



**STRATEGY
RESEARCH
PROJECT**

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**IMPROVING OUR STRATEGIC MOBILITY
POSTURE FOR THE XXI CENTURY**

BY

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USAWC STRATEGIC RESEARCH PROJECT

IMPROVING OUR STRATEGIC MOBILITY POSTURE FOR THE XXI CENTURY

by

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ABSTRACT

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After 30 years of decline, our military strategic mobility modernization program, beginning in 1995 and going through 2001, will allow the Armed Forces to accomplish their National Security and Military Strategies. The purpose of the paper is to provide the reader a clear understanding of the required commitment by our Nation's leaders, both civilian and military, to the strategic mobility modernization program. This paper examines the strengths, weaknesses, and makes improvement recommendations for the strategic mobility triad of airlift, sealift, and prepositioning of equipment. The paper will review the two critical DOD mobility studies that provided the mobility requirements for the year 2001: the 1992 Mobility Requirements Study (MRS) and the 1995 Mobility Requirements Study, Bottom-Up Review Update (MRS BURU). The paper concludes with the "bottom line" fact that to remain a global power-projection military our leadership must keep MRS BURU requirements a top funding priority.

IMPROVING OUR STRATEGIC MOBILITY POSTURE FOR THE XXI CENTURY

EXECUTION OF THE FUTURE YEARS STRATEGIC MOBILITY MODERNIZATION PROGRAM WILL ALLOW US TO DEPLOY AND EMPLOY COMBAT FORCES ON A GLOBAL BASIS REGARDLESS OF PROPOSED CHANGES TO OUR TWO MRC STRATEGY

INTRODUCTION

“To deter aggression, we must have forces that can deploy quickly and supplement U.S. forward based and forward deployed forces.”

President William J. Clinton
The White House
February 1995

“In my mind, as far as I see, the single most important enhancement the Nation needs to meet our two MRC contingency strategy is strategic lift.”

General Shalikashvili
Chairman, Joint Chiefs of Staff
8 February 1995

The United States National Security and Military Strategies focus the Armed Forces on fighting and winning two nearly simultaneous regional contingencies. However, recent comments made by senior military and President Clinton’s administration officials indicate possible abandonment of the two-war strategy, “either cut forces and give up our military strategy, or put in more resources. I think the country could live with either alternative. But I don’t want us.... kidding ourselves” stated Defense secretary William Perry in *Aviation Week & Space Technology*, January 29, 1996. Additionally, *Aviation Week & Technology*, February 12, 1996, reports Senator Joe Lieberman (D-Conn.) “believes the two wars scenario will get a

thorough, but independent, nonpartisan examination by a big national commission and will result in the U.S. abandonment of that strategy.” Even with some doubts about maintaining our military’s two MRC strategy, the Department of Defense (DOD) continues to assess our military’s strategic mobility capabilities as we move into the XXI century.

This paper will focus on the strengths and weaknesses of our current strategic airlift, sealift, and prepositioning policies. It will provide conclusions and make improvement recommendations for each strategic mobility topic discussed. The paper’s bottom line is that accomplishment of the 1995 Mobility Requirements Study, Bottom-up Review Update (MRS BURU) recommendations will allow us to accomplish our military strategy, reduced or not, into the XXI century.

In recent years, two major studies have shaped United States strategic mobility requirements: the Mobility Requirements Study (MRS) in 1992 and the Bottom-Up Review (BUR) in 1993. The MRS provided the basis for current DOD programming of strategic mobility forces and a comprehensive review of US strategic mobility requirements for the 1999 timeframe. The BUR resulted in changes to the defense strategy and overall force structure, modernization, and infrastructure. The BUR’s two nearly simultaneous major regional contingencies strategy placed new requirements on the strategic mobility system. This prompted DOD to conduct a follow-on study to address two basic essential mobility questions:

- (1) Does the United States have the strategic lift to execute and win two nearly simultaneous major regional contingencies?
- (2) What changes, if any, are recommended to the strategic mobility mix to ensure the successful execution of the new strategy?

The Joint Staff answered these questions through the MRS BURU in 1995. The MRS BURU examined a range of potential future contingencies, while varying warning times, overseas base access, and availability of US mobility assets. Representatives from the Joint Staff, Office of the Secretary of Defense, the combatant commands, and Military Services all participated in the study.¹

A summary of the key mobility requirements for the MRS and the MRS BURU are provided below. Both studies use the assumption that moderate risk is logical and acceptable.

Mobility Requirements Study:

To meet the total mobility requirements, DOD has developed a notional plan for execution through the normal programming, budget, and acquisition procedures. The major components of the plan are:

- > To deploy (by 1997) an afloat pre-positioned package of approximately 2 million sqft of Army combat and combat support equipment. This package will be carried on nine LMSRs in the pre-positioning configuration. In the near term, chartered pre-positioning ships will be used to supplement converted and newly constructed ships.

- > To acquire through new construction and conversion an additional sealift capacity equal to 20 large (380,000 sqft total capacity and 300,000 sqft capacity for pre-positioning configuration), medium-speed (24 knot sustained) roll-on/roll-off ships LMSRs. In addition, to lease two container ships (2000 container capacity each) for pre-positioning.

- > To add (by FY 1998) 3 million sqft of surge sealift capability for the rapid deployment of heavy Army divisions and support from the United States. This capability will be

provided by 11 of the LMSRs in high readiness. When added to the eight fast sealift ships currently maintained by the Military Sealift Command, this will provide adequate capability to deploy rapidly from the United States into a regional crisis.

> To expand (by FY 1999) the Ready Reserve Force (RRF) from the current 96 ships to 142 ships (of which 104 will be dry-cargo ships) and to increase the readiness of the fleet.

> To continue the C-17 program to improve the airlift component of strategic mobility.

> To buy and stage 233 additional heavy-lift railcars, develop a containerized west coast ammunition loading facility, negotiate additional berthing at loading ports, improve Transportation Terminal Units readiness, and seek legislation to ensure continuous use of posts.

Also, the study determined a need for 49-52 million ton miles per day for airlift, 10 million sqft of sealift, and 1,945 railcars for hauling equipment to ports of embarkation.

Mobility Requirements Study, Bottom-Up Review Update:

The MRS BURU identifies military mobility requirements through use of representative scenarios, for deploying and sustaining US forces during the 2001 timeframe and developed recommended programs to meet those requirements. The MRS BURU study attempted to answer two questions:

(1) What strategic lift is required to support US national military strategy in the year 2001?

(2) What is the required mix of airlift, sealift, and pre-positioned equipment given

fiscal realities?

The MRS recommendations are included in the MRS BURU along with one basic assumption. The assumption is: that FY 1994-1999 Future Years Defense Plan (FYDP) provides the baseline for projecting FY 2001 forces. In those cases where assets are outside the FYDP, projections to FY 2001 are derived by extending current budgets through straight-line adjustments or using existing program data.² The MRS BURU key recommendations are:

- > Nineteen LMSRs for PREPO and surge (8 PREPO, 11 surge). The 8 PREPO LMSRs used for an afloat prepositioning package of approximately 2 million sqft
- > Two leased container ships for pre-positioning Army sustainment stocks.
- > Several CONUS infrastructure improvements ‘fort to port’ and West Coast ammunition loading facility.
- > Reduce the RRF to 65 dry cargo ships (with acquisitions, availabilities of ships indicated in MRS completed). Expand RRF to 36 RO/ROS.
- > Use MRS BURU to pursue joint planning with industry to ensure time-phased availability of intermodal capability to meet sustainment requirements.
- > Change the CRAF agreement with industry to provide a baseline fleet of 24,57, and 73 for CRAF stages I, II, and III.
- > Total aircraft capacity 49 MTM/D to 52 MTM/D, surge sealift at 10M sqft, and 1,945 railcars.

“Our ability to meet the MRS BURU requirements of dual, nearly simultaneous major regional conflicts is a function of assumptions, force requirements and delivery timelines. It should be remembered that MRS BURU is a planning tool helping to guide the debate on the

kind and amounts of strategic mobility assets our nation should possess at the turn of the century”.³

The next several pages will provide an executive summary of the DOD’s strategic mobility triad of airlift, sealift, and prepositioning of equipment.

STRATEGIC AIRLIFT

General

The first pillar of the strategic mobility triad is airlift. Strategic airlift is comprised of both military and commercial aircraft. Military aircraft provide the rapid movement of passengers and outsized military cargo that require immediate insertion into a crisis contingency area. The outsized cargo is usually armored vehicles, helicopters, and large support vehicles. Commercial aircraft provide the majority of passenger airlift capacity and make a contribution in the movement of military cargo. The military and commercial airlift make sufficient contributions to both peacetime and contingency missions of the military.

Strengths

The Air Force continues to maintain a large fleet of strategic air lifters. The FY 1996 military air fleet is comprised of 104 C-5s, 191 C-141s, 37 KC-10s, and 21 C-17s.⁴ The CRAF still retains a robust capability to provide wide body aircraft in a crisis situation to DOD. The General Services Administration (GSA) has removed several disincentives for Airlines affiliated with the CRAF program and replaced them with incentives. An example of one incentive is the

GSA program called City Pairs which requires federal government air travelers to fly aboard CRAF carriers when on official business. Since 1990, the CRAF capacity has shown steady improvements.

Additionally, CRAF enjoys some advantages over military aircraft as they transverse around the world. They have in-place refuel agreements and they reduce requirements for military infrastructure at most large civilian airfields. Also, CRAF provides flexibility to access most world-wide airfields which eliminates problems with diplomatic clearances and overflight restrictions.

The Defense Acquisition Board in November 1995 approved the purchase of 80 additional C-17 aircraft, bringing the total C-17 buy to 120 aircraft. The Department of Defense has programmed sufficient funds to ensure that its military fleet remains capable of deploying and supporting forces as required.⁵ This decision to acquire an all C-17 fleet deferred further efforts on a modified Non-Developmental Airlift Aircraft (NDAA) until completion of the CRAF enhancement studies due in June 1996. The C-17 will not only meet the requirements specified in MRS BURU, but is an ideal candidate to replace the current fleet of C-141s and C-5s. The C-5 is currently under going a joint Army and Air Force test to certify the C-5 for heavy equipment drops. If the decision is made to modify the C-5, the Air Force will receive approximately \$300M for the modifications.

The strength of the strategic airlift will rely on the priority of funding for these enhancements in the future budgetary deliberations.

Weaknesses

The Air Force has not had a new airlift aircraft for approximately 28 years (excluding the C-17). Although several product improvements were made during these years, the airlifter fleet is rapidly approaching the end of useful service life. The wings have been literally flown off the C-141 fleet. The last C-141 aircraft is due to retire in FY 06. During the Desert Shield/Storm operations the C-141 and the C-5 were restricted to flying only about 75% of their maximum load capability. The operational stress of the Desert War aged the fleet of airlifters about 1 ½ times their normal operational tempo. C-5s flew nearly 3 ½ times their normal peacetime mission profile.

CRAF accounts for about one third (1/3) of our strategic airlift capability. It provides for about 90% of passenger and 30% of cargo air deployment capacity for DOD. However, CRAF is limited to the commercial type missions of moving passengers and light cargo that enhances military sustainment. However, the commercial airlifter cannot carry outsized military equipment, and does not have roll-on/roll-off capability. Additionally, CRAF airplanes are not air refuelable which causes additional logistics coordination for obtaining refueling basing rights in foreign countries. Commercial planes also require special material-handling equipment and longer runways both of which limit their ability to operate in remote airfields.

Finally, today, over 30% of the U.S. commercial air fleet is leased, and this could reach 60-70% within the next ten years. Leasing provides airlines greater flexibility to change aircraft types and saves large capital costs associated with purchasing aircraft. Most of the ownership of these leased aircraft belong to foreign corporations. This further works against the flexibility of CRAF to provide aircraft to DOD since foreign-owned aircraft are excluded from participating in the CRAF program.⁶

Conclusions

Based on MRS BURU recommendations, DOD has established an intertheater airlift objective of between 49 and 52 million ton-miles per day of cargo capacity. The precise amount of airlift needed will depend on the level achieved of overseas prepositioning of equipment. The Department is continuing to evaluate prepositioning options, as well as other potential war fighting enhancements, that could result in changes to the airlift objectives.

CRAF participation levels and incentive programs will require adjustments to meet the MRS BURU scenario deployments. The trend toward foreign ownership of commercial fleet will need further attention by the President's Administration. The overall CRAF program looks favorable for DOD in the foreseeable future.

The decision to purchase 120 C-17s was clearly a positive enhancement our strategic airlift aircraft. The C-17 gives the capability to move the majority of the military's outsized equipment and cargo to the forward areas more efficiently and expeditiously. For example, estimates show that if the C-17 had replaced the C-141 during Desert Shield/Storm, we could have met our airlift deployment requirements 20 to 35 percent faster.⁷ The C-17 will become the military's primary heavy airlifter for the next 20 plus years.

Recommendations

Our civilian and military leadership must keep the strategic modernization programs fully funded as described in the future-year modernization plan. The dollars for the C-17 purchases, the CRAF incentives for improving commercial carriers participation, and funding for the C-5 upgrades are the key initiatives that must receive funding.

The other major factor that has direct impact on our strategic airlift capabilities is current operational deployments (otherwise known as deployment optempo). To reduce the deployment optempo we must efficiently utilize our organic military airlift resources while leveraging commercial industry capabilities. We must ensure access to commercial airlift during a contingency and must work to channel the government's transportation business to those commercial airlift operators committing their assets to support operations in peace and war.⁸

STRATEGIC SEALIFT

General

The second pillar of the strategic mobility triad is sealift. Our sealift capacity comes from three sources; commercial trade ships, DOD long-term charter of ships, and government owned ships maintained in reserve status. Sealift move the majority of military equipment with container ships, RO/RO ships, tanker ships, and the older breakbulk ships. As did airlift, the sealift capacity comes from both military and commercial sources. The majority of military equipment and sustainment is moved by sealift in both peacetime and contingency operations.

Strengths

The U.S.-flag commercial fleet contains 209 ships with military usefulness. These include 108 dry cargo ships, 99 tankers, and two passenger ships. Another 124 commercial vessels that could contribute to military missions- 50 dry cargo ships, 67 tankers, and seven

passengers ships are maintained in the effective U.S. control (EUSC) fleet. EUSC ships are owned by U.S. companies or their foreign subsidiaries and registered in nations whose laws do not preclude the ships' requisitioning for military purposes.⁹

The sealift enhancements recommended by the MRS and required by the Unified Commanders provide the Nation with the capacity to deploy a five-division contingency force with its associated support structure anywhere in the world in 75 days. The strategic sealift initiatives include procurement of 19 Large Medium Speed RO/ROs (LSMR) ships by the Navy and increasing the size (36 RRF RO/ROs) and readiness of the Ready Reserve Fleet. The current Navy POM fully funds the LSMR program and the MRS BURU supports this acquisition program. The RRF fleet consists of 31 of 36 RO/ROs with the remaining five ships at risk due to funding and procurement issues.

Today, the U.S.-flag and EUSC fleets have more than enough capacity to meet the sustainment demands of the two MRC requirements. The DOD controlled and the RRF fleets have a shortfall of RO/ROs to meet the demanding unit movement requirements. This RO/RO shortfall creates risk until we purchase the additional RO/ROs. Currently, our strategic sealift capacity projections will meet the required capacity recommended in MRS BURU in the year 2001.

Weaknesses

There had been no new strategic sealift construction in over 30 years until the MRS gained approval by Congress. The current sealift enhancement program has been troubled with ship building delays, cost overruns, procurement problems, fleet siting problems, declining

maritime workforce, and a lack of DOD support to the commercial shipping industry similar to the airlift CRAF program. Each one of these troubled areas are discussed below.

The LSMR program is under way with five ships (converted commercial vessels) scheduled for delivery in FY 1996-1997 with a delay of roughly 14-22 months as related to initial plans. These delays were a shared fault of the contractor and DOD. As a result of cost overruns and escalation of some building costs, a cost growth of almost 3% over the overall \$5.77B LSMR program has occurred. The Navy is examining their out-year budget forecasts to find funds to offset this approximate \$170M shortage.

The Army requires use of 21 RRF breakbulk ships to augment other assets to surge the force until the LSMR construction/conversion program is complete. These ships are not the preferred vessel to transport tracked and wheeled military equipment. These breakbulk ships were maintained in a RRF-10 day readiness status. However, ship readiness was lowered to an RRF-30 status because of congressional cuts to the Navy POM in FY95. The Navy applied their POM cuts to the RRF readiness program vis other Navy funding programs. This RRF readiness reduction is a cause for concern. The RRF fleet's maintenance problems, experienced in the early stages of deployment to the Persian Gulf War, is still remembered by many senior leaders today.

A provision under the National Defense Sealift Fund (NDSF) statute limits DOD's procurement of foreign built ships to five. DOD met its ceiling when five foreign flag ships procured as DOD sealift ships in support of the LSMR ship conversion program. Currently, the RRF has 31 of 36 RO/ROs in their inventory. DOD cannot procure the final five ROROs from foreign sources unless the congressional language restriction is lifted or changed.

Based upon MRS BURU, the CONUS based organic surge dry-cargo fleet has siting requirements on the various sea coasts around the country. The sites recommended by MRS BURU deprived the Maritime Administration (MARAD) and the Military Sealift Command (MSC) of the flexibility to find the most cost effective layberths in a given region which could still satisfy force closure requirements. Additionally, several of the MRS BURU siting locations had no available layberths which could support reduced operating status (ROS) vessels. RRF program funding shortfalls have made it impossible to implement the MRS BURU plan. The projected DOD funding constraints make it necessary to look for alternative ways to berth our RRF surge fleet.

The merchant mariner population is declining in the United States because of modern fleets reducing the manning requirements. Without a viable merchant fleet, the United States cannot maintain the merchant mariners needed to crew ships it buys or charters and cannot maintain the shipbuilding and ship repair industries necessary to maintain the largest government-owned fleet.¹⁰ This decline of certified merchant mariners will potentially delay the availability of surge sealift for a military crisis.

The maritime industry does not have an incentive program similar to the airline industry's CRAF program. The existing DOD Sealift Readiness Program (SRP) is not supported by the sealift industry. The maritime industry wants a new program similar to CRAF so they can reduce risks to market losses and potential ship requisitioning while meeting DOD requirements. They want adequate and assured compensation when they are used in an national emergency situation.

Conclusions

The Strategic Sealift capabilities cannot meet the current requirements of MRS BURU. The Sealift program will have to accept moderate risk in meeting their 2 million sqft wartime surge requirement. The LMSR and RRF RO/RO acquisition programs and the appropriation of sufficient resources to maintain our fleet is essential for proper wartime readiness. It appears the Sealift program will miss its target date of 2001 to meet the MRS BUR required sealift capacity. The RRF breakbulk ships, 80 cargo ships, will have to offset the delays in the construction and conversion programs. The cost overruns in the conversion program may jeopardize the last two contract for the new LMSRs.

The LMSR and RRF RO/RO delays will require the 21 breakbulk ships be maintained at a RRF-10 versus a RRF-30 day readiness status. The Navy claims it can save about \$35M per year if the RRF-30 status is maintained. It believes this savings is worth the risk to the surge sealift program.

The outcome of the FY 96 budget is critical to the RRF RO/RO acquisition program. There is still a \$70M shortage to buy three and convert one RO/RO ships. If the \$70M is approved, DOD will have to obtain Congressional relief on restrictions to buy foreign ships for conversion.

With funding shortfalls constraining the MRS BURU recommendations for sealift, the sealift siting plan recommended by MRS BURU requires modification. DOD should seek the most cost effective siting plan that will comply with the force closure requirements. The Services stated concerns about the initial siting plan, believing ships sited at ports others than the ones designated for their embarkation could not meet the outload criteria. The United

States Transportation Command (USTRANSCOM) working with MARAD and MSC) can solve this problem in a cost efficient manner.

The Sealift program will remain a challenge to DOD. History has shown that major deployment of our forces require 90% of their movement by sealift and 10% by airlift. Also, the sealift problem can not rest with DOD alone. The government and commercial industry must combine efforts to work the issues. The U.S. maritime industry must find ways to make themselves more competitive in the worldwide markets. This will give a boost to the shipbuilding industry which hopefully will lead to ships built for dual purposes; military and commercial.

Recommendations

Again, it is imperative that our civilian and military leadership keep the strategic modernization programs fully funded as described in the future-year modernization plan. The cost overruns now represent are a relatively small amount of money. However, if future years funds are provided as programmed and stretched out over several years, the ultimate cost for strategic lift improvements will soar beyond support ability. We must get the required funding for our sealift improvements.

We must meet the MRS BURU, RRF requirements for RO/RO configured ships. The RRF is a critical component of our sealift fleet, comprising 40% of our total organic capability. It provides over one-half of the total sealift capability necessary to deploy the two Army heavy divisions and Marine Corps amphibious task force assault follow-on echelon forces.¹¹ By the 2001-2002 time frame, we must have the following MRS BURU recommended organic surge

dry-cargo fleet profile: LMSR-11, FSS-8, RO/RO-36, Breakbulk-14, RRF LASH-3, SEA BARGE-3, T-ACS-9, and Container Ship-2. The majority of these vessels (67) are maintained in ROS-4 and -5 status with the remainder (19) maintained in RRF-10 and -20 status.

The RRF ships should retain its maintenance levels of readiness, ROS profile, until the final acquisition of the LMSRs and the RRF RO/ROs. The Navy's POM cuts should not be applied to the RRF readiness program while waiting for the LMSR construction completion. This is not a good risk to take based up our recent past deployment experiences. The RRF readiness problems experienced during Desert Shield/Storm clearly indicated the need for improved RRF readiness.

USTRANSCOM should recommend the DOD sealift siting plan. USTRANSCOM's siting plan, working with MSC and MARAD, should provide the flexibility to site vessels in the most cost effective manner and comply with the force closure requirements. The Services must have confidence in USTRANSCOM's ability to meet their stated outload requirements. If the Services are not satisfied with the siting plan they can fund the difference between USTRANSCOM's siting location(s) and their requested siting location(s). DOD obtaining the most cost effective layberths that meet the force closure requirements is the goal.

The reduction of merchant mariners in the U.S. requires closer over watch by the MARAD. The decrease in total mariners numbers is not at the crisis point yet, but MARAD must work with DOD to project the manpower requirements into the XXI century. The reduction in the RRF fleet and the modernization of ships, requiring less crews, should keep the population of mariners about correct to meet DOD requirements.

MARAD developed the Voluntary Intermodal Sealift Agreement (VISA) program which

is similar to the airlines CRAF program. It provides a contractually phased access to vessel capacity and Intermodal capability to DOD to support sustainment and current surge requirements. VISA has three stages to the program that provides contractual support to DOD. The first and second stages have defined contractual requirements to meet MRS BURU sustainment and current surge requirements. The third stage provides shipping to meet additional DOD requirements and provides a program to meet shortfalls, short of requisitioning. The Sealift industry supports a program that allows them to participate in planning their contribution, reducing the effects of market disruption, and assures their adequate compensation. DOD rejected the initial VISA proposals, but USTRANSCOM / MSC modified the VISA plan to meet DOD's objectives. It appears VISA meets the DOD and Sealift industry requirements which provides a viable replacement for the ineffective Sealift Readiness Program. The Department of Transportation (DOT) and MARAD must get Congress to sponsor a Bill or sponsor an executive agreement with DOT and DOD to establish the VISA program.

Sealift moves approximately 90% of DOD's cargo during most operations, peacetime and war. Currently, DOD's short term risks taken with sealift capabilities versus requirements (approximately 3.6M sqft shortfall) is acceptable risks. However, all working issues of funding, vessel siting, merchant marines, and incentive programs require positive action between FY 97-01.

PREPOSITIONING POLICIES

General

The third pillar of the strategic mobility triad is prepositioning. Prepositioning policies include two methods of making equipment and supplies readily available to our forces; afloat and land based. This year, DOD is using 34 ships for afloat prepositioning. Of these, 23 have been chartered from the commercial fleet, 10 come from the RRF, and one ship is government owned. Thirteen of the chartered ships are Maritime Prepositioning Ships (MPS), which were built or modified in the mid-1980s specifically for the prepositioning of Marine Corps equipment and supplies. Eight RRF ships and six chartered vessels carry Army equipment and supplies. The remaining seven ships carry ammunition, medical supplies, and fuel.¹² The MPS and Army Prepositioned Afloat (APA) programs are not in competition with each other. “In reality, APA ships carry equipment that, when combined with soldiers to man it, form units that complement the Maritime Prepositioning Force (MPF) which is comprised of MPS and Marines who support it. The programs can be used by the joint force commanders (JFCs) either together for synergistic effects in conducting operations-capable of being sustained ashore and over wide areas-or separately.”¹³ The afloat prepositioned ships (APS) provide equipment and supplies for all Services as indicated below.

- > 4 USAF ammunition breakbulk/LASH ships.
- > 1 USN Fleet Hospital Base Kit.
- > 1 T-ACS ship.
- > 3 Army LASH ammunition ships.

- > 4 LMSRs (Army theater CS/CSS, 1M sqft).
- > 2 Army sustainment containerships.
- > 2 Heavy Lift Ships (Army port opening package).

Strengths

The strength of the prepositioning programs are the reduced time required to move heavy forces and initial supplies into a region where military conflict is highly probable. It reduces the strategic sealift movement requirements and the “fort to port” movement requirements.

The prepositioning afloat program provides greater flexibility for DOD to strategically position the afloat equipment. It allows staging of equipment in an area of the world that can rapidly respond to several contingency areas. This type of flexibility can reduce overall shipping time to critical areas of the world by 5-10 days.

Additionally, the current afloat and land-based prepositioning equipment and supplies are receiving upgrades to their stocks. These upgrades are a windfall from the military downsizing and the reduction of prepositioned stocks located overseas.

Weaknesses

The prepositioning afloat and land based programs face few weaknesses to date. The funding of these programs are in question based upon the needs to properly forward stage equipment and supplies to meet the XXI century requirements. It costs DOD \$14.2 million per year for one prepositioned LMSR, which equates to about \$42 per square foot per year for afloat prepositioning.¹⁴

The afloat program is hampered in most cases by the deployment regions port facilities. “Depending on the port space the brigade’s sustainment stocks may be unloaded with the heavy combat equipment. Many third world port facilities are unable to handle more than one or two ships at a time. Somalia is an example of how limited port facilities hamper off-loading operations and increase deployment time. Both systems have “in-stream off-load” capabilities to off-load without port facilities.”¹⁵ Additionally, the Law of the Sea Convention (LOS), which is of major strategic and economic importance to the United States, is awaiting Senate approval for the President to enroll the United States into this international Convention. The most important aspect of LOS is the assured freedom of navigation rights around the world. In the past, the United States has been effective in representing and gaining support for policies that are in its best interests. “However, the United States risks losing its ability to speak with authority in the international arena if it fails to join the Convention.”¹⁶

Military land based equipment and supplies policies have caused some foreign country leaders problems. The problems range from upsetting neighbor countries with U.S. military equipment positioned in the region to providing land and sustainment support for the equipment and personnel. It has been a long and difficult challenge for CINC, CENTCOM and the DOD staff to obtain basing rights for prepositioned equipment in the Middle East countries allied to the United States.

Conclusions

The National Military Strategy requires a forward presence of military soldiers and equipment capable of providing global flexible responses. With the major of the nation’s

military located in CONUS, the need exist for the prepositioning of critical U.S. military equipment at strategic locations around the world. This prepositioning of equipment can reduce initial military response time by three to four weeks. The military has the ability to move soldiers (passengers) quickly to a crisis area, but the rapid equipment movement is the most time consuming portion of the deployment process.

The prepositioning of military equipment, both afloat and land-based, is expensive. As mentioned earlier, the afloat cost for one LMSR is \$14.2 million per ship, per year. This expense is acceptable given the two other most likely military options to meet the National Military Strategy. These options would require a more robust overseas presence of permanent based units or a more weighted Air Force initial crisis response with little to no heavy ground force response from the Army.

Recommendations

We must fund the prepositioning programs, both afloat and land-based, which are critical to the Services. These programs strengthen deterrence and overall response times to crisis areas around the world.

The DOD must continue to ensure funds are provided for Joint Logistics Over-The-Shore (JLOTS) exercises conducted by the regional CINC's with the Army, Navy, and Marines. This will allow the in-stream, off-load capabilities of the Services to remain in a high state of readiness. Additionally, DOD must continue to work the Army watercraft improvement program and the JLOTS interoperability issues between the Army and Navy. These issues are workable in the next five to seven years. This will enhance the military's ability to overcome

third world post facilities constraints that limit off-loading operations.

Prepositioning of military equipment in key strategic regions around the world is critical for all Services in meeting their contingency missions. The afloat and land-based programs are critical to the success of DOD's strategic mobility improvement programs as we move to the XXI century. We cannot back-off on our commitment to the prepositioning programs and policies without impact to military capability to meet its missions.

BOTTOM LINE

After several strategic mobility studies and reviews, the MRS BURU provides the strategic airlift, sealift, and prepositioning equipment requirements to meet the national military strategy for 2001. Although there has been recent discussions about reducing the two MRC strategy, the MRS BURU recommendations must remain as our strategic mobility goal. It is important to understand that our ability to meet the National Security and Military Strategies is based on power projection forces that can move rapidly from the US to world-wide contingencies. The 30 plus years of DOD neglect in purchasing airlift and sealift assets have made the future strategic mobility modernization programs extremely vital for the Nation.

The execution of the strategic mobility program as outlined in MRS BURU is contingent upon future years funding. DOD's FYDP and budget is always subject to changes and cuts. The bill payer for DOD in the past has been force structure and mobility assets verses modern weapon platforms. To date, with some small degradation, the future years defense funding for strategic mobility assets have remained a priority. Keeping this funding on track is essential for

the strategic mobility future of our CONUS based military forces. Although the 1997 military budget will provide the lowest procurement dollars in seven years, the projected procurement funding through 2001 looks favorable. Additionally, an unexpected \$13 billion "inflation dividend" will add to the buying power of DOD in the next five years. This additional buying power will help overcome the projected shortfall of dollars in the next few years. The key is applying those dollars to the strategic mobility modernization programs and not to other DOD defense programs.

Senior military and congressional leaders have frequently recognized and acknowledged the critical requirements to improve our strategic mobility assets. They must continue their full-court press for execution of MRS BURU. They must not let the potential reduction in two MRC strategy or a down-sized force structure change the MRS BURU mobility procurement. Our ability as a Nation to project military power around the world is what distinguishes us from any other world power(s). We will only remain a global military force into the XXI century if we continue to modernize our forces and modernize their ability to rapidly deploy. As General Shalikashvili noted, "If we do not build a transportation system that can meet our needs tomorrow then it doesn't matter much what kind of force we have because we won't be able to get it there"¹⁷

The leadership of this Nation, both military and civilian, have for the first time in over thirty years the ability to drastically improve our strategic mobility posture in the next five years. The future of the military will not change its requirements to project its power on a global basis. Therefore, it is the responsibility of our leadership to ensure our legitimacy as a credible military force in support of our national security and military strategy.

ENDNOTES

1. Joint Chiefs of Staff, Mobility Requirements Study, Bottom-Up Review Update, Washington: U.S. Department of Defense, 28 March 1995, p. ES-1.
2. Ibid., Appendix C, p.1.
3. Rutherford, Robert L. General, United States Transportation Command, Posture Statement presented to 104th Congress, (Washington: U.S. TRANSCOM, 1995), p.2.
4. Perry, William J., Secretary of Defense, Annual Report to the President and the Congress, DEPSECDEF APPROVED DRAFT, (Washington: U.S. Department of Defense, 29 January 1996), IV-92.
5. Ibid., I-39.
6. Conrad, Scott W., "Moving The Force: Desert Storm and Beyond", Institute For National Strategic Studies, McNair Paper 32, December 1994, 60.
7. Ibid. , 59.
8. Rutherford, 2.
9. Perry, iv 94-94.
10. Rutherford, 6.
11. Rutherford, 5.
12. Perry, 97-98.
13. Chilcoat, Robert A., BrigGen; Henderson, David S. , Maj, "Army Prepositioning Afloat, JFO: Joint Force Quarterly, Spring '94, 52.
14. Mobility Requirements Study, Bottom-up Review Update, c-34.
15. Chilcoat, 55-56.
16. Perry, h-3.
17. United States Transportation Command, USTRANSCOM- A Vision For The Future, USTRANSCOM Pamphlet 35-1 (Scott Air Force Base, II: Public Affairs Office, March 1995), insert.

BIBLIOGRAPHY

- 1) Association of the United States Army, Army Budget Fiscal Year 1996, Institute of Land Warfare, May 1995.
- 2) Brou, Phillip E., "The Army strategic mobility program and land based prepositioning alternatives", Defense Technical Information Center, AD-A253 221, 28 July 1992.
- 3) Chilcoat, Robert A., BrigGen; Henderson, David S., Maj, "Army Prepositioning Afloat", JFO: Joint Forces Quarterly, No.4, Spring 1994, 51-57.
- 4) Conrad, Scott W., "MOVING THE FORCE: Desert Storm and Beyond", Institute For National Strategic Studies, National Defense University, Washington D.C., McNair Paper 32, December 1994.
- 5) Crawford, Billie E. Cdr., "Strategic Sealift, A New Era", U.S. Army War College Library, Study Project, AD-A264 891, 7 June 1993.
- 6) Department of Defense, Report on the Bottom-Up Review, Washington: U.S. Department of Defense, October 1993.
- 7) Fogleman, Ronald R., "State of Defense Transportation Preparedness", Defense Transportation Journal, September-October 1994, 8-19.
- 8) Fogleman, Ronald R., "Balanced: Surface, Airlift, Sealift", Defense 94, Issue 6, 35-50.
- 9) Fogleman, Ronald R. General, An Oral History, Scott AFB, IL: USTRANSCOM Research Center, March 1995.
- 10) Fogleman, Ronald R. General, "Reengineering Defense Transportation", JFO: Joint Forces Quarterly, No.3, Winter 1993-94, 75-79.

- 11) Heiter, Ronald P., "Our Strategic Deployment System: Is It Structured To Support The Combatant Commander?", Defense Technical Information Center, AD-A279 620, 20 April 1994.
- 12) Foye, Douglas J., "Strategic Sealift: Funding During A Period Of Force Austerity And Fiscal Constraints", U.S. Army War College Library, AD- A249 426, 12 May 1992.
- 13) Johnson, Hansford T. General, An Oral History, Scott AFB, IL: USTRANSCOM Research Center, December 1992.
- 14) Joint Chiefs of Staff, Mobility Requirements Study, (Vol. 1 and Vol. 2), Washington: U.S. Department of Defense, 23 January 1992 (Vol.) And 5 June 1993 (Vol. 2).
- 15) Joint Chiefs of Staff, Mobility Requirements Study, Bottom-Up Review Update, Washington: U.S. Department of Defense, 28 March 1995.
- 16) Joint Chiefs of Staff, National Military Strategy of the United States Of America, Washington: U.S. Government Printing Office, 1995.
- 17) Kokko, Richard W., "Strategic Mobility For The National Military Strategy", Defense Technical Information Center, AD-A283 281, 15 August 1994.
- 18) Kroesen, Frederick J. General, "The U.S. Army--Yesterday, Today and Tomorrow", Army, Vol. 46, No. 3, March 1996, 11-21.
- 19) Meadows, Sandra I., "Multi-Threat World Dares U.S. to hatch New Strategy", National Defense, Volume LXXX, Number 512, November 1995, 12-13.
- 20) Perry, William J., Secretary of Defense, Annual Report to the President and Congress, DEPSECDEF APPROVED DRAFT, (Washington: U.S. Department of Defense, 29 January 1996), IV-92.21)

Priddy, Ronald N., A History of The Civil Reserve Air Fleet in Operations Desert Shield, Desert Storm, and Desert Sortie, Acorn Park, Cambridge, MA Volpe National Transportation Center, 1994.

22) Rauhecker, David C, "The Critical Impact of Strategic Mobility on National Security", Defense Technical Information Center, AD-A276 561, 9 March 1994.

23) Reimer, Dennis J., "Soldiers Are Our Credentials", Military Review, Volume LXXV, NO. 5, September-October 1995, 4-15.

24) Rutherford, Robert L. General, United States Transportation Command, Posture Statement presented to 104th Congress, Scott AFB, IL: USTRANSCOM, 1995.

25) Truver, Scott C., "Can't Get There From Here", Armed Forces journal, International, NO.7, August 1995, 24-27.

26) United States General Accounting Office, Bottom-Up Review: Analysis of Key DOD Assumptions, Washington: GAO, January 1995.

27) U. S. Transportation Command, USTRANSCOM- A Vision For The Future, USTRANSCOM Pamphlet 35-1, Scott AFB, IL: Public Affairs Office, March, 1995.

28) White House, A National Security of Engagement and Enlargement, Washington: The White House, February 1995.