REPOR

AD-A280 544

Form Approved
OMB No. 0704-0188

Public reporting burden for this collec... gathering and maintaining the data n... collection of information, including su... Davis Highway, Suite 1204, Arlington,... g the time for reviewing instructions, searching existing data sources, comments regarding this burden estimate or any other aspect of this i, Directorate for Information Operations and Reports, 1215 Jefferson k Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	April 1994	FINAL

4. TITLE AND SUBTITLE
PROFILE: AERIAL PORT READINESS

5. FUNDING NUMBERS

6. AUTHOR(S)
CLARENCE J. EVANS
LT COL, USAF

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
AIR WAR COLLEGE
325 CHENNAULT CIRCLE
MAXWELL AFB AL 36112-6427

8. PERFORMING ORGANIZATION REPORT NUMBER
Unnumbered AWC research paper

DTIC
ELECTE
JUN 23 1994
S F D

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
N/A

10. SPONSORING/MONITORING AGENCY REPORT NUMBER
N/A

11. SUPPLEMENTARY NOTES
PAPER IS WRITTEN TO FULFILL ACADEMIC RESEARCH REQUIREMNTS FOR AN IN-RESIDENCE SENIOR SERVICE PROFESSIONAL MILITARY SCHOOL.

12a. DISTRIBUTION/AVAILABILITY STATEMENT
APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

DTIC QUALITY INSPECTED 2

94-19141

94 6 22 079

14. SUBJECT TERMS
Profile, Port, Readiness

15. NUMBER OF PAGES
27

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLAS	UNCLAS	UNCLAS	UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18
298-102

Air War College

Air University

PROFILE: AERIAL PORT READINESS

BY

CLARENCE J. EVANS

LIEUTENANT COLONEL, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE CURRICULUM

Advisor: Colonel L. S. Taylor

MAXWELL AIR FORCE BASE AL

APRIL 1994

TABLE OF CONTENTS

DISCLAIMER

This paper represents the views of the author and does not necessarily reflect the official opinion of the Air War College or the Department of the Air Force. In accordance with Air Force Regulation 110-8, it is not copyrighted but is the property of the United States government.

Loan copies of this document may be obtained through the interlibrary loan desk of Air University Library, Maxwell Air Force Base, Alabama 36112-5564

BIOGRAPHICAL SKETCH

Lieutenant Colonel Clarence J. Evans (B.A. Economics; M. A. Business Management/Human Relations) is a Transportation Officer. He has worked as an Aerial Port Officer, Military Airlift Command Transportation Inspector General, Military Airlift Command Liaison Officer with the United States Navy at Naples, Italy, Commanded a Transportation Squadron, an Aerial Port Squadron and a Mobile Aerial Port Squadron. Lieutenant Colonel Evans is a graduate of Squadron Officers School, Air Command and Staff College (correspondence) and is a classmember of the Air War College class of 1994.

PROFILE: AERIAL PORT READINESS

I

INTRODUCTION

"The effectiveness of sustained tactical airlift in Vietnam is controlled to a great extent by the capability of the aerial ports to respond to shifting tactical airlift requirements....Without adequate port facilities, equipment, and personnel to handle the widely fluctuating and diverse support requirements generated in a combat environment, tactical airlift can never realize its full potential."(5:2)

Major General Burl W. McLaughlin

The fall of the Berlin wall, collapse of the Union of Soviet Socialist Republics (USSR), and dissolution of the Eastern Bloc Warsaw Pact ended 45 years of cold war. As a result of this new world order, long repressed tensions have begun to resurface, and many groups are taking the opportunity to assert themselves, whether to establish long dreamed-of homelands, reassert ethnic or tribal control over "ancestral" lands, or reincorporate by force neighboring states separated by colonial rule. The United States and the world community have been compelled repeatedly to take action, sometimes on moral grounds, to protect our own economic and political interest as was the case in the Persian Gulf and currently going on in Bosnia. In some cases, the consequences of disorder caused by economic dislocation or famine are enough to motivate the world community and the United States into large relief efforts, mounted on short notice, such as the

Provide Hope and **Restore Hope** operations to the former Soviet Union and Somalia. The United States Transportation Command Supported 13 major operations of this nature. See figure 1-1.

Aerial port readiness is essential to the United States strategic mobility system in supporting global reach and power projection. Aerial porters are generally the first to arrive, setting up fixed or non-fixed facilities to receive deploying troops and materiel, and they are usually the one to turn out the lights.

This is a think piece focusing on aerial port readiness and its capability to support United States national and military objectives. Aerial port readiness is tied closely to materials handling equipment, training, facilities, and people. More than fifty percent of the aerial porters are in the Air Reserve Component (ARC). Consequently, the Air National Guard and the Air Force Reserve play a critical role in aerial port readiness.

Historically, aerial port readiness leaves a lot to be desired and that situation is essentially the same today. During the Vietnam War, aerial ports experienced problems across-the-board and many of those same problems existed during Operations Desert Shield and Desert Storm. With the current drawdown and budget crunch, aerial port readiness will continue to be an aerial of concern that could degrade the airlift system.

USTRANSCOM Major Operations -- 1993

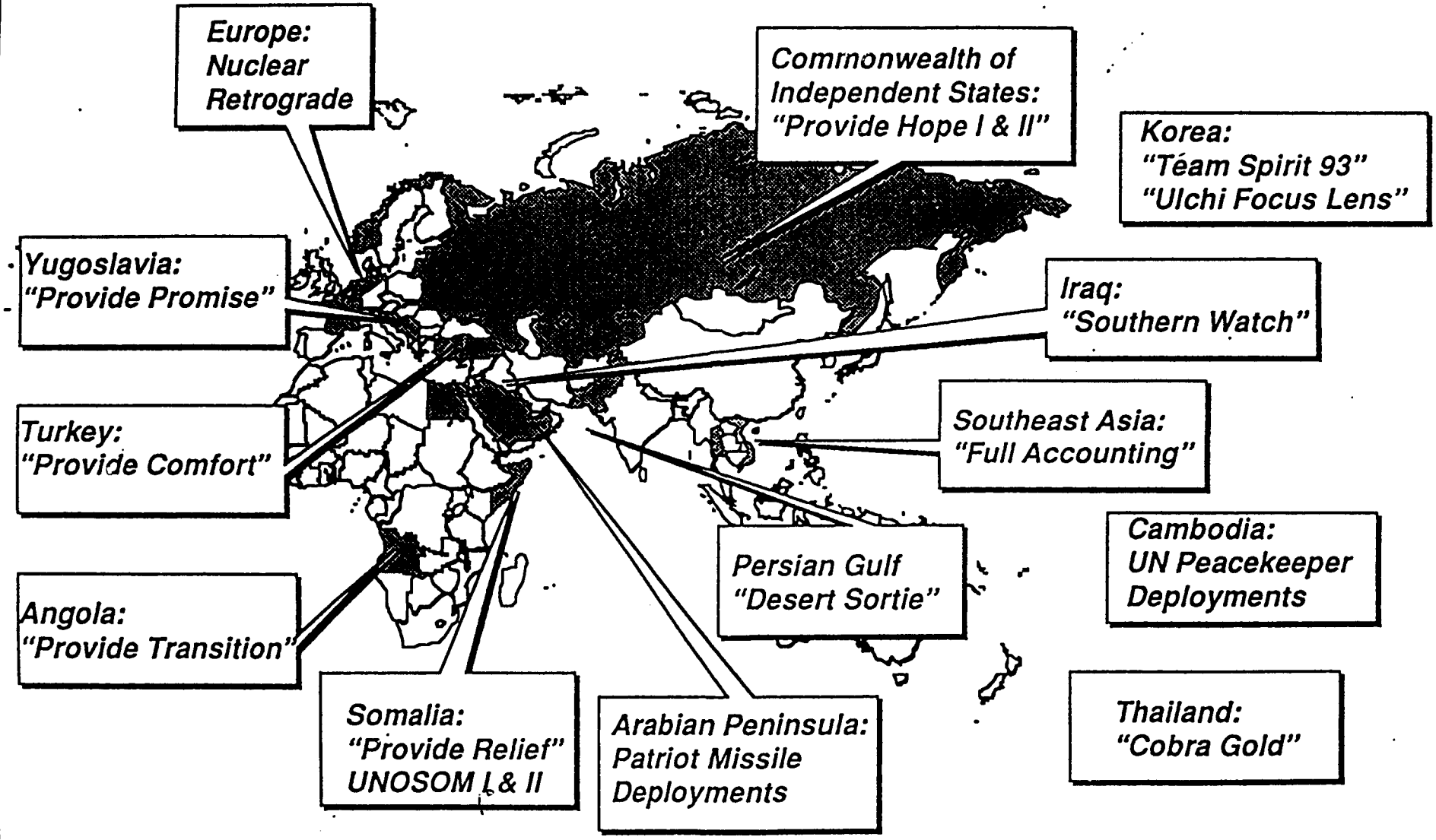

FIG 1-1

II

THE OWNERSHIP CONTROVERSY: ARMY OR AIR FORCE

Controversy over air terminals and aerial ports ownership surfaced after the 1947 National Security Act established the Air Force as a separate service. The crux of the problem evolved around JCS paper 1891/18, September 1950, which could be interpreted as assigning the responsibility for the operation to the Army, Navy, or Air Force on the basic of "principal operational interest." (4)

The Air Staff and Air University were the two key Air Force players. They presented the Air Force's position emphasizing that it was very important for the Air Force to retain control of loading and unloading of combat airlift. It was pointed out that the loss of terminal and facilities to another agency means the loss in mobility to the Air Force. Since the Air Force must control the airlift that it employs, it is only axiomatic that it control the facilities that permit the employment of those aircraft. To divide the responsibility for the operation of air terminals and aerial ports among several agencies as suggested by the Army is in direct contradiction to elementary principle of command and sound management. (4)

The well documented Air University Staff Study dated 3 August 1951 was crucial to securing Air Force ownership of air terminals and aerial ports. Within the Air Force, air terminals and aerial ports were owned by Tactical Air Command and Military Air Transport Service (later MAC) until consolidated under Military Airlift Command in 1974. (9:348)

Since World War II, aerial ports have been closely associated with military airlift operations. The following are some of the major operations these units supported:

THE HUMP: The transportation of materiel, personnel, and gasoline between India and Chinas from 1942 to 1945 may be the most famous of Air Transport Command's World War II air transport operations. Between December 1942 and the peak month of August 1945, the unit moved 721,700 tons of cargo. (9:47,56) This operation tested and proved the feasibility and dependability of mass airlift of men and materiel in support of military operations. (4)

THE BERLIN AIRLIFT: This was a massive effort to provide supplies, food, and fuel to the 2,500,000 civilian and military residents of West Berlin during the Soviet blockade of ground lines of communications. More than 2,223,000 tons were delivered from 26 June 1948 to 1 August 1949. (9:175)

FAR EAST AIR FORCE COMBAT COMMAND: This command was activated on 10 September 1950 and was responsible for the Japan-Korea and the inter-Japan airlift. From 10 September to 31 December 1950, approximately 103,000 passengers and 98,000 tons of cargo were flown into and out of Korea. (4:2,3)

Since World War II, aerial ports have been closely associated with military airlift operations. The following are some of the major operations these units supported:

THE HUMP: The transportation of materiel, personnel, and gasoline between India and Chinas from 1942 to 1945 may be the most famous of Air Transport Command's World War II air transport operations. Between December 1942 and the peak month of August 1945, the unit moved 721,700 tons of cargo. (9:47,56) This operation tested and proved the feasibility and dependability of mass airlift of men and materiel in support of military operations. (4)

THE BERLIN AIRLIFT: This was a massive effort to provide supplies, food, and fuel to the 2,500,000 civilian and military residents of West Berlin during the Soviet blockade of ground lines of communications. More than 2,223,000 tons were delivered from 26 June 1948 to 1 August 1949. (9:175)

FAR EAST AIR FORCE COMBAT COMMAND: This command was activated on 10 September 1950 and was responsible for the Japan-Korea and the inter-Japan airlift. From 10 September to 31 December 1950, approximately 103,000 passengers and 98,000 tons of cargo were flown into and out of Korea. (4:2,3)

III

A QUESTION OF READINESS - VIETNAM

General Curtis LeMay, after a vietnam in April of 1962, said "there is no effective airlift system." The nonsystem reportedly

had two problems: not enough aerial port facilities and poor command, control, and communications. (9:311) General LeMay was not the only senior Air Force official to note problems with aerial port readiness and capability.

> "A lack of adequate physical facilities, low materials handling equipment in commission rates, unreliable communications, and the shortage of personnel have been long-standing problems impacting on aerial port operations." (5:2,3)
>
> Major General Burl W. McLaughlin

Despite shortfalls in readiness, aerial ports played a critical role in tactical airlift in Vietnam, particularly in large scale operations such as Junction City, Khe Sanh, Tet Offensive 1968, An Loc, and Kontum. (9:318,325)

It was neither aircraft nor aircrews that limited operation, but the saturation of aerial port facilities, materials handling equipment, communications, and manpower which degraded airlift capabilities. Congested and poorly located facilities impaired aerial port operations throughout Vietnam. On 26 June 1967, Brigadier General William G. Moore, Jr., 834th Air Division, described the seriousness of the problem and its impact on the airlift system as follows:

> "Cargo processing areas in which our aerial ports must operate have few hard surface areas. Palletization and

handling are being accomplished in the mud or on the aircraft parking ramps. The aerial port mission is further hampered by the lack of adequate covered storage areas to protect freight during processing. For example, at Tan Son Nhut over 50 percent of the cargo open processing is in the mud. During December 1968, aerial ports processed over 400,000 people using conex containers, tents, and small crowded buildings at terminal facilities. Another factor that detracts from our aerial port capability is the congested ramp areas on which we work....At other bases we are processing cargo in as many as three separate areas in order to obtain room to handle all the port requirements. All these factors contribute to excessive turnaround times and their impact on aircraft utilization is a matter of primary concern to me. Delays are being reduced but not at the rate we would like to see." (5:9)

The materials handling support system (463L) was a major technological breakthrough in the aerial port business. It revolutionized cargo handling and aircraft loading procedures. However, the materials handling equipment introduced in Vietnam in 1964 had two major recurring problems: (1) poor in-commission rates and (2) shortages of pallets and restraint equipment. (5:13) Unfortunate, these problems still exist today.

Highly reliable forklifts and K-loaders are absolutely essential to aerial port readiness and a responsive airlift system. This equipment is critical to palletizing loads and to load the pallets on and off aircraft. In January 1967, aerial porters in Vietnam were operating with about 39 percent of the forklifts required and some 42 percent of the K-loaders. Senior leadership felt that with additional ground handling equipment, cargo tonnage could increase from 10 to 21 percent without any increase in the number of aircraft assigned. The materials handling equipment in use had the wrong technology for continuous operation or for operating in the environment of dirt, sand, and mud. (5:13,14)

Aerial porters were not adequately prepared to operate effectively in a hostile environment. Material handling equipment operating in Vietnam was vulnerable to combat damage. Ground fire and shell fragments took a heavy toll of tires, hydraulic lines, and radiators. This resulted in the development of the Southeast Asia Operational Requirement (SEAOR) 174 in 1968 calling for battle-damage-proof tires. In the first month of the Cambodian operation, nineteen 10K All Terrain forklifts required 24 tire changes. Cost of replacement tires was $4,853.04 and a total of 408.5 hours of MHE our-of-commission time was experienced. A total of 33,600 pounds of airlift costing $6,782.00 required to transport tires to forward operating

locations and return unserviceable tires for breakdown. (5:16,17)

Material handling equipment maintenance significantly impaired aerial port readiness. This problem was twofold: (1) manning and experience. Transportation squadron did not usually have sufficient manning in the skills required to maintain the equipment properly. During 1968, the manning of in-country 463L maintenance shops varied from one mechanic per 18 vehicle equivalents to one per 30 vehicle equivalents. The average in-commission rate for forklifts and K-loaders for the six-month period ending 29 February 1968 were 66 and 72 percent respectively. PACAF standard was 92 percent. AFLC and PACAF maintenance teams periodically on a TDY basis saved the day. This kind of "maintenance brenksmanship" convinced aerial porters that an organically assigned maintenance capability offered a promising solution to this "serious problem." (5:18,19)

Cargo pallets were absolutely crucial to rapid and efficient handling of cargo. By using 463L pallets, a C-130 could be completely offloaded and reloaded in 15 minutes. This ability to offload rapidly was of overriding importance when cargo was delivered to forward airfields in high-threat areas. Ironically, it was such operation that high loss rate of pallets and restraint equipment occurred. After an aggressive recovery program was started, restraint equipment valued at $3,152,352.00 were secured from airfields not having permanently assigned aerial porters. (5:20,21)

IV

PERSONNEL

Manning of stateside aerial ports with civilians caused a shortage of trained and experienced personnel. To fill Vietnam requirements, NCOs and airmen were transferred from other career fields. Their training generally consisted of a brief two-week course in aircraft loading prior to arrival in Vietnam. Aerial ports suffered chronically from a lack of sufficient authorized and assigned personnel. The lack of qualified personnel was still affecting capabilities of the aerial ports in 1967. At the beginning of the year, 88.8 percent of all aerial port personnel were in upgrade or retraining status. Of all personnel assigned, 57.2 percent were retrained from either supply or administrative career fields.

By November 1967, significant progress had been made and the training program was down to 62 percent, but still a problem. Manning was so critical during the 1968 Tet Offensive that assistance from out-of-theater resources had to be employed. About 400 TDY personnel from USAFE, PACAF, and CONUS augmented the aerial ports in Vietnam until May 1968. (5:30)

V

OPERATION DESERT SHIELD AND DESERT STORM

"Never before in history has any nation airlifted as many tons over as many miles. At the height of our initial surge, more

than 124 strategic airlifters were landing in the desert each day...that's one airplane every 11 minutes." (12:1)

General Hansford T. Johnson

During the first 30 days during the phase I deployment, C-141, C-5, KC-10,and commercial aircraft moved 72,000 tons of cargo and 91,000 people to the Persian Gulf. This airlift effort was crucial to U. S. plans for bolstering a thin line of American defenders in the critical days before other elements of the mobility triad boosted American forces stockpiles to more t[illegible] million tons of materiel. This was sufficient to sustain th[illegible] expanded U.S. forces for more than 30 days of combat. (5:29)

Nearly 20 years after Vietnam and a huge military buildup during the 1980s, aerial port readiness was still hampered by an aging materials handling equipment (MHE) fleet. (10) An after action report submitted to Military Airlift Command by a deployed MHE mechanic identified poorly trained mechanics and inadequate facilities as major problems in maintaining a strong vehicle ready fleet. Equipment was repaired in the san and on a small parking lot where space was a premium. During the initial phase of the deployment, obtaining parts was a serious problem. All emphasis was placed on aircraft parts. Vehicle maintenance relied on an obsolete War Reserve Materiel spare parts kits which were filled with obsolete parts.

Another Vietnam ghost surfaced, sufficient 463L pallets. Cargo pallets were consumed at an alarming rate. When users did not return them to the airlift system, this quickly depleted the 120,000 war

reserve materiel (WRM) pallet stockpile and became a potential "show stopper."

Operation Desert Shield highlighted an old problem that continues to haunt aerial port operations...intransit visibility. The first time this problem surfaced was during Vietnam, but the airlift system was preoccupied with so many other concerns this one took a back seat until Operation Desert Shield. This prompted MAC to embark on an ambitious automation effort to fix the problem. Statistics showed that a lack of intransit visibility (ITV) was causing items to be re-requisition because they were lost in the system. Money saved with visibility of items in the pipeline on a given day, DoD wide, far exceeded the cost of the Cargo Automated Processing System (CAPS) which was never implemented. Lesson learned: MAC (AMC) needs to emphasize completion of projects and do not abandon the project prior to operation without proven replacement. (6:11)

Both the user and the operator need a way to provide more immediate load visibility. Both have separate capability, but no joint data base from which the planners can access information. This was a Nifty Nugget finding. (6:11) Logistics applications of automated marking and reading symbols labels were being applied, but load visibility was still a slow and cumbersome process. The lack of an easy to use identification system resulted in at least two football fields full of undeliverable

cargo at one location in the theater. The problem is twofold: (1) during deployment, destination blocks are marked "XX" "DS" or Mob" as destination and color coded by unit. Because destination were classified and no one knew the color codes at the offload aerial port of debarkation, cargo was undeliverable, (2) retrograde cargo from field units also was a problem. Users in country did not, could not, and would not properly prepare cargo for ship (documentation of destination) so cargo was shipped back to Germany and put in holding areas for MAC to sort out. (10:1) Intransit visibility requirements to track individual loads stretched transportation resources. The authorized manning during Operation Desert Shield and Desert Storm was inadequate to satisfy all of Desert Shield taskings. (10:12)

VI

AIR RESERVE COMPONENT - COMPENSATING LEVERAGE

With the continued drawdown and a reduced budget, the Air Reserve Component (ARC) is our common denominator in supporting national policies and objectives. It is incredible the extent to which we are dependent on out mobility force to give us the flexibility our policymakers need. In the chaotic post-Cold War environment, our mobility forces define our status as a superpower. Given the importance of these forces, it is critical that we anticipate the effects of changes in the mobility force structure.

The Total Force Policy, mandating that the reserve component be fully integrated into the military force structure, has reached its greatest actualization within the mobility system. No other portion of the force structure depends more heavily on the reserves for augmentation. (11:15)

The militia concept traces its orgins to medieval England and is deeply embedded in the United States thinking about their military. The United States relied on this concept in its essential aspects until World War II, maintaining small standing forces during peacetime. As the nature of warfare began to change in this century, the militia concept began to present limitation, while the idea of having military reserves gained strength. Before World War I, it became apparent that our standing military forces were inadequate to deploy and engage an overseas enemy in a reasonable amount of time and simultaneously fulfill the role of training new recruits during lengthy national mobilization. The answer was the creation of the Federal Reserve in 1916. The reserves would mobilize with a minimum of required training to augment the deployed active forces, allowing some of the active forces to remain behind to support the general mobilization of the militia. This doctrine concerning the role of reserves endured essentially intact until the 1960s. (11:16)

In the decade of the 1960s, the reserve concept began to change. The realities of possible war in Europe against the Soviets dictated that no time would be available to mobilize,

train, and equip new units. The U.S. needed forces-in-being, ready to fight a "come as you are" war. Although the fiscal realities of maintaining so much force structure in peacetime implied a greater reliance on reserves, these reserves would need to be more ready and more equivalent to the active forces than the traditional concept had required. Toward this end Congress passed the Reserve Forces Bill of Rights and Vitalization Act of 1967. The movement toward a more effective and ready reserve component continued to gain momentum and culminated by 1970 in the Total Force Concept, which became the Total Force Policy in 1973. The Total Force Policy mandates that the reserves (1) receive modern combat equipment compatible with the active force, (2) be the initial and primary source of augmentation of the active forces during emergencies, (3) receive additional functions and units whenever possible, to save money, and (4) be taken fully into account in sizing and structuring U. S. forces. (10:17)

Before 1976, no Air Reserve Component could be called to active duty involuntarily without a declaration of war or national emergency by Congress or the President. The massive airlift effort to aid Israel during the 1973 Mideast War indicated that for peacetime contingency purposes, some authority to call up reserves was necessary short of such declarations. The result was Section 673b of Title 10, which allowed the President to call

up 50,000 reservists for 90 days to "augment operational missions." This authority later was expanded to 200,000 and the period increased to 180 days. Section 673b authority became an important enabling element of the Total Force Policy, allowing planners to integrate the ARC into the earliest parts of their contingency plans.(10:18)

Air Force Regulation 45-1, "Purpose, Policy, and responsibilities for Air National Guard and Air Force Reserve," outlines the Air Force's implementation of the Total Force Policy. This regulation makes formidable demands on the Air National Guard and Air Force Reserve in terms of combat readiness. To achieve the needed levels of combat readiness, Air Force clearly states that the missi m of the Air Reserve Component in peacetime is to training for wartime mobilization. (10:22)

Contribution by the Air National Guard and Air Force Reserve to the Total Force is a combined percentage of seventy percent. The Air National Guard has 23 aerial port units and the Air Force Reserve has 68 units. (Defense 93 Almanac) What impact does this have on overall aerial port readiness? If the units are receiving and conducting the proper training, then it enhances aerial port readiness. However, if these units are not receiving sufficient training, then overall readiness is degraded.

There are three things that adversely affects Air Reserve

Component readiness: (1) money, (2) time to conduct all required training, and (3) availability of equipment. With tight fiscal constraints across-the-board some units may not be able to flyaway to active duty units for training or to the reserve training center at Dobbins AFB, Georgia to keep proficient on materials handling equipment. Air Force restructuring and the year of training caused some serious problems with training. The Air Reserve Component was given the same training tasks as the active units and there is not enough time for them to accomplish the training. Also, these units are required to be proficient on the 40K loader and there are only two assigned to the Air Reserve Component and both are assigned to Air Force Reserve units. Air Force restructuring also decreased some opportunities for active duty training.

In the March 1994 issue of ROA National Security Report, then Secretary of Defense Les Aspin addressed the question of "How Do We Structure Our Reserve Forces For The New World?" Mr Aspin said that the answer comes from the Bottom-up Review, a start-from-scratch analysis of the post-World War security threats and force we need to respond to them. He indicated that through the review, we built a new overall military strategy, force structure and defense policy, block by block, to meet the dangers of the post Cold War world.

Mr. Aspin further stated that we need to respond anywhere in the world and that the United States must field military forces

that can fight and win two major regional conflicts, and do so nearly simultaneously. This is the so-called win-win strategy.

What does all this mean for the reserve Forces? The key to reducing the risks and controlling the costs of our future total force is going to be how we use the reserve Forces Component. Our Reserve Forces are going to provide us with the "compensating leverage" we need to make the win-win strategy work.

The Honorable Deborah R. Lee , Assistant Secretary of Defense for Reserve Affairs said that Compensating leverage means that instead of reducing the Reserve Components in the same direct proportion as the active components, we should look for smart missi on-effective ways to use the reserves to minimize the risk associated with the active drawdown and to control our peacetime costs. (8)

VII

MATERIALS HANDLING EQUIPMENT - HEADING SOUTH

The workhorses of aerial port operations are the 40k and 25K loaders and they are both heading South rapidly. Fifty-eight percent of the 40K loaders and seventy-nine percent of the 25K loaders have had cracks in structural members caused by age, fatigue, and heavy use. The cracks have been repaired but metal fatigue is still a problem. The average age of the 40K loader and the 25K loader is 21 years, and many of the 40K loaders as well as the 25K loader have been through depot for remanufacturing. The life expectancy when this equipment was procured was eight years for the 40K loader and ten years for the 25K loader. (10)

The Tactical Aircraft Loader (TAC) is generally used by mobile aerial porter at forward austere locations. It provides mobile aerial porters the capability to operate at dirt air strips in support of combat operations. The average age of the 59 TAC loaders is sixteen years, while their life expectancy when purchased was 8 years. Due to prohibitive costs,no depot overhaul will be done on these loaders. These loaders will be processed for disposition as they meet or exceed disposition criteria and used for cannibalization due to parts unavailability. (10)

In order to halt the southward move of the materials handlding equipment, Air Mobility Command is procuring a 60K loader which should help considerably. The 60K loader is critical for Global Reach and AMC made it the number two priority. With this piece of equipment in the inventory, aerial porters can work both military and wide-body aircraft, thus reducing airlift requirement to move MHE.

Two 60K loader prototypes from Southwest Mobile Systems and Teledyne-Brown Engineering are undergoing operational assessment at Dover AFB DE. The contract is expected to be awarded by April 1994 and delivery of 360 of these loaders is scheduled from late 1996 through 2006. (10)

Air Mobility Command is also looking at a new small loader capable of servicing wide-body aircraft. The small loader acquisition plan calls for leasing four loaders (with the option to buy) from each of the top two bidders from FY 96 to FY 98 for operational testing and a "drive-off", production source selection in FY98, and production contract award in FY99 for 300 loaders.

The procurement of a contingency cargo pallet is long overdue. This is another combat lesson unlearned from Vietnam. There is evident that an expendable cargo pallet did exist during the 1968 and 1969 time frame, but it appears as though it was never seriously pursued. Now nearly twenty-five years later, the subject has surfaced again at Air Mobility Command. This need

has always been there, and to procure a contingency cargo pallet will be money very well spent. This is a "must do" readiness initiative with huge savings in terms of money and combat effectivness. (3)

VIII

CONCLUSION

Aerial ports in Vietnam were a vital part of the largest and most complex sustained tactical (intratheater) airlift operation in history. The airlift of troops and cargo were statistically staggering. For example, in 1969 the 834th Air Division airlifted more than 4.5 million troops, the equivalent of the combined populations of Boston, Detroit, Cincinnati, Dallas, Oklahoma City, Omaha, and Honolulu. The 1969 total weight of cargo, mail, and troops airlifted in Vietnam was more than 1,341,000 tons. (5)

In light of the above extraordinary performance by aerial porters, it would be easy to conclude that aerial port readiness was extremely high during the Vietnam War. However, that was not the case in Vietnam, Operation Desert Shield/Desert Storm, nor today.

Aerial port readiness was adversely impacted by lack of adequate materials handling equipment, poor facilities, low manning, and untrained personnel. Unfortunate, many of the combat lessons learned from Vietnam were never implemented or were implemented and subsequently terminated. For example, intransit visibility initially surfaced during Vietnam, noted during Nifty Nugget, and resurfaced during Operation Desert Shield as a priority initiative. Project CHECO, dated 5 Aug 70, documented a MHE maintenance finding as follows: "No more

important lesson was learned in RVN with respect to aerial port operations than the one having to do with maintenance of MHE. It was clearly evident that transportation squadrons did not usually have sufficient manning in the skills required to maintain the equipment properly." Nearly 25 years later, aerial ports MHE mechanics were reassigned to transportation squadrons as a result of the objective wing structure.

As a result of the objective wing structure, numerous aerial port authorizations were deleted or transferred to Traffic Management, mobile aerial port squadrons were deactivated and some of the authorizations were merged at strategic aerial ports. This was a good initiative, however, when the C-130s were transferred to Air Combat Command, USAFE, and PACAF, no aerial port personnel were part of the package deal. Senior transportation officials at ACC felt that they did not need any aerial porters since they were a force provider and AMC could manage that much better.

Uited States Air Force Europe (USAFE) transportation officials feel that the 30 authorizations allotted to them is inadequate to support theater requirements. With the drawdown, they do not have the luxury of getting augmentees from assigned units...manpower is not available to go around.

Former Secretary of Defense Les Aspin and the Honorable Deborah R. Lee, Assistant Secretary of Defense for Reserve Affairs said that our Air Reserve Component are going to provide us with the "compensating leverage" we need to make the win-win

strategy work in dealing with nearly two simultaneous Major Regional Conflicts (MRCs).

With a decrease in active duty forces (bases and people), reserve training is going to be hard pressed to accomplish in some aspects. There will be less units to train with and less people to provide the training as well as equipment availability. There is only two 40k loaders assigned to the Air Reserve Component.

Historically, when the baloon goes up, senior Air Force officials have come to the rescue of aerial port readiness to ensure that we get the goods in the hands of the shooters. While readiness may lag behind during peacetime, we have demonstrated the capacity to put it back on track as the situation dictates. However, since we will not be fighting future conflicts like the last one, we need to rethink aerial port readiness and ensure that it is sufficient to support this nation's **GLOBAL REACH** strategy. This means we need reliable MHE, sufficient manpower consistent with the force structure drawdown, sufficient training for our Air reserve Component, and facilities.

Emphasizing the critically important role played by aerial ports ion tactical airlift, General Herring said:

> "As we look beyond the operation in RVN, we should guard against a tendency demonstrated in the past to draw heavily on aspects of the airlift system that are not constantly exercised in peacetime such as the aerial

port function. If we are going to maintain "X" amount of tactical airlift capability, then we need to determine and maintain a corresponding minimum amount of aerial port strength. That minimum amount should be based on a capability to expand rapidly." (5:36)

BIBLIOGRAPHY

1. AMC Hosted Multi-Command Study, Air Mobility En Route Infrastructure, 20 July 1993
2. Aspin, Les, Defense Secretary, Restructuring U. S. Reserve Forces For The New World, ROA National Security Report, Mar
3. Bendall, David C., Contingency Air Cargo Pallet, Background Paper, 2 Mar 94
4. Hebert, Col and Word, Col, The Air Force position on Air Transportation and Aerial Port, AWC 5112, 22 June 1951
5. Humphries, Jack T., Lt Col, Project CHECO Report: USAF Aerial Port Operations In RVN, K717.0413.79, 5 Aug 70
6. HQ MAC Staff/Working Group, Report of The Desert Shield Lesson Learned Working Group, 1991
7. Kassing, David, Getting U.S. Military Power To The Desert: An Annotated Briefing, N-3508-AF/A/OSD
8. Lee, Deborah R., Assistant Secretary of Defense For Reserve Affairs, U.S. Military Changes Mean Greater Reliance Will Be Placed On Reserves Forces, ROA National Security Report, Mar 94
9. Miller, Charles E., Airlift Doctrine, Air University Press, Maxwell AFB AL, March 1988
10. Prechtel, Capt, Materials Handling Equipment (MHE), AMC Point Paper, 9 Feb 94
11. Rand Study, Guard and Reserve Participation in The Air Mobility System, March 1993

12. Tefbeller, William R., Strategic Airlift Support For U.S. Forces Deployment to Operation Desert Shield, Ft McNair, DC, Industrial College of The Armed Forces, April 1991, Doc Call No: M-U 3508-AF/A/OSD

13. Unknown, CORONA HARVEST: Aerial Port Operations, Vol III, 1 Apr 68 - 31 Dec 69

14. Unknown, PROJECT CHECO REPORT, K717.0414-2, Jan 67

15. Williamson, David , Col, Current and Future Air Mobility En Route Infrastructure, 20 Jul 93

16. Wrinkles, Paul A.,SMS, Desert Shield/Storm After Action, Report, 1991