China."¹⁸ Logistics planning and cooperation among the allies was critical to its eventual success, specifically logistic operations in India.

Supplying the Chinese forces was essentially under the overall control of a US commander and the Munitions Ammunition Board. General Stilwell was responsible for presenting all Chinese military requirements to Washington. In addition to the American provisions, the British, Canadians, and Australians provided supplies to the Chinese. American forces also were responsible for administration and maintenance of these supplies. Because the Chinese did not have the necessary personnel or facilities in India to handle storage and movement of lend-lease supplies, these functions also were the

responsibility of the US supply services, specifically the SOS organization (discussed earlier in Operation Overlord).

The administration of this program proved to be extremely difficult to manage. The American theater SOS was inundated with large stockpiles of Chinese supplies from US lend-lease. The problem of large stockpiles was the result of a shortage of trained supply personnel and poor storage capacity. Despite these constraints, the supplies continued to arrive monthly, making the task of locating needed supplies very difficult. Due to the difficulty in finding supplies among the large stockpiles, supply requisitions were often duplicated. The civilian transportation companies did not often provide shipping manifest. Once supplies arrived to India, they were often piled in storage sheds. "Once in sheds, supplies were simply piled there, with no attempt at physical inventory. Records showed only 'CDS supplies' or 'spare parts'."¹⁹

"To sure proper distribution and use of available equipment, Chinese as well as American, Wedemeyer permitted his own SOS commander, Major General Gilbert Cheves, to assume the duties of commander of the Chinese SOS as well."²⁰ Britain and US agreed that the port of Calcutta would be controlled by the military under a British commander with an American deputy and a civilian director to placate the Government of India). US logistics organizations, such as the Negro port companies worked tirelessly to keep cargo moving toward the front.

In Great Britain, during the buildup of supplies and forces for the invasion of France, the British provided the US many supplies locally under the reciprocal aid program. Likewise, the Government of India under reciprocal aid provided most of supplies for US forces in India. "During the period 1943 and 1944, reciprocal aid from

India steadily increased until it began to seem that the upper limit was being approached even though various US agencies took steps to improve Indian productivity.”²¹ Table 2 contains SOS anticipated postwar settlement estimates for goods provided to the US under reciprocal aid. Many of the Indian workers were trained and supervised by US Army enlisted soldiers.

Table 2. Reciprocal Aid Provided by the Government of India

	1943	1944
January-February	5,710,370	35,662,824
March- April	6,413,377	46,042,316
May-June	9,049,295	52,482,591
July-August	13,113,736	56,203,485
September-October	16,881,941	57,050,847
November-December	27,469,293	-----

Source: Charles F. Romanus and Riley Sunderland, *Stilwell's Command Problems* (Washington, DC: Office of the Chief of Military History, US Army, 1956), 278.

The US SOS troops could certainly draw supplies (such as rations) directly from the Royal Indian Army Service Corps depots. Eventually army forces in the field could send requisitions directly to the local depots without approval from the SOS. This was allowed due to the fact that the agreement between the US and the government of India prevented the US from buying imported goods on the open market. The US needed to be able to have the flexibility to buy imported goods in case of emergencies. Additionally, to improve Indian productivity, teams of US technicians visited Indian factories and provided assistance.

Moving supplies to forward areas was a major challenge. Supplying forces, which consisted of Hindu, Moslem, Burmese, Chinese, British and Americans, required

the SOS to maintain a large and varied inventory, especially with respect to food. The US logisticians attempted to conform to the different dietary requirements and relations of the various countries. Even, experts from the US were sent to this theater to assist in establishing a stock record system to improve the poorly organized warehouses.

The US SOS was challenged in providing logistics within this theater to a multinational force. Eventually, the SOS and British were able to increase the tonnage of supplies brought forward to allied forces. Charles Romanus and Riley Sunderland, in *Stillwell's Command Problems* maintain that "behind the successes in north Burma lay success in the field of logistics."²² The forces in this theater received almost all of its equipment from the US and Britain. Although the Government of India did not have the capability to supply critical arms and munitions to CBI, it provided US forces supplies such as clothing and foodstuffs under the reciprocal aid program. Like the European theater, logistics was entirely a collective responsibility.

World War II still serves as a foundation upon which US operational logistical planning is built. Casualty rates, fuel consumption, and ammunition expenditure are all based, to an extent, on World War II. By 1940 Britain was standing alone to face Nazi Germany. Therefore, from the outset, the Allies were forced to take a collective approach in every aspect of military operations to defeat Nazi Germany. Consequently, the US was forced to enact measures such as the lend-lease policy to support nations fighting against Nazi Germany. On the other hand, the US, having to project its forces into Europe, needed to rely on host countries for a significant portion of its supplies (such as rations and other base support items) to sustain its forces. Thus the collective approach at the strategic level forced logistics staffs to be integrated such as the ADCON

in Southern France. This section's success was due in large part to multinational staff integration. At every level of war (from tactical to strategic), there was integration as illustrated in discussion of Base 901 to the joint MABs. Gordon Gray, a former US secretary of the army, captures the importance of War II. He stated:

It is only through a sound, effective integration of our military and other national policies that war can maintain the posture necessary to keep peace in the world. If by our strength, we can discourage aggression long enough; and if during that uneasy period, we can throw our entire will and idealism into the effort to develop an effective organization for world peace, we may approach the goal that man has sought long: unarmed settlement of differences between nations.²³

In sum, this war validates the need for establishing policies, which emphasize a collective approach to resolving military problems. The examples provided suggests that alliances must capitalize on the strengths of their partners, and that a collective approach to providing logistical support can achieve economies of scale. It further highlights the need of military officers to become familiar with the procedures of its fellow alliance officers. Thus, when developing future models for providing logistics to coalition forces, logisticians should begin with World War II, for it offers a wide range of examples for supporting conventional warfare in varied environments throughout the world.

¹C. Ravenhill, "The Influence of Logistics on Operations in Northwest Europe, 1944-1945," *Journal Royal United Service Institution* 91 (1996): 495-498.

²Roland Ruppenthal, *Logistical Support of the Armies*, vol.1, *May 1941-September 1944* (Washington, DC: Center of Military History, United States Army, 1985), 13.

³Robert W. Coakley and Richard M. Leighton, *Global Logistics and Strategy 1943-1945* (Washington, DC: Center of Military History, United States Army, 1968), 627.

⁴*Ibid.*, 631.

⁵Ruppenthal, 255-256.

⁶Byron Fairchild and Jonathan Grossman, *The Army and Industrial Manpower* (Washington, DC: Center of Military History, United States Army, 1985), 260.

⁷William F. Ross and Charles F. Romanus, *The Quartermaster Corps: Operations in the War Against Germany* (Washington, DC: Center of Military History, United States Army, 1965), 396.

⁸D.W. Boileau, *The Second World War II, 1939-1945*, vol. 1, *Supplies and Transport* (Great Britain: War Office, 1954), 318.

⁹*Ibid.*, 304.

¹⁰Arthur Conn, "Continental Advance Section," *Military Review* 30, no. 3 (June 1950): 29.

¹¹*Ibid.*, 30.

¹²*Ibid.*

¹³Leo J. Daugherty III, "Interservice and Interallied Corporation in China-Burma-India," *Joint Force Quarterly* 12 (summer 1996): 95-105.

¹⁴ *Ibid.*, 99.

¹⁵Charles F. Romanus and Riley Sunderland, *Stilwell's Command Problems* (Washington, DC: Center of Military History, United States Army, 1956), 4.

¹⁶*Ibid.*, 4.

¹⁷Barbara Tuchman, *Stilwell and the American Experience in China, 1911-45* (New York: MacMillan, 1970), 234.

¹⁸Romanus and Sunderland, 9.

¹⁹Romanus and Sunderland, 283.

²⁰Coakley and Leighton, 734.

²¹Romanus and Sunderland, 278.

²²*Ibid.*, 257.

²³Conn, 33.

CHAPTER 3

THE KOREAN WAR

The Korean War, unlike the global conflict of World War II, was limited in scope, resulting in different logistical preparation, policies, and organization at the strategic as well as operational level. The limited scope of this conflict is evidenced by US President Harry Truman's use of the euphemism, a "police action," to characterize the Korean War. World War II required massive economic mobilization and a worldwide visibility of resources at the highest levels of the British and American governments. The Korean War was supplied with World War II "leftovers."

The political events leading to the Korean War and the economic plight of the Allies after World War II are key to understanding the logistics policies of the Korean War. The end of World War II left the European allied economies in shambles. With the US ending the lend lease program after the Japanese surrender in August 1945, the Western allies were left searching for ways to maintain a military presence in foreign territories occupied prior to the war and to defend against the budding communist threat. Most of the allies rejected the US postwar calls for immediate cash for military equipment supplied to them. The US policy involved providing allies access to thirty-year loans at commercial interest rates. Most of the allies wanted the US to write off war debts, but American political pressure prevented the government from following that course. Ultimately, Britain and the Western allies had to receive American and Canadian loans (in addition to the Marshall Plan) to rebuild their economies. The British

government was bankrupt, spending over 2,000 million pounds and earning only 350 million pounds in 1945.

Thus at the end of the world war, America was left as the lone power to face the new communist threat. Britain's plight is representative of the European governments after the war. For example,

Britain's only solution was to embark upon a further round of borrowing while attempting to shed or transfer as many overseas involvement as possible. Thus the British support for the anti-Communist struggle in Greece and Turkey was transferred to the Americans in 1947. A further round of financial sustenance, not merely for Britain but for Western Europe as a whole, came with the Marshall. Much of this took the form of an outright gift, but some was on loan, and in the period 1948-51 Britain received some 681 million pounds. Thus even before the Korean War prompted a new and expensive round of rearmament the British economy was in crisis.¹

Although the British wanted to exert the same influence concerning military strategic and operational policy in Korea that it held in World War II, its poor economic condition relegated them to US support.

The genesis of the conflict on the Korean peninsula inevitably made the US the "lead" nation in this conflict. The Korean War was the first major war (and "UN" war) involving coalition and allied forces since World War II. This war was a manifestation of a poor postwar settlement concerning the Korean peninsula. Prior to the end of World War II, the Korean peninsula had been dominated and controlled by the Japanese for forty years. However, the defeat of imperial Japan created a power vacuum in the Korean peninsula, which was ultimately divided between US and Soviet occupation zones at the 38th parallel. To a great extent, Korea became a victim of a deteriorating relationship between the Russians and Americans who became "trustees" north and south of the 38th parallel respectively. Different political objectives between Russia and the

US prevented the intended unification of the peninsula under one government. The natural by product of this animosity and polarity was Korea's domination by nationalists in the South and communists in the North.

North Korea, unable to exert influence politically and diplomatically, launched an attack into South Korea and within three days had occupied Seoul, the South Korean capitol. On 27 June 1950, the UN requested that member states provide military assistance to the Republic of Korea (ROK) to "repel the armed attack and restore international peace and security in the area."² Over twenty nations eventually responded by providing various sorts of assistance ranging from medical supplies and personnel to combat air support and combat ground units. On 7 July 1950, the UN named General Douglas MacArthur as the UN combined commander and recommended that other nations supplying forces and materiel contribute them to a single command under the US. By September 1950, the forces (elements of General Walton Walker's poorly supplied the US Eighth Army) rushed to Korea to assist the ROK Army against the North Korean's were defending behind the Pusan Perimeter.

MacArthur's initial strategy pivoted on holding the port of Pusan in the extreme southeast corner of Korea, and on July 19 Walker established the headquarters of the Eighth Army at Taejon, established operational control over the ROK Army, and began to direct a withdrawal of US -ROK forces to an arc of hastily improvised defenses known as the Pusan Perimeter.³

Upon receiving fresh divisions to assist the ones currently defending at the Pusan Perimeter, MacArthur landed these new divisions at the port of Inchon on the Korean western Coast on 15 September 1950. The successful landing of these forces coupled with General Walker's successful attack at Pusan and subsequent drive northward led to the collapse of the North Korean forces. However, the UN offensive across the 38th

parallel and drive toward the Yalu River at the Korean-China border was repelled by Chinese forces. With the loss of the territory gained in their invasion of North Korea, the UN forces fought to a stalemate against Chinese and North Koreans on territory near the 38th parallel until the July 1953 armistice.

Forming an international force to repel the Sino-Soviet-sponsored North Korean government's military attack was an extremely complex task, especially in terms of interoperability. In addition to the problems associated with the various operational and tactical doctrines, languages, customs, and organization, the task of providing logistical support proved to be one of the most challenging aspects of integrating these nations into an effective international force.

The governments of Thailand, India, the Netherlands, France, Greece, Belgium, Ethiopia, Luxembourg, Turkey, and the Philippines all offered to send combat forces to aid the ROK. "When offers of troop contingents were accepted by the United States on behalf of the UN, the US army was authorized to enter into direct negotiations with foreign representatives concerned in order to work out plans for logistic support and operational commitment."⁴ On 20 September 1950, a Philippine combat team consisting of 1400 soldiers arrived in Korea. During the month of November 1950, the British 29th Infantry Brigade Group of over 9,300 soldiers, a Turkish brigade of approximately 5,000 soldiers, a 1,200 soldier Thai infantry regiment, a 6,660 soldier battalion from the Netherlands, and a French infantry battalion all arrived in Korea. A 1,256-soldier Canadian infantry battalion and a 1,231-soldier artillery battalion from New Zealand arrived by the end of December. Other countries, including Norway, Columbia, Sweden, and Italy, also offered support and provided various types of combat or combat service

support personnel. Before the end of 1952 over 32,000 men were deployed to Korea and attached to the US 8th Army in Korea. The forces sent by these countries were all integrated into the US command structure.

In addition to the armed forces of the Republic of Korea, the United Nations Command consisted of military formations in alphabetical order, from Australia, Belgium, Canada, Columbia, Ethiopia, France, Greece, Luxembourg, the Netherlands, New Zealand, the Philippines, Thailand, turkey, the Union of South Africa, the United kingdom and the United States. Besides, Denmark, India, Italy, Norway and Sweden sent medical units. From the beginning, however, the United States forces were the effective core of the UN forces and throughout the fighting the United States made by far the biggest and most effective contribution of any single nation.⁵

The United Nations command is depicted in figure 2.

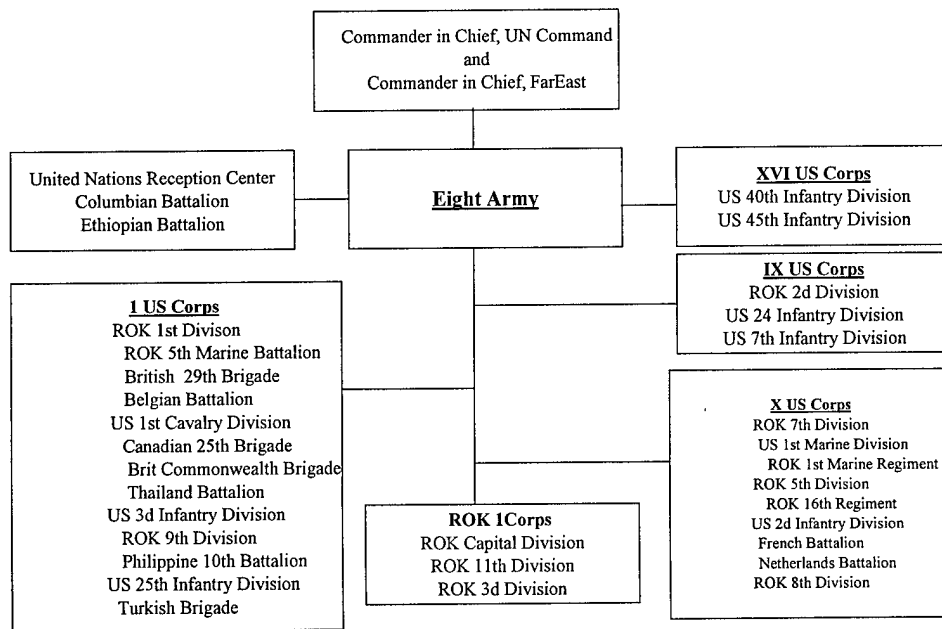


Figure 2. UN Command and Far East Command, Major Ground Forces, 1 July 1951. Source. Walter G.Hermes. *Truce Tent and Fighting Front* (Washington: Office of the Chief of Military History, US Army, 1966), 57.

The battalions from Greece, Thailand, Britain, and Turkey served under the 1 US Corps. A natural corollary of integrating these nations into the US command structure was the practical requirement of the US to provide most of their logistical support. Logistics was arguably key to integrating these countries into the US command structure in order to form an effective multinational military coalition. General MacArthur tended to emphasize combat usefulness in recommending acceptance of offers of assistance, but the president's policy emphasized getting the largest possible number of UN members to participate on whatever scale they were willing and able to undertake. A year later, the Far East Command was recommending "that no units smaller than regimental combat team or brigade size, with fire support, logistics support, and administrative elements integrated, should be offered."⁶ The complexities associated with providing logistical support for these nations played a major role in this shift of policy.

In principle, each participating nation was expected to provide its own logistical support. However, often the forces offered by these nations did not contain the internal logistical structure to offer long-term sustainment. Eventually, three separate logistical systems (all using the port of Pusan) were established to sustain UN forces. The US, Britain, and Republic of Korea (ROK), each maintained separate supply lines. However, the US provided the principal sustainment logistical pipeline for UN forces. The British maintained their own system for themselves and the Commonwealth forces. Logistics was shared for these forces. New Zealand provided the majority of rations and foodstuffs consumed by the commonwealth forces and the Australians provided the transportation of these supplies into the Korean theater of operations. The US provided most aspects of logistical support including clothing weapons, rations, equipment, and ammunition to the

vast majority of UN countries, which were not part of the British Commonwealth. Even the Commonwealth received some supplies from the US. Of the commonwealth countries, the Canadians were the most dependent on the US; they received received food, vehicles, laundry, some signal equipment and ammunition, and spare parts for their tanks. The Canadians used American Sherman tanks. The British received rations, bulk petroleum, oils, various weaponry, and winter clothing. The ROK supply line constituted the third system, which passed for the most part, issues of war materials from the United States. The other logistical support came from sources within their local economy. The US allocated rice to the ROK army and gave their commanders money to buy rations on the local economy.

Thus, vast resources, coupled with the established logistical base in Japan enabled the US to provide the greater proportion of logistical support. Its "World War II reserve stocks in Japan proved to be a great force enhancer during the Korean War, supplying Korean and Allied forces during the initial stages of the conflict."⁷ UN countries were then required to provide payment to the US for this support.

This method of providing logistics support created major administrative problems for the coalition. "When the matter of providing logistics support to various UN Countries in Korea arose in 1950, the first question logistics staff officers in the Department of the Army asked was, 'How is it going to be paid for?'"⁸ The only formal arrangement involving one nation providing logistics to other allied nations was the Mutual Defense Assistance Program (MDAP). The MDAP was a US program designed to build the military strength of its allies, primarily NATO countries, by providing them materiel. The US considered this program critical to enhance the war fighting capability

of the new NATO alliance against communist Russia and its satellites. However, the administration of this program was based on peacetime requirements and procedures. Funds had to be allocated for this in accordance with bureaucratic planning and programming procedures and the approval of the secretary of state. There were no wartime procedures established to provide materiel or other aspects of logistics support. Therefore, the newly formed coalition to defend Korea had to establish a viable system quickly. Congress, however, did pass an amendment on 26 July 1959 to provide assistance on a reimbursable basis to authorized countries under the MDAP Act, but the amendment had little impact on the Korean crisis. This act dealt primarily with encouraging standardization and interoperability among allies without cost to the US. "The total amount of outstanding contracts under this provision could not exceed \$100 million, and in any case goods could be made available only after the recipient nation had provided a 'dependable undertaking' to pay the full cost."⁹ The act for mutual defense was later expanded to Korea. Thus, the cornerstone of logistical support operations during the Korean War was based on the concept of reimbursable support.

Operationally, it would have been more efficient for the US to provide all of the logistics support. But, to be considered a true coalition, each of the countries that offered assistance would have to pay the costs of their support, especially due to the political pressure on US President Truman, as summarized in Grey's (1988) *The Commonwealth armies and the Korean War*.

Although President Truman was the executive agent of the Security Council in carrying out United Nations' action in Korea, it was clear from the outset that the United States was not prepared to bear the cost of defeating Communist aggression alone, just as the Americans were not prepared to be the only UN member nation to commit troops. There was domestic political pressure for

America's allies to support her in Korea, especially in view of American commitments to the defence of Western Europe through NATO and the generous provisions of the Marshall Plan. It was the sort of pressure that no president could withstand for long. Section seven of the 'Policy for integration' dealt with the accountability of logistics support rendered by American forces and outlined the procedures for reimbursement.¹⁰

Thus each of the eighteen nations that volunteered assistance were required to pay the US for any support it received from them. This policy, however, created a huge burden on US logisticians in terms of financially accounting for all of the support provided to the allies. Despite the problems caused by this task of accounting for cost, both the US and its allies felt that it was necessary. The allies wanted to keep track of all of their expenses to gain some idea of their indebtedness in order to prevent being surprised with a huge bill from the US at some later date. A formal system of accounting provided the UN countries a means of legitimizing themselves as credible partners in the coalition. Likewise, the US did not want give some elements of the international community the impression that it was hiring mercenaries to fight its fights.

Eventually, the US Department of Defense issued a directive authorizing the various departments within the military to provide logistics support to the UN countries. However, the law to provide this support was subject to interpretation. The Department of Defense interpretation was that the receiving country should provide reimbursement immediately. If a government receiving support could not provide immediate reimbursement, they were required to conduct negotiations with the US to resolve the financial situation. However, the president was authorized to make an exception.

This interpretation was called into immediate question when the US logisticians refused to implement plans to provide logistics support to the Turkish troops promised

and accepted by the UN to participate as part of the coalition. Support was eventually provided based on the fact that the Turkish government provided an acknowledgement of their financial obligation to the US. Subsequent situations arose concerning the interpretation of this law. According to the US State Department's interpretation, a nation could be provided support only if it merely agreed to having an obligation to the US. Eventually the US provided logistics support on a consistent basis to foreign governments using the Department of Defense's interpretation. According to the Assistant Secretary of the Defense in 1950, "a primary consideration is the precedent which is being set for all future United Nations 'police actions,' and it would appear undesirable to establish any general principle that United States military supplies and equipment would be donated without any obligation on the part of the recipients."¹¹ Some of the established agreements required that reimbursement be provided on a quarterly basis after the US prepared invoices and financial statements.

Even with an established policy and tracking mechanism, only Norway, Sweden, the Netherlands, and South Africa had concluded agreements by the end of 1952. The British Commonwealth countries also posed a formidable challenge. Although all of the British Commonwealth countries received their supplies from a centralized supply unit, the British government demanded that each of the commonwealth countries be billed individually. Thus after the British would receive supplies, they would redistributed them to the nations under their control. The supplies were inevitably mixed, making it very difficult to determine an accurate quantity of how much each of the respective countries received.

This problem was a symptom of the larger one: determining a fair system to derive the amount owed to the US. Tracking supplies by unit or item required combat units to prepare mounds of paperwork. Thus the Far East commander requested a system based on consumption factors, such as average cost per man per day. This approach was sound, for it relieved the units from the burden of paperwork. Conversely, it was unacceptable politically, for the Secretary of Defense and the foreign governments preferred that each item supplied be accounted for. The defense department issued an order stating that consumption factors could be used if they were negotiated and acceptable to the foreign government. Otherwise all supplies had to be accounted for by unit or item. Ultimately, the US had to bear the burden of the administrative workload to track reimbursement. By the end of 1953, the US had provided approximately \$278,092,000 of supplies and equipment. The US divided financial statements into four distinct categories:

(1) initial issue of equipment, including a 16-percent accessorial charge to cover handling and transportation, based on actual list price of material furnished; (2) maintenance cost of personnel, including the resupply of items having a unit cost of less than \$1000, hospitalization, and other services, figured on a per capita basis as determined by replacement and consumption factors revised from time to time in order to reflect changes in the type of fighting and thus five data as nearly as practicable based on actual experience; (3) major items, that is those having unit costs of more than \$1000, furnished subsequent to initial issues, based on actual prices lists; and (4) ocean transportation based on reports for moving troops or cargo belonging to participating forces.¹²

The policy of reimbursable support ultimately stimulated debate among US logisticians (G4s) and operational planners (G3s) within the military. Logisticians were afraid that this operation would establish a precedent for future coalition operations; they did not want to give other nations the expectation that the US would be the coalition

supply and materiel provider. Politics further shaped this view among the G-4 staff, for Congress complained of the number of combat service support units in the Korean theater. To provide service support to the allies increased these numbers, thus the G-4 planners were very reluctant to support any concept that would increase the size of its logistics structure. These senior logisticians further contended that the supplies given to coalition forces in Korea would have hampered US ability to supply and train uncommitted divisions in the US. They stressed that to maintain the readiness of units in the US, these units had to be supplied and that "equipment for forces from other nations would have to be in addition to that provided to American units."¹³ The latter argument was made primarily in response to the G3's advocating of allowing the UN allies to use US supplies without the requirement of reimbursement, for the allied soldiers were a part of the US command structure. Specifically, the US G-3 proposed that the US outfit division size units of allies, who would be used to relieve American troops.

The allied forces in Korea received logistical support from the Rear Headquarters of the Eighth Army (later called the Japan Logistical Command) located in Yokohama. The Japan Logistical Command monitored and controlled all logistical activity for the theater to include port operations. In essence, this logistical command was the theater communications zone. The following excerpt from Terrance Gough's *US Mobilization and logistic in the Korean War: A Research Approach* outlines the logistical organization of the US Army during the Korean War.

Army doctrine in mid-1950 provided for three types of logistical commands: type A, to provide army and communications zone support to a combat force not exceeding 30,000 men or a reinforced division; type B, to furnish communications zone support to a combat force of not more than 100,000 men; and type C, to provide communications zone support to a combat force of

approximately 400,000 men. All of these commands were envisioned as permanent organizations under approved tables of organization, with balanced groupings of combined services for logistical support. The type C command, which the command in Japan was designated, was supposed to include between 75,000 and 150,000 men. In actuality, the Japan Logistical Command contained twice as many soldiers, had occupation duties not contemplated by the doctrine, and suffered a shortage of qualified technical personnel that forced it to rely heavily on Japanese labor.¹⁴

In 1952 the Japan Logistical command came under the umbrella of the joint command, US Army forces East (AFFE), which became the primary administrative and logistical headquarters in Japan.

Another logistical organization, the Pusan Base Command (later called the 2nd Logistical Command), was formed as a type B command to supply UN and US forces under the UN flag. "The primary mission of the new command was to receive, store, and forward supplies for the Eight Army and forward most of the Eight Army's requisitions to the Japan logistical command."¹⁵ However, usually a communications zone is established to control all rear area operations. As the war progressed and the UN and US forces moved further north in Korea, forward supply points were established. In addition to the advanced supply bases, a communications zone should have been at the Pusan area as was seen in Normandy during World War II. However, General Matthew Ridgway (who replaced General Walker) insisted that his area of responsibility begin the Korean shoreline. History suggests that General Ridgway wanted to preclude any interference from General MacArthur. Consequently, all aspects of logistics to include the railroad system management and rear area security became the responsibility of the Eight Army. In 1952, the 2nd Logistical Command was replaced by a communications zone, when rear security, prisoner of war management, and logistical administrative duties became to

much for the Eight Army to handle. Therefore, a communications zone replaced the 2nd Logistical Command. With the establishment of this communications zone, the three supply lines referred to earlier were regularized. The 2nd Logistical Command was able to now serve as the logistical conduit to support the Eight Army. The Korean communications zone assumed all other administrative functions.

Although there were lessons learned concerning multinational logistics in World War II, the Korean War, with a coalition comprising over twenty different countries, presented the Far East Command unique, unexpected logistical obstacles. Some of the challenges manifested during this operation are outlined below.

There were many basic problems associated with cultural differences among the allies of World War II, which were anticipated during the Korean War. For example, the Turkish contingent presented one of the first problems. Because their diet did not include pork, the US class M ration was altered to include extra bread and no pork. Extra rice was included in the rations prepared for the Asian UN contingents. Additionally, most of these countries were accustomed to having large quantities of one type of food as opposed to having modest portions of a wider variety as the standard US rations contained. As a result, US rations were further modified to include large portions of a certain staple such as rice. The "Dutch missed their milk and cheese, the French their bottles of wine, and nearly all Europeans wanted a great deal more bread than the American ration provided. The Thailanders and Filipinos had to have rice and strong spices, and strong brands of tea and coffee."¹⁶ Consequently additional spices packs and hot sauces, various supplements and other modifications were made to the American rations. Most of these modifications were made at division supply points. However, the

Turkish food problem was the most difficult, for a new ration without pork was developed for them, which was subsequently rejected after it was issued. Only Norway, Canada and Sweden were accepting the US rations without modifications.

For each 1,000 rations issued to the Belgian and Luxembourg troops, 500 pounds of bread and 200 pounds of potatoes were added. The French added 500 lb. of bread and 30 lb of dehydrated potatoes. The Colombians received 214 pounds of rice for each 1000 pounds of rations, and they deleted about 50 percent of the dehydrated potatoes from the regular American ration. The Greeks eliminated all sweet potatoes, canned corn, pineapple, peanut butter, dehydrated pea soup, and salad dressing; they added 500 pounds of bread, 42 pounds of macaroni, and 86 pounds of lard.¹⁷

As stated above, the US provided the bulk of support to the Korean Army. The US established a board, which allocated grain nationally, balancing the need of the Army and the local population. Cooked rice issued to the ROK army troops in combat was often spoiled, and like the other Asian contingents, the Koreans disliked US C-rations. Consequently, the Japan Logistical Command developed a special J ration. This 3210-calorie ration contained rice, rice cake, fish, tea, kelp and other items. The US Army used Japanese employees in the US quartermaster depot in Tokyo to assemble these rations.

In addition to the above challenges associated with providing subsistence to this multinational force, other aspects of sustaining this multinational force surfaced. Thai soldiers with their "paddle-shaped feet"¹⁸ experienced difficulty wearing the US standard boot and soldiers from other Asian countries had difficulty wearing American clothing due their small physical stature. Clothing presented certain morale problems, for soldiers wanted to be recognized as members of the countries of their national origin. Therefore, patches identifying the units from their respective countries were worn on the sleeves.

UN and ROK operation and maintenance of equipment created another complex logistical problem. A conglomeration of vehicles particularly handicapped the ROK forces, as well as a lack of sufficient organic maintenance organization and control, and lack of maintenance equipment. "Replacement parts were lacking for obsolete ROK materiel and Thai and Filipino troops were judged incapable of handling medium tanks or cold weather maintenance."¹⁹

The cold weather also posed many problems, for the Ethiopians arrived with only warm weather military fatigues and little equipment for cold weather operations. Thus the Ethiopians and other countries depended heavily on the US for cold weather logistical support. This posed problems for many of the UN contingents, which needed extensive training in the use of US cold weather gear and equipment that often was too complicated for them to operate. For example, there were many deaths associated with the improper use of the heating apparatuses needed to cook and keep warm. Additionally some UN soldiers mistook fuel tablets for salt tablets and consumed them.

The above problems were exacerbated by the language differences. The manual instructions for various equipment and training were in English whereas the other countries spoke Spanish and other languages.

To mitigate many of these problems associated with the incorporation of UN nations in the US command and logistical structure, the US Logistical Command established the UN Reception Center (UNRC). The mission of the UNRC was "to clothe, equip, and provide familiarization training with US Army weapons and equipment to UN troops as determined essential for operations in Korea by the Reception Center Commander."²⁰ This reception center provided the Far East Command an excellent tool

to educate foreign troops on American equipment and administrative and logistical procedures. The center also proved beneficial for the US, for it gave them to the opportunity to resolve issues resulting from differences of cultures and customs. The US logistical commander never planned to establish a center for integration; it evolved due to necessity.

The first units to be received into theater (after the US and ROK forces) were British forces stationed in Hong Kong. These units were basically self-sufficient logistically, and integrated into operations in Korea immediately. General MacArthur quickly recognized the need for a centralized reception center. However, the integration of the 10th Battalion Combat Team from the Philippines proved to be more difficult. Based on the additional time required to train the Filipino unit and the projected arrival of troops from Turkey, Greece, Ethiopia, and other countries, a reception center was created at the Taegu University in Korea. Problems related to clothing sizes, culinary likes and dislikes, and fighting styles were all identified at this reception center. In addition to the reception center, the US sent military representatives to many of the UN countries to train them on American equipment as well as tactics. Individual UN countries also sent representatives as part of an advanced parties to coordinate logistical issues prior to the arrival of the main forces. This training significantly enhanced the effectiveness of the UNRC. Because the UNRC was so successful, the British eventually established their own center for unit integration.

As a result of the Korean War, US staff officers of that time-period recorded many lessons learned to be applied to UN coalition operations. A review of the articles written in *The Military Review* finds many recommendations to improve interoperability

among allies. After-action reports emphasized the need for foreign officers to attend US schools to familiarize themselves with American tactics and doctrine. The reverse, however, was not recommended. Officers further emphasized that countries should strive to offer units no smaller than division or brigade, ensuring that an organized logistics structure is obtained. Battalion-sized units increased not only the combat support burden but also logistical requirements burden because it had to be attached to a larger unit.

US staff planners also argued for units to arrive with a common table of organization of equipment (TOE) for future operations. This would also include a list of all equipment, the status of equipment and needs of the ally. The US 1st Corps commander summarized the importance of Korea for future operations. According to this commander, in future operations, "a group of UN representatives should sit down and select items of equipment and supplies which they considered superior regardless of origin of manufacture, thus leading to standardization of those items throughout the UN member nations."²¹ An officer from the Belgian UN command has a similar reflection of the Korean operations. He stated

that every standardization in organization, equipment and methods will of course be paramount to the efficiency of a United Nations Army. However, whatever the degree of standardization there will be, national characteristics of each army will give to the same organization a different aspect. To get around this difficulty it seems that one of the most important points is to get in each unit a sufficient number of officers and noncommissioned officers acquainted with the customs and the methods of the other units. This can be obtained by exchange in peacetime of officers and NCOs an even of units up to Battalion.²²

In sum, the Korean War set the stage for future logistics policy within NATO and the UN. Because the Korean War was the first war conducted by UN forces, every action and relationship formed was subject to intense scrutiny, for these actions could

establishing precedents for future operations World War II left the allies with only one superpower with the capacity to launch and sustain a major military operation. Thus when UN nations agreed to provide military units to assist the South Koreans, the US was vividly aware of the danger of being the only allied superpower posed. The US military would be expected to provide supplies as it did with its lend-lease program during World War II. Military logisticians were adamantly opposed to setting precedents with the US providing logistical support for its allies, especially if they were not expected to pay for the support. The US political mood after World War II required that the US adopt a policy more in line with sharing the burden of international stability. In the spirit of truly sharing the burden, governments were required to pay for support rendered by the US. Moreover, payment was expected upon delivery of supplies. The accounting burden placed on the US was significant; it required that every supply provided to a nation be tracked for purposes for reimbursement. The UN had no mechanism in place to provide support and later assess each UN nation according to standard formula. These problems faced by the US bolster the cry for a policy based on national responsibility where individual countries are responsible for developing their own resources. Although today's situation is not the same in terms of the economic conditions of US allies, the disparity between military capabilities remains significant. Futurist Alvin Toffler, in *Powershift*, alludes to the fact that this disparity in capability will continue to force the US to take a lead role in international conflicts.

The US cannot police the entire tumultuous and highly dangerous world, either on its own behalf or anyone else's, but its unique capability suggests that it may, in alliance with other nations or international organizations, squelch regional conflicts that threaten world peace. In the dangerous decades ahead, many other nations may want just a firefighter on duty.²³

The reality of the US's unique military capability referenced by Toffler challenges the concept of national responsibility. Thus the logistical preparation and organization of the UN during the Korean War is highly likely to be seen in future coalition operations.

¹Jeffery, Grey, *The Commonwealth Armies and the Korean War* (Manchester and New York: Manchester University Press, 1988), 168-169.

²Billy Mossman, *US Army in the Korean War: Ebb and Flow November 1950 - July 1951* (Washington, DC: Center of Military History, United States Army, 1990), 13.

³Larry H. Addington, *The Pattern of War Since the Eighteenth Century* (Bloomington and Indianapolis: Indiana University Press, 1994), 272.

⁴James A. Huston, *Guns and Butter, Powder and Rice, US Army Logistics in the Korean War* (London and Toronto: Associated University Press, 1989), 309.

⁵Ministry of National Defense, The Republic of Korea, *The History of UN Forces in the Korean War* (The Republic of Korea: Ministry of National Defense, 1974).

⁶Ibid., 310.

⁷John DiGenio, "Sustaining Combat in Korea," *Army Logistician* 32, no.1 (January-February 2000): 7.

⁸Huston, 322.

⁹ Ibid., 343.

¹⁰Grey, 171.

¹¹Huston, 325.

¹²Ibid., 329

¹³Ibid., 330.

¹⁴Terrence Gough, *US Army Mobilization and Logistics in the Korean War, A Research Approach* (Washington, DC: Center of Military History, United States Army, 1987), 61-62.

¹⁵Ibid., 7.

¹⁶Ibid., 51.

¹⁷Huston, 318.

¹⁸Franklin B. Cooling, "Allied Interoperability in the Korean War," *Military Review* 63, no. 6 (June 1983): 30.

¹⁹*Ibid.*, 45

²⁰*Ibid.*, 28.

²¹*Ibid.*, 51.

²²*Ibid.*

²³Alvin Toffler, *Powershift* (New York and Toronto: Bantam Books, 1990), 446.

CHAPTER 4

OPERATION UPHOLD DEMOCRACY

The 1994 UN sponsored peace operation in Haiti, Uphold Democracy, to restore the legitimately elected government in Haiti typified the manner in which the international community would use the military to resolve international conflicts in the decade of the 1990s. This operation was one of the many MOOTW conducted to deter war and promote peace and the first UN mission under a US commander since the Korean War. During the Korean War, the UN had no formalized procedures for providing logistics for coalition forces. The US was the lead nation and coalition partners were integrated into the its logistical structure. However, with over forty years of experience, the UN in the 1990s had an established structure, with its rules that often proved to be cumbersome.

After providing a brief overview of the events leading to peacekeeping operations in Haiti, this chapter will discuss the manner in which logistics was provided for the US led multinational force (MNF) and the UN Mission in Haiti (UNMIH). Most lessons learned will be concerned with UNMIH operations and MNF operations during the transition period between the two organizations.

The MNF force, which included battalions from the Caribbean community and Bangladesh, was charged with ensuring that the environment in Haiti was safe and secure for the return of President Jean-Bertrand Aristide. A Roman Catholic priest elected as President of Haiti in December 1990, Aristide was ousted by a military coup on 30 September 1991 led by Lieutenant General Raoul Cedras. Subsequent economic and

political conditions led many Haitians to seek refuge in the US. The policy of repatriating these refugees created political problems for both the Bush and Clinton administrations. In 1993, President Clinton pledged the return of Aristide as President of Haiti. Political pressures forced President Clinton to eventually reverse his policy of repatriation. This reversal led to a flood of refugees to the US who were eventually sheltered at Guantanamo Bay, Cuba. After UN sanctions did not cause Cedras government to abdicate, the UN passed a resolution to resolve the crisis. This resolution, UN Security Resolution 940, called for the "application of all necessary means to restore democracy in Haiti."¹ Thus after a successful, last minute brokered agreement between Cedras and a negotiation team led by former President Jimmy Carter, a US led MNF, under the authority of the UN Resolution, entered Haiti in a relatively "permissive" environment. The MNF fulfilled their task of stabilizing Haiti in January 1995 and turned over operations to the UNMIH on 31 March 1995.

To coordinate support to the MNF in Haiti, a Joint Logistics Support Command (JLSC) was established. The JLSC brought all of the various Department of Defense (DOD) agencies under the umbrella of a single logistics headquarters. The NATO C-SPT organization discussed in the Introduction was established for similar reasons in Operation Joint Endeavor. The JLSC provided support to the coalition forces through a Presidential Executive Order. "The President may direct an emergency drawdown of military department inventory of stocks under Section 506 of the FAA [Foreign Assistance Act] for emergency assistance programs or support under 552 of FAA for PK [peacekeeping]."² "The multinational forces could request any US item (in the federal supply system) against a 50 million dollar draw down authority." Requests for support

were submitted through the US manager for stocks and property (PBO) within the Haiti theater of operations to the MNF J4. The MNF J4 then validated each request and forwarded them through the US Atlantic Command (USACOM) to the Department of Defense (DOD). Upon issue, the supplies became the requesting nation's property. When the UN assumed responsibility for Operations in Haiti, much of the MNF equipment was turned over to the UNMIH.

To gain an appreciation of the complexity of the logistical operations in Operation UPHHOLD DEMOCRACY (after the MNF departed), an understanding of the UN logistical structure is critical. As will be seen in subsequent paragraphs, operating under UN guidelines provided a formidable challenge to this US-led UN operation. US Army Field Manual 100-23, *Peace Operations* (1994), addresses the fact that "national interest and organizational influence may compete with doctrine and efficiency. Consensus is painstakingly difficult, and solutions are often in a national character. Commanders can expect contributing nations to adhere to national policies and priorities, which at times complicates the multinational effort."³

Generally, the commander of the UN force, who is appointed by the UN Secretary-General (SYG), is from the nation that provides the most military personnel to the operation. Often the SYG has a special representative to whom the force commander can report. The chief administrative officer and the force commander are equals with respect to positions within the UN organizational structure; they must have an extremely close relationship. The UN military commander has no fiscal authority. The CAO provides approximately 95 percent of the logistical support for the multinational force. The UNMIH organization is depicted in figure 3.

UNMIH ORGANIZATION

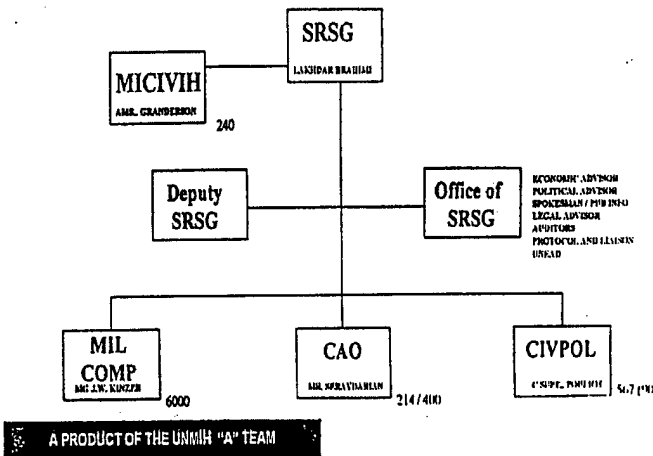


Figure 3. UNMIH Organization. Source: US Army Training and Doctrine Command. *Operation Uphold Democracy, Initial Impressions, Vol.3, The US Army and UN Peacekeeping* (Fort Leavenworth, KS: Center for Army lessons Learned, 1995), 169.

Unlike NATO logistical doctrine, the national responsibility is not the prevailing concept for providing logistics support. In UN operations, participating nations receive support from a UN-operated base and are generally reimbursed for the costs of operation. However, each nation is expected to provide at least some of its logistical support and to be self-sufficient for a temporary period. The field administration and logistics division (FALD) of the UN headquarters is primarily responsible for managing logistical support to UN led peacekeeping operations. UN operations are generally supported as follows:

1. One option is to have one nation control all the logistics for an operation. Though this is usually the most efficient option, it is not always acceptable, nor is one nation always capable of willing to perform this role.
2. The second option is to make logistics a shared responsibility, both in terms of logistics elements deployed and logistics personnel on the force headquarters staff.
3. The final option is to decentralize logistics planning and operations if the operation is dispersed over wide areas in different regions.⁴

Uphold democracy actions appear to be representative of the second option.

The CAO and the chief logistics officer (CLO) are primary logistics managers for overall supporting and controlling daily UN logistics functions respectively. The CAO is appointed by the FALD and is the principal advisor to the UN special representative to the secretary general (SRSG) and manages the entire mission budget. Figure 4 depicts the position of the FALD and UN mission in Haiti (UNMIH) within the organization of the UN Department of Peacekeeping. Understanding this organization was critical to the efficiency of logistical support operations by conducted by contingent countries.

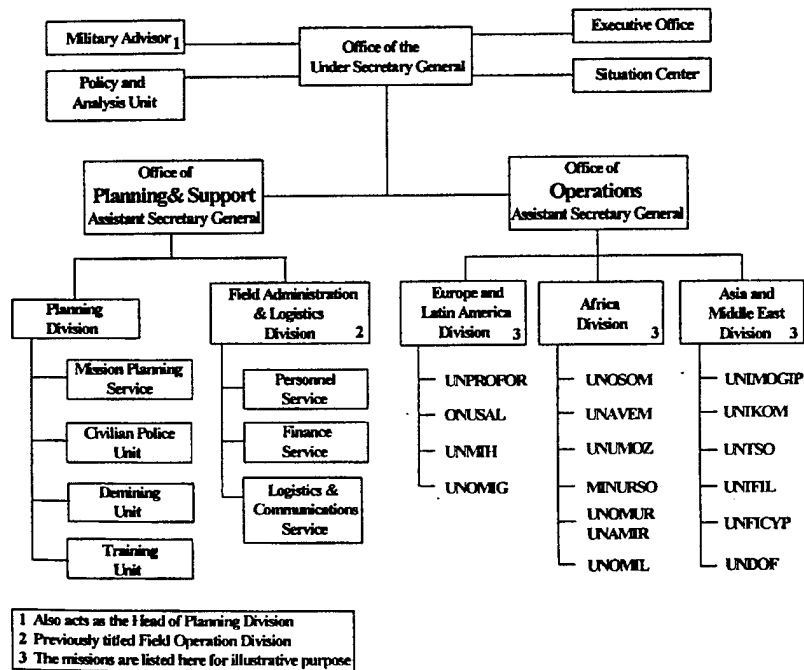


Figure 4. UN Peacekeeping Organization. Source: Department of the Army, Field Manual No. 100-23, *Peace Operations* (Washington, DC: Headquarters, Department of the Army, 1994), 62.

The CLO, a military officer on the UN headquarters staff, establishes and operates the UN field and maintenance area. This officer must validate all requirements for the various national contingents participating in the operation. After the requests are validated, the CLO passes them to the CAO for funding and procurement. "The CLO also controls the activities of the logistics elements in the logistic element in the logistics base. Typically those elements provided elements provided by each contingent are organized into a force logistics group (FLSG)."⁵

Each national contingent participating in the operation receives support from a UN operated logistical base and provides a national support element to the FLSG. If the participating national contingent is not self-supporting, it receives support through agreements and other sources. The UN requests that each nation deploy with the capability to sustain itself with the necessary supplies, equipment, and organic transportation for thirty to ninety days. However, many nations arrive into theater without any logistical sustainment capability. When this happens, the UN seeks support for these nations by requesting that other members provide donations or procure the necessary equipment locally.

The UN is responsible for providing reimbursement to contributing nations in accordance with several established vehicles such as letters of agreements, but it must approve all support given to other nations. If the UN does not approve the support provided, it will not provide reimbursement to the contributing nation. The services or supplies, which the UN has agreed to reimburse, must be tracked by the supplying nation. The delivery of these services or supplies is verified by the CAO.

Major Francois Vaillancourt, a Canadian logistics officer who served as a logistics advisor within the UN operations section, from February 1996 to September 1997 maintained "that the UN procedures in this operation, were extremely cumbersome. One of the difficulties was the fact that the civilian CAO controlled the funding thus having the last word"⁶ (for purchasing items). Thus if the CAO did not want to fund a particular service or item, one could appeal to the force commander. If the force commander were unable to persuade the CAO, the item would not be funded

As presented in the Center for Army Lessons Learned's (CALL) document *Initial Impressions*, Volume III, *The US Army and UN Peacekeeping* (1995), one of the primary logistical challenges was that the "US Army uses predictive logistics as its standard. The UN only buys what it needs, and only when the user can prove that the materiel are truly required."⁷ In addition to this difference in logistics management, providing for transportation, morale and welfare activities, and local purchasing posed significant challenges. Central to the above problems in Haiti was the lack of understanding of UN procedures including the duties and responsibilities of the CAO. The following excerpt from the CALL illustrates the necessity of the US and contributing nations to understand the role of the CAO.

To request and purchase materiel or services through the UN requires information and a level of detail that would bewilder those not familiar with the procedures. These procedures if not fully understood by the field commander, can have a significant impact on his mission. For example, if a truck becomes the Non-mission Capable (NMC) with an alternator problem, the unit just does not take the part off the shelf and repair it. The unit must submit a written justification through the "J" and "U" staff to the CAO. If the documentation contains all the required information, is error free, and is accepted by the CAO, it takes from four to five days to receive approval. Expenditures for high dollar items, like an engine, can take longer.

The Joint Logistic Support Command (JLSC) has coordinated with CAO to gain approval for the delegation of authority to purchase low dollar items such as, alternators, tires, and other minor repair parts but, written justification is still required. Additionally, the CAO tries to provide a 34-hour turn around on high priority requests but again this does not always occur.

The UN approach to business is to buy only what it needs, when they need it and nothing more. Rarely does the CAO approve the purchase of backup or stockage of anticipated required items. The leader who attempts to be proactive and plan for future events or operational stocks that requires the expenditure of UN funds may become frustrated with the system. They will find that the UN is an event and not a time driven organization.⁸

Thus militaries that maintained a safety level of supplies were hampered in their ability to respond to emergency situations. In Haiti, the CAO verified the need and cost each requisition for supplies line by line. After reviewing the requisitions, the CAO would either approve or disapprove the item. These cumbersome procedures had a major impact on many units, most notably the US engineer battalion which had many vital pieces of equipment inoperable due to the lack of spare parts. The result was several delays in many base camp construction projects. Therefore, the US paid for any safety stocks of spare parts without UN reimbursement.

Not unlike World War II and the Korean War, the various cultures of the multinational force posed problems in providing food and other supplies in Haiti. Before the transition between the multinational force and the UN was complete, the US provided food and water for the UN forces in the interim. US logisticians had to intensively manage food operations and found it difficult to provide the variety of food needed. Some countries required live goats or mutton and others preferred rice or fish with special spices. The CALL report highlighted the Bangladesh contingent's desire for a special herb that grows only on a mountain in their country. The UN eventually established contracted food services to accommodate the various contingent forces. However, the

US required that the contracted food meet US standards of quality. If the contracted food did not meet US standards, the US provided its own contracted ration services without being reimbursed from the UN. Furthermore, contingent countries have different planning factors for daily requirements of rations and water. Thus, if a country's requirement is higher than the UN planning factors allow, the country would be required to pay for those services without reimbursement.

The wealthier nations tended to be somewhat self-sufficient and provided equipment to the UN on a reimbursable basis. For example, Canada and the US provided many of the transportation assets used by the UN forces. The "Canadians provided sixteen 10-ton vehicles and four helicopters (CH47s) for movement of supplies and equipment;"⁹ the US provided landing crafts. As was seen with the requisitioning of supplies, all transportation requests had to be approved by the CAO prior to any movement.

National responsibility did play a role; the UN directed that organizational maintenance is a national responsibility. Therefore, nations that could not maintain their equipment were forced to establish letters of agreement with other countries or contract maintenance support. This action fixed responsibility on units to maintain their own equipment. Contingent UN owned equipment tended to be abused by using countries, thereby affecting readiness. According to Major Vaillancourt,

If you [the contingent nation] don't own the equipment, you [the contingent nation], don't have a vested interest in maintaining the equipment. The force commander might impose a task and the contingent would be not be prepared due to poor serviceability. With contingent owned equipment, the force commander in Haiti demanded that the contingents maintain a serviceability rate of 90 percent.¹⁰

As a result, when the force commander called upon a particular nation to perform a task, they were better prepared.

In sum, logistics operations in Haiti were a collective responsibility. However, the vehicle through which to provide this support was extremely cumbersome. In conventional war, allied nations would not be afforded the luxury of time to work through these inefficiencies. The concept of national responsibility was limited in this operation. UN units were required to be self-sufficient for thirty to ninety days after arrival into a theater of operations and the US provided much of this support until UN services were established. UN contingents were also responsible for maintaining their own equipment.

Lastly, the force commander did not have fiscal responsibility for logistics operations. This lack of authority, arguably, hampers a commander's ability to focus all of his resources at the right place and time. Major Vaillancourt's observation of the UN force commander's need to "lobby for resources could set a dangerous precedent."¹¹ Antoine Henri Jomini warns that a commander and his logistics staff must be closely integrated. According to Jomini, "their [logistics staff officers] functions are necessarily very intimately connected [with commanders], and woe to an army where these authorities cease to act in concert!"¹²

The UN's collective approach to logistics recognizes that requiring every nation to be logistically self-sufficient is not realistic, for not all nations have the same logistic capacity. Prohibiting certain nations from participating because of their military weaknesses is often inconsistent with the need for international legitimacy. Thus logistical operations seen in Haiti are likely to be experienced in the future peacekeeping

missions. However, the current feasibility of the relationship between the commander and his senior logisticians, and the UN logistical procedures for requisitioning and providing reimbursement must be seriously investigated prior to embarking on future multinational operations.

¹ Walter E. Kretchik, Robert F. Baumann, and John T. Fishel., *Invasion Intervention, "Intervasion": A Concise History of the U.S. Army in Operation Uphold Democracy* (Fort Leavenworth: US Army Command and General Staff College, 1998), 213.

²Department of the Army, Field Manual No. 100-23, *Peace Operations* (Washington, DC: Headquarters, Department of the Army, 1994), 56.

³Ibid., 23.

⁴Ibid.

⁵Ibid., 54

⁶Major Francois Vaillancourt, "UNMIH logistics 1996-1997 and Force Protection," interview by Dr. Robert Baumann, tape recording, 10 January 2000, US Army Command and General Staff College, Fort Leavenworth, KS.

⁷US Army Training and Doctrine Command, *Operation Uphold Democracy, Initial Impressions*, vol. 3, *The US Army and UN Peacekeeping* (Fort Leavenworth: Center for Army lessons Learned, 1995), 169.

⁸Ibid., 171.

⁹US Army Training and Doctrine Command, 196.

¹⁰Vaillancourt.

¹¹Ibid.

¹²Henri Antoine Jomini, *Summary of the Art of War*, ed. by Brig. Gen. J.D. Hittle, in *Roots of Strategy*, Book 2 (Mechanicsburg, PA: Stackpole Books 1838), 531.

CHAPTER 5

OPERATION JOINT ENDEAVOR

This chapter provides a narrative of my experiences in Operation Joint Endeavor as it relates to providing logistics for a multinational headquarters. I was assigned to NATO AFSOUTH as the Director of Retail Operations where I managed six international duty free stores for the NATO community in Naples Italy. In times of mobilization, this position was converted to a forward logistics officer, responsible for planning base support logistics. Both positions fell within the Headquarters (HQ) Command, AFSOUTH, commanded by a US army colonel. This commander, called the HQ Commandant, is comparable to a post commander on a US installation, responsible for all installation management functions from day care centers to post security. However, during mobilization, the HQ command is responsible for providing all base support activities for the AF SOUTH commander's forward deployed headquarters. During Operation Joint Endeavor, the AFSOUTH commander was Admiral Leighton Smith.

In the summer of 1994, the HQ command and staff was planning on establishing a headquarters in Zagreb, Croatia if NATO was required to deploy to the former Yugoslavia. In the summer of 1995, I served as a logisticain for an advance team of officers from the HQ Command to find a location to establish a NATO headquarters in Zagreb. During this time period, it appeared that NATO could possibly replace UN protection forces (UNPROFOR) in the former Yugoslavia. UNPROFOR was created in 1992 to conduct peacekeeping operations in Croatia. It was later expanded to Bosnia in 1992 and Macedonia in 1993. The AFSOUTH plan was to use the existing headquarters

facilities of the UN. I was responsible for establishing all billeting, food arrangements, and morale and welfare activities for the HQ IFOR (AFSOUTH's forward deployed headquarters during Operation Joint Endeavor). I additionally served as the HQ IFOR Commandant's representative for coordinating with the Croatian Ministry of Defense for the use of Croatian buildings as a headquarters for HQ IFOR and C-SPT. The IFOR HQs had planned to deploy to Zagreb if a peace agreement were signed. Thus, as part of this team, I traveled to Zagreb (the location of the UNPROFOR headquarters) monthly to coordinate the transition of certain logistics functions from the UN to NATO. Due to political sensitivities, we were required to wear UN berets while coordinating the transition activities. The UNPROFOR HQ was located in the city of Zagreb. Initial planing involved establishing a headquarters of 300 to 500 multinational staff members, which grew to over 1000 personnel with the planned arrival of C-SPT and other military support activities. Thus during the months prior to the Dayton Accords, I visited every hotel in Zagreb and the surrounding area, attempting to see if we could block rooms in the event of a deployment. In addition to hotel rooms, I investigated the possibility of using the UN Camp Pleso near the Zagreb airport which would have reduced costs to the NATO countries. Hotels identified and ultimately used ranged from the luxurious Hotel Esplanade (referenced in Robert Kaplan's *Balkan's Ghosts*) and Zagreb Intercontinental to the substantially lesser quality Hotel Panorama and Hotel Laguna. At the same time in which I was coordinating for billeting space for the HQ IFOR, a Canadian logistics officer was coordinating the same support for the C-SPT. We eventually pooled our efforts.

While coordinating for billeting spaces, we used criteria such as security, location, and cleanliness. Individual nations' preferences were not considered when choosing locations. Even though each nation was responsible for paying for the arrangements made, billeting, food, laundry were all part of the member nation's responsibility. Primarily, countries financed billeting through individual per diem of their military members. NATO had a simple philosophy with respect to funding. The "cost lies where it falls." All NATO costs for Operation Joint Endeavor were divided as follows:

1. NATO HQ: The costs of establishing and operating the NATO Headquarters in theater, which would be paid for and administered by NATO.

2. Theater Engineering/Logistics costs: The costs of theater wide infrastructure and communications which could not be attributed to the requirements of any specific nation, which would be considered eligible for NATO common funding on a project-by-project basis. Actual provision of such support (i.e. repairs/bridging of vital transport routes, repairs to port facilities used by all nations, etc.) could come either directly by NATO HQ in theater or by nations on a reimbursable basis (with the prior specific authorization of the NATO HQ).

3. Consumer Logistics costs: Direct support of forces in the theater, which would be fully funded and provided by the nation providing those troops. Nations were encouraged to enter into bilateral or multilateral support arrangements. The United States, France, and the United Kingdom each accepted responsibility as "Framework Nation" in their division-level sectors to ensure that all formations were sufficiently provided for.¹

The execution of billeting operations proved to be a very daunting task. Many countries complained about the costs of hotels and stated that their countries would refuse to pay for certain hotels due to either cost or quality. We attempted accommodate each country's need to the maximum extent possible. However, in the end these nations had to settle with the arrangement that were made.

Approximately a month before the signing of the Dayton Accord, the decision was made to move the HQ IFOR headquarters to Sarajevo. Thus the transition team was split between Zagreb and Sarajevo. Another logistics officer was sent to coordinate logistics arrangements in Sarajevo while I managed the inflow of the multinational staff into Zagreb in December 1995. Although, I had been deploying to the former Yugoslavia theater of operations for several months, I officially deployed as a part of a NATO enabling force on 5 December. The official deployment of IFOR was scheduled to begin as soon as the Dayton agreement was signed in Paris on 14 December. The IFOR commander's staff was to fly to Zagreb, establish operations temporarily, and deploy to Sarajevo. C-SPT would stay in Zagreb to coordinate logistics activities for the entire theater of operations. To be fair, we tried to billet personnel on a first-come first-serve basis and to place General officer in the Sheraton or Zagreb Intercontinental. Eventually some nations were billeted at the UN camp near the airport. To have each NATO country make its own arrangements would have been extremely inefficient and cumbersome. It was essential for the IFOR staff to live in the same locations. Major General Farnen, C-SPT commander during Operation Joint Endeavor, argued that it was a necessity for multinational staffs to be billeted together.

Synergy and output were helped by a decision to billet everyone together. Moreover, since all personnel received per diem, quality of life issues were a minor factor. Everyone, regardless of nationality, command or service, lived in the same hotel. A family spirit was fostered. The effort was focused on logistical success in and out of sector mission. The commander for support was dedicated to the endeavor and realized the EUCOM motto of one team, one mission. Assigned staff members should be housed under one roof to build an organization that gets synergy from the sum of its parts. This will help ensure that the team focuses entirely on the mission and is not encumbered by petty squabbles. Billeting every one together will also facilitate security, transportation, dining and productivity while reducing cost.²

Food arrangements tended to be easier to coordinate. Many of the hotels included meals in the price, and there was a UN dining facility in Zagreb. Major catering firms, such as the Zagreb Airport, scrambled to show me their catering operations in hopes of getting a NATO contract. However, the UN contractor expanded his services and each NATO country had to establish a method funding their soldiers use of these services.

After the initial flow of personnel to Zagreb, I was sent to Sarajevo to coordinate logistics arrangements. Unlike Zagreb, which was virtually untouched by the war, Sarajevo was ravaged and barricaded. The politics of finding billeting and funding for billeting arrangements were not as contentious as they were in Zagreb, for there were very few undamaged structures available to house forces. The HQ Commander established Admiral Smith's headquarters at an old communist party residence near the Sarajevo Olympic Stadium. "The Residence" as we called the location was adjacent to an old sandbagged office building ("the Annex"), which we used to billet all key members of the IFOR Commander's staff. Admiral Smith slept in the residence where his office was located. We additionally established office space for his French Deputy. NATO funded the establishment of the headquarters. Thus, I was given NATO funds to

purchase furniture and other items necessary for operating an international headquarters. Initially, the command and staff slept in prefabricated containers for living and working, used previously by the UN, and in the office buildings within the compound of the Residence.

As time passed, HQ Command acquired other government buildings to establish places to billet our personnel. US Navy Seabees provided much of the renovations to improve the headquarters location. The other building called "the Parliament" (located a block from where Archduke Franz Ferdinand was assassinated) was renovated and subsequently housed a significant portion of the multinational staff. Most of the funding was provided by a NATO fund consistent with the criteria delineated in the previous paragraphs. Food arrangements were coordinated for the IFOR staff at the residence using the UN contractor located there previously. We tracked meals eaten by requiring all staff members to sign-in when using the facility; the individual nations then had to provide reimbursement based on meals consumed. Similar reimbursable contracts were made for laundry services, which was also a national responsibility.

Unlike the US sector in Bosnia-Herzegovina, there were no restrictions on alcohol consumption in the heterogeneous of HQ IFOR. Therefore, I was tasked to establish a bar at the residence for morale and welfare purposes. Due to the fact that I operated the international duty free stores at AFSOUTH, I was able to receive alcohol shipments from the beverage warehouse in Naples using the daily flight shuttles from AFSOUTH. We were also able to purchase beer locally. There was no NATO funding for these items; money was self-generated from the AFSOUTH Morale and Welfare Activity (MWA).

All military members from nations assigned to this headquarters were allowed to use the bar.

In addition to establishing the bar, there were outcries for the establishment of some sort of an exchange. Because the staff was international, I looked for European contractors to provide a wide variety of items to satisfy the varied taste of the international headquarters. The large European airport duty free distributor, Gebr. Heinemann was offered the most advantageous terms. However, in the end, transportation costs, security and other factors made this endeavor unfeasible. Therefore I approached AAFES to establish a satellite in Sarajevo. I flew to Zagreb to meet with the AAFES manager located at Camp Pleso, to arrange establishing an AAFES facility in Sarajevo. Thus the US provided this morale and welfare operation for the multinational staff and forces in the Sarajevo area.

The amount of \$20,000 dollars was allotted to start the facility. Store items arrived to Camp Pleso, Croatia, from the AAFES warehouse in Giessen, Germany. I arranged to have the items shipped to Camp Pleso (which was located near the military airport) to be flown from the Zagreb airport to the Sarajevo airport. After training several US Navy Corpsman assigned to AFSOUTH to operate the facility, we were able to open the facility in the winter 1995. Because all NATO members were authorized to use the exchange, stock quickly increased from \$20,000 to \$60,000. IFOR had to use military personnel because NATO would not provide funds to hire a civilian employee for a US activity even though it provided morale and welfare support to the entire IFOR community.

Eventually all of the services provided by the HQ Commandant were transferred to the contractor DynCorps; they operated every aspect of base camp operations from laundry and billeting to dining facility management and minor construction projects. Our staff then served to oversee contract execution. The AAFES satellite continued to be operated by military personnel.

In sum, my personal experiences during Operation Joint Endeavor suggest that when conducting planning for a multinational headquarters, the concept of national responsibility should not be used as the basis from which to build a logistical plan. To have each nation develop their own logistical plan would create gross redundancies. It would also involve a competition for limited resources in a limited area of operations.

Based on these experiences, I recommend that the logistics planner search for the most operationally feasible logistical solution for establishing base support for a multinational staff without considering funding as a limitation. Time will not allow one to sort through the intricacies of the various national fiscal policies. Each nation has different per diem rates and financial guidelines. But if the logistician's plan is feasible operationally, the individual countries will be more likely to agree to fund the planned support. When planning for billeting in Zagreb, hotels were the most feasible option due to the location of the headquarters. Thus plans were made to billet and shuttle the personnel without regard to whether or not a country would pay for the services. To satisfy each country's unique funding requirements would have required that each country provide a logistician to organize their support arrangements. This manner of planning could only have resulted in animosity and confusion. A staff required to work together would be competing for limited resources. This practice would have symbolized a lack

of respect for individual national differences. Steven Covey, in his *Seven Habits of Highly Effective People*, maintains that “valuing differences is the essence of synergy.”³ Each nation operating with its separate logistical structure, transmits a message stating that my country's way is the only way and that NATO's common good is secondary. The success of the IFOR and C-SPT was arguably, the result of a synergistic multinational staff. Logistical planning for the collective whole was a key ingredient to the synergy achieved.

¹Christopher Gregory, *Evolution of NATO Multinational Logistics Doctrine: The Link Between Funding and Logistics* (Brussels: NATO Publications, July-August 1999), [database on-line]; available from www.navsup.navy.mil/lintest/julaug99web; Internet.

²William N. Farnen, “Wanted: A NATO Logistics Headquarters,” *Joint Forces Quarterly* 18 (spring 98): 66.

³Steven R. Covey, *The Seven Habits of Highly Effective People* (New York: Simon and Schuster, 1989), 277.

CHAPTER 6

CONCLUSION

World War II, the Korean War, Operation Uphold Democracy in Haiti and Operation Joint Endeavor in Bosnia-Herzegovina all entailed the sharing of logistics among coalition members. These military operations are representative examples of total war, limited war, and MOOTW and provide insight into the feasibility of the principle of national responsibility. Although the historical operations covered in this study were different in the manner in which they are planned and executed, common threads can be found. One such thread is the fact that nations (like the US and Britain) with the largest military capabilities have carried the bulk of the logistical responsibility in coalition operations. The historical examples presented in this study suggest that integrating and sharing logistics is an efficient way to support multinational forces. Conversely, these examples question the equity of having a few nations bear the burden of supplying war.

The concept of national responsibility evolved after the Korean War to fit the conditions designed to support a NATO war against the Warsaw Pact in Europe. NATO's first opportunity to validate this policy of national responsibility occurred in Operation Joint Endeavor; it was designed as the most logical way to support NATO's defensive plans during the cold war. In chapter 2, it was noted that US military logisticians during the Korean War believed that providing logistical support to coalition partners would establish a precedent for future multinational operations. These officers felt strongly about this issue, for a doctrine of national responsibility charges each nation

to become self-sufficient. Each nation's taxpayers must bear the burden of financing military capabilities. Thus national responsibility shares the burden of the responsibility for international stability among the various nations. In keeping with this principle, each NATO nation, with its designated defensive sectors in Europe, was expected to provide its own logistics support or make the necessary host nation support agreement to make up for any deficiencies. However, the fall of the Soviet Union and the Warsaw Pact immediately led to instability in Europe, leaving NATO little time for a gradual transition of doctrine to the new state of European affairs. Faced with the crisis in the Balkans and other mounting ethnic friction, NATO enacted several initiatives to meet this challenge such as placing emphasis on mutually supporting logistics agreements. Operation Joint Endeavor saw the first implementation of its policy of national responsibility and the operation, albeit successful, revealed a duplication of effort and resources. Consequently NATO forces quickly realized the need for establishing support agreements among nations.

The historical lessons of the cases covered in this study can provide a template upon which to build a coherent logistical program. These examples highlight the need for a logistical policy whose cornerstone is based on an integrated and shared responsibility for logistics. The current UN approach is more aligned with this philosophy, but its system (as seen in the Haiti) can be extremely cumbersome, with contingent nations being dependent on a bureaucratic requisition system in order to receive reimbursable support. Major Vaillancourt's comments and the lessons learned from the Haiti experience suggest that national responsibility must remain an essential part of NATO policy because it forces nations to be self-sufficient and self-reliant. It also

forces countries to search for methods to continuously improve their military organizations. Contingent forces using equipment provided by the UN were not well maintained, forcing the UN to establish policies requiring contingents to be self-sufficient for certain logistical requirements. The cases indicate the need to develop an integrated, mutually supporting approach to logistics in multinational operations. However, any recommendation for a new policy concerning logistical doctrine should be based on the circumstances unique to current conditions. Specifically, logistical integration in the future can be enhanced through the following: the establishment of a NATO logistical command, a policy primarily based on mutual support agreements, and a vigorous officer exchange programs among NATO nations.

The establishment of a NATO command is perhaps the most controversial, for it requires NATO countries to break a forty year paradigm based on the primacy of the concept of national responsibility. In the age of shrinking national budgets, an approach calling for the establishment of a peacetime bureaucracy or converting current logistics structures into a logistical command is not a welcomed suggestion. Current approaches for preparing organizations for the future and improving organizational efficiency are based on a "total quality management" approach which emphasizes the flattening of organizations. However, history shows that in times of immediate crisis, a logistical command is needed to plan and coordinate logistical operations. World War II, the Korean War and Operation Joint Endeavor show us that having a single, focal point for logistics activities can significantly enhance efficiency.

This idea of a logistical command is not a new, but entails overcoming the inertia concerning national sovereignty and other issues. The following overview of the late

Lieutenant General John Heiser's thoughts and recommendations pertaining to NATO logistics and the complexity of the issues concerning national responsibility. As stated in the Introduction, retired Lieutenant General Joseph Heiser served in World War II and the Korean War. He was selected to perform several reviews of NATO logistics. In 1975, the Supreme Allied Commander, Europe (SACEUR) General Alexander Haig, requested General Heiser to study the logistical situation in NATO and request recommendations for reform. According to General Heiser, the common perception that logistics is a national responsibility "runs directly contrary to the basic definition of a military alliance. Some members of the alliance ignore the founding principles of NATO and avoid following them."¹ The following excerpt from Heiser's *Soldiers Supporting Soliders* highlights the difficulties associated with changing logistics policy.

The logistics task force included senior military and civilian officials from our allies. Each was assigned to examine a logistics subcategory and prepare reports and recommendations. While their perception of the problems was always on the mark, their willingness to recommend necessary reforms was not so often forthcoming. One colleague, for example, who prepared a splendid draft on fuel problems, submitted a final report significantly different because of objections by his home country officials. Although I refused to retreat from my conclusions, I too did not always receive full support from the US Defense Department when it came to our task force's recommendations to the NATO ministers. In the end I personally visited each national capital and explained the content of our proposed recommendations. As a result of such visits recommendations were modified or added. Even those recommendations not agreed to officially have the private support of logistics officials in those nations where political reasons prevented agreements. This is a hazard in any alliance: until a crisis occurs, the protection of perceived sovereign rights of a nation tends to take place. I prepared the final report myself, based on the work of the subcommittees, strengthening their recommendations when and appropriate.²

One of the task force's most controversial recommendations was the establishment of a NATO logistical command. They suggested that NAMSA, the NATO Maintenance and Supply Agency, be given the tasks of managing the material of this

command. The fear among nations was that the recommendation implied keeping NATO stocks. General Heiser's concern was that there was no US line of communication in Europe, thus making America dependent on each sovereign European nation for roads, ports, airports, and railroads and other key facilities required to supply forces in a European theater. These concerns reflected his experiences in Korea and World War II where the US provided much of the logistical support for its allies. European nations were concerned that the US, through this logistical command, would attempt to control sovereign assets. The General's group did "foresee an agreed NATO control 'string' on certain critical stocks that could be used to reallocate them among NATO nations in accordance with allied commitments."³ Although General Heiser's recommendation was based on a cold war model, his suggestions are valid today. However, the General's approach to this problem was inherently nationalistic for it originates from an US-centered foundation (no US lines of communications in Europe). Thus, the US, like other NATO countries, must shift their mental boundaries in order to meet the challenges of the future. History teaches us that it takes grave situations to force new ways of thinking. Britain during World War II was left alone to face the Germany which had overrun most of Europe in 1940. A centralized and integrated means of manner of planning and implementing operations and logistics was created out of necessity.

World War II provides excellent examples of a combined logistical headquarters. Support requirements and logistical planning were determined by multinational staffs and logistics organizations. The French and American Coastal Base Section (later called the Continental Advanced Section), organized to plan the support of Allied Operation Dragoon. This organization, discussed in chapter 2, can serve as a blueprint for the

successful formation of an integrated multinational logistical organization during wartime. Additionally, the C-SPT, a multinational logistical organization formed to support Operation Joint Endeavor, can also serve as model. As referenced in the Introduction, this organization was created as a separate command, primarily to relieve the personnel drain placed on the component commands of the NATO combined joint task force (CJTF). The multinational staff totaled 40 individuals from the US and other NATO members. Because of various studies and simulations, NATO determined that the expeditionary logistics capability would require a greater reliance on the US, France, and Great Britain. This staff was organized initially to support a plan concerning the NATO extraction of UN forces from Bosnia-Herzegovina and was given full command and control of logistics forces in May 1995. Consequently, when the Dayton Accords were signed in October 1995, NATO had a logistical command framework upon which to build a logistical command. Major General William Farnen, the Commander of C-SPT during Operation Joint endeavor, argues that some sort of a logistical command is needed. As seen in the following excerpt:

The quick implementation of the Dayton Peace Accords is arguably attributed to the fact that NATO had the nucleus of a logistics headquarters available. The importance of that capability was demonstrated by recalling the staff of the commander for support to plan and execute logistics for Joint Endeavor. The range of responsibilities undertaken by the C-SPT headquarters on recall has proven the value of having a standing NATO logistics headquarters.⁴

The second implication of these historical examples is the viability of mutual support agreements. The birth of this manner of providing supply during coalition operations began with the Korean War. The political climate within the US during the Korean War reflected a policy requiring the US forces to terminate practices similar to

the lend-lease policies of World War II. However, because the US was the only country with the resource capability necessary to support combat forces needed for the Korean conflict, it had to provide support to coalition partners. But, all support was provided on a reimbursable basis.

Furthermore, the initial problems in the former Yugoslavia forced the NATO alliance to develop a new strategic concept in November 1991. This new concept emphasized the new mobile, expeditionary nature of NATO. This new strategy recognized the need for multinational logistics as seen in the following excerpt from, the NATO Logistics Handbook.

Recognizing that the provision of logistic support, though fundamentally a national responsibility, also needs to be a collective responsibility if the necessary flexibility is to be achieved, the Senior NATO Logisticians' Conference responded to the introduction of the new strategic concept by undertaking an analysis of the key characteristics of NATO's military strategy and force structures and their implications for new logistic principles and policies. New logistics principles and policies were endorsed by the Defense Planning Committee in 1992 in a document known as MC 319. They have served as the springboard for the subsequent development of more specific principles and policies relating to functional areas of logistics, such as medical support, host nation support, and movement and transportation. MC 319 has been thoroughly reviewed in the light of the experiences gained from NATO-led peacekeeping operations, and a Revised Version had been published in 1997 as MC 319/1. NATO logistics principles and policies apply to peace, crisis and war, and include operations under Article 5 of the North Atlantic Treaty as well as non-Article 5 operations. They also apply to operations within the framework of a Combined Joint Task Force concept and for operations involving non-NATO nations in NATO-led operations.

Co-operative arrangements and mutual assistance among nations in the provision and the use of logistic resources ease the individual burden on each nation.⁵

Therefore NATO commanders are now given the authority to take all necessary measures to include mutual support agreement to provide logistical support to their forces. National responsibility however, is the cornerstone.

Lastly, this study suggests a need to develop an aggressive officer exchange program among NATO nations. The Continental Advance Section, in support of Allied Operation Dragoon, included French Officers that were familiar with US supply procedures. In preparation for supporting this operation, French officers were sent to American logistical commands to learn American logistical policies and procedures. Likewise, American officers were sent to French commands to gain a better understanding of their requirements and supply structure. During the Korean War, UN nations were sent to the UN Reception Center to familiarize them with US procedures prior to entering combat. In Operation Uphold Democracy, one of the most significant obstacles for the US in providing logistical support for its forces was an understanding of the UN system of requisitioning. Although there are courses for logisticians assigned to NATO and similar courses for non-NATO partners, this does not address the need for familiarization with member country systems. Currently international officers do attend US Army logistics schools. This practice is critical and should be continued. Being attached to a US division or corps headquarters is an option that should be considered.

After fifty years of planning logistical support for defending against an attack by the Warsaw Pact, NATO logistics officers must shift its focus to supporting an expeditionary NATO. Although today's conditions are less polar and predictable than they were in the last fifty years, logisticians can look to the past for a framework upon which to build a logistics policy. Fortunately, modern history provides examples of a wide range of coalition military operations. World War II, the Korean War, and recent peacekeeping operations are filled with valuable lessons applicable today, but their relevancy for the future conflicts is more important.

¹Joseph M. Heiser, *A Soldier Supporting Soldiers* (Washington, DC: Office of the Chief of Military History, United States Army, 1991), 217.

²*Ibid.*, 220.

³*Ibid.*, 225.

⁴William N. Farnen, "Wanted: A NATO Logistics Headquarters," *Joint Forces Quarterly* 18 (spring 1998), 66.

⁵NATO, *NATO Logistics Handbook* (Brussels: NATO Publications, 1985), 1301.

⁶Williamson Murray, "Thinking About Revolutions in Military Affairs." *Joint Force Quarterly* 15 (summer 1997), 69-79.

⁷*Ibid.*

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