4-2-1987

The Military Sealift Command: Their Potential Role in Providing Military Logistic Support to the Persian Gulf

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THE MILITARY SEALIFT COMMAND

Their Potential Role in Providing Military Logistic Support to the Persian Gulf

Kevin W. Nicholas
Major Paper
Marine Affairs Seminar
2 April 1987
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ACKNOWLEDGEMENTS

Thanks to the staff of the Military Sealift Command Headquarters in Washington, D.C. and to the staff of the Naval War College Library for their assistance in helping compile much of the research material for this paper.

Special thanks to my wife Leslee for her support throughout this project.
ABSTRACT

The ultimate goal of the U.S. Maritime Strategy is to project power into all the oceans of the world. By projecting power over this vast geographic area, the U.S. is able to provide a deterrent force that will inhibit the development of a significant hostile military action, anywhere in the world. The ability to support this global peacekeeping force hinges on the capability of the U.S. to provide a strong logistic support organization. From a waterborne perspective, the Indian Ocean is the one geographic area of the world that presents the greatest logistic challenge. The U.S. Navy and the Military Sealift Command combine their resources and efforts to assure that this objective is achieved.
If there is a geographic area of the earth that can still be regarded from a naval standpoint as a 'frontier', then that region would be the Indian Ocean. Up until about six years ago, U.S. Navy units were earning the Navy Expeditionary Medal for deployments into this area. Several political and operational factors have now combined to designate the Indian Ocean as a standard naval operating area with two battle groups normally on station. The Indian Ocean represents a total of 28 billion square miles, is bounded by 20 separate nations and can be accessed via the Suez Canal/Red Sea, Cape of Good Hope and Indonesian passages. Probably the most valuable real estate in this region is the Persian Gulf which encompasses a tremendous amount of the world's petroleum reserves. From a political, military and economic standpoint, petroleum is an ideal motivating force which could drive a country to use force to acquire control. From a shipping perspective, this geographic area has only one choke point access that allows for entrance and departure of military and commercial vessels. Many of the nations that border the Gulf are politically unstable and have become targets from both intracountry factions as well as from outside nations.

As has been demonstrated in numerous global conflicts and most recently with the fighting in the Falkland Islands, it is essential...
that a nation be supported by a strong, quick and organized logistic force to support power projection away from the homeland. A U.S. Navy summary report on lessons learned from the Falkland battles states "Vast quantities of munitions and other consumables are required for sustained combat, and this is a major concern for U.S. planners. The lack of any single item could influence dramatically a conflict's outcome. While not new, this proposition is receiving special emphasis within the Navy Department. Increasing the combat sustainability of fleet and marine units ... is one lesson that was relearned and needed." (General Dynamics Corp., 1985). Military logistics are generally categorized into three different areas: airlift, sealift and prepositioning. The philosophy of this threefold approach holds true when U.S. military operational strategies are addressed. Shipping statistics show that approximately 90-95 percent of the world's trade is carried by water and this same percentage applies when logistic support activities are examined in support of military actions. It is precisely this topic that this paper addresses. The U.S. has been involved in conflicts both in Europe and the Pacific, but we have never been involved in a major conflict in the Indian Ocean region. Yet, the potential for such an action to occur is high at this particular time. Both the sealift and prepositioning responsibilities previously mentioned have been delegated to the Military Sealift Command (MSC), under the control of the U.S. Navy. When examining the statistics afore mentioned, it is evident that the responsibility given to the MSC represents the essential element necessary to successfully support operational
strategies.

In order to consolidate the management responsibility for coordinating logistics within the Department of Defense, the Pentagon has established a new unified command, the U.S. Transportation Command (USTRANSCOM). This command will be fully established by October 1988 and will assume the coordination roles previously separated between the Military Airlift Command, Joint Military Traffic Management Command, Military Sealift Command and the Joint Deployment Agency. The task of coordinating both air and sea assets will fall upon one agency ensuring speed of response and a reduction in interagency conflicts.

This paper focuses on the potential role that seaborne logistics could play should a conflict in the Middle East occur and should the United States become involved in a conventional interdiction. From a difficulty standpoint as to accessibility and from an analysis of current political situations, the Persian Gulf has been chosen as the focal point for this discussion. The two specific considerations that will be addressed through a review of both current and proposed logistic assets and philosophies are:

Based on years of technical research and development, the U.S. has the necessary logistic tools to support forward operations in the Persian Gulf.

and

In this unique area of the world there are several external variables present that could undermine our logistic strategy. Current operational plans have considered the variables and they will not significantly effect the accomplishment of our logistic objectives.
To test the above hypotheses, the following considerations are addressed throughout the paper: 1) geography/isolation of the region, 2) physical logistic assets available, 3) preplanning/prepositioning philosophy, 4) unique vulnerabilities to be encountered and 5) an analysis of both initial and short/longterm resupply measures to be utilized. Evaluation is accomplished by analyzing a hypothetical situation involving the U.S. in a conflict against Iran to halt the spread of takeover actions against other friendly Arab nations. Although this paper does not officially represent the viewpoint of the Department of Defense, the topic focuses heavily on the predominant military, vice commercial, position on the subject of logistic capabilities. The analysis is presented from the viewpoint of those advisors conducting logistic support and does not focus directly on military actions unless they could potentially impede upon the flow of supplies. As it is currently structured, this role is the primary responsibility of the U.S. Central Command whose operational priorities are: to ensure continual Western access to Persian Gulf oil; to deter Soviet aggression and preserve regional stability; and to reduce Soviet regional influence (U.S. Department of Defense, 1986).

Naval logistic support under the cognizance of the MSC is based on the foundation principal of 'Strategic Sealift'. This principal was officially adopted by the Chief of Naval Operations in 1984, and it now carries equal weight with the other two primary mission objectives of the U.S. Navy, those being: Sea Control and Power Projection. Strategic Sealift is obtained through the accomplishment of three
specific concepts: 1) prepositioning, 2) surge and 3) resupply (both short and long term). The analysis of the potential conflict is presented from a supply standpoint using this specific division of concepts. The discussion begins with an analysis of Strategic Sealift. This is then followed with the specific phases of logistic employment previously mentioned. Prepositioning and surge, due to their similar timeframe for utilization, will be addressed simultaneously in the scenario. Resupply will be handled as a separate topic from the two previous stages. Finally, the results of the analysis are addressed in the conclusion.
CHAPTER TWO
STRATEGIC SEALIFT

Strategic Sealift, as it has been adopted, is composed of two elements: the first being the use of U.S. Government owned vessels, the second being the support role of both U.S.-flag and Allied Merchant Marine assets. U.S. Government vessels are geared for an initial movement into a conflict area, while the primary role of other merchant vessels is to support sustained operations. The understanding of how critical this concept is toward achieving the goal of global power projection has gained notoriety only within the past ten years. As stated by the Secretary of the Navy, John Lehman, "Once we lose sealift capabilities, all other strategies will fail." (Matthews, 1986). This statement typifies the current thinking in not only the Department of the Navy, but in the entire Department of Defense. The plans to be discussed involve the support of the Marine Corps, Army and Air Force. Strategic Sealift has grown along with the expansion of the surface naval force and has maintained its growth in light of the shrinking U.S.-flag merchant fleet. As shown in Figure 1, the overall plan to fortify strategic sealift capability has been researched extensively and the proposed plan will will reach its overall goal about 1990. Each of the elements presented in the graph is addressed in the subsequent discussion. Along with Strategic Sealift, an understanding of Strategic Airlift (see Figure 2) is
FIGURE 1

STRATEGIC SEALIFT CAPACITY

FIGURE 2
STRATEGIC AIRLIFT CAPACITY

essential to any complete strategy of logistics. Although not the primary focal point of this paper, there exists a deficiency in overall planned airlift capability and that fact is considered in the analysis. The philosophy that has developed is centered around the fact that the U.S. understands the importance of sealift and is willing to devote money and research toward this objective. At the same time though, it is understood that the final objectives in this regard can be accomplished without a total resurgence of the U.S.-flag Merchant Marine. The rapid growth that the Navy has enjoyed in comparison to a simultaneous decline of the Merchant Marine fleet is an indication of this trend.

Current estimates from the Pentagon and the Maritime Administration (MARAD) cite the need for the addition of a minimum of 20 ships per year into the U.S.-flag Merchant Marine fleet to maintain current levels and produce some stimulation for the U.S. shipbuilding industry (Pettavino, 1986). While there exists an increase in the utilization and creation of merchant marine assets to support Strategic Sealift, this 20 ship level will not be obtained through the current plans. Public Law 664 (50/50 Law) mandates that at least 50 percent of waterborne U.S. Government owned/interest cargo will be carried on U.S.-flag merchants. Current usage shows that the MSC is far surpassing this and is moving approximately 95 percent of government cargoes. In addition, the Military Transportation Act of 1904 has mandated that military cargo must be carried entirely on U.S. flag merchants.

To put into perspective how vital the concept of Strategic Sealift
is to defense strategy, a quick look at the dollar commitment is necessary. The entire MSC budget was 1.87 billion dollars in 1985. Of this amount, over 1.2 billion was devoted specifically to the Strategic Sealift mission area. This included internal operation costs, research and development, with the greatest portion of the money being allocated to time/voyage charters in support of this objective. A combination of the two legislative acts as well as the direct chartering of commercial vessels for MSC use is estimated at approximately $15 billion of business for the U.S. shipping industry.

The current design of the MSC strategy shows that the initial supply line into any global area will be accomplished by both government owned and chartered vessels. This includes both the prepositioning of equipment and supplies as well as the initial input of supplies into the conflict area. The roles of the U.S.-flag merchants, the Effective Controlled U.S. Fleet, the National Defense Reserve Fleet and NATO Allies are geared specifically toward the objective of resupply and will most likely be utilized in the order presented.

The elements that have been designated to accomplish Strategic Sealift and their specific design have been formulated with three variables in mind: distance, specific tasking and the need for continued resupply. All variables, as well as the specific hardware dedicated to the mission, are discussed in the analysis.
There has been an ever-increasing interest in the Persian Gulf area, especially over the last six years since the end of the oil embargoes/shortages. A political/geographic overview of the area shows that at least eight independent nations border the Gulf. Among the eight nations, Iran incorporates the largest littoral area. Iran and Iraq are recognized as the two most unstable nations in the Persian Gulf region. From an economic and strategic standpoint, Iran's population size, oil production capacity/reserves and direct access to the Gulf/Straits of Hormuz make it a more valuable prize than Iraq. Current projections indicate that Iran holds the upper hand in the current struggle against Iraq and they also carry the greatest potential to undermine an overthrow of the Iraqi government. A recent statement on the subject presented in Navy Times indicates that "If Iran or Iraq wins the war, the West and the U.S. specifically will lose...What is happening in the Gulf today is the greatest threat anywhere to security and peace. Out of control it could cause massive damage to Western interests and uniquely in the world, it could in short order escalate into a U.S. - Soviet confrontation." (Hunter, 1987). The U.S. has adopted the philosophy of avoiding direct intervention into the current conflict, but the recent arms scandal has publicized that the U.S. has been providing arms to both countries
for a number of years. Publicized dealings with Iran have undermined the U.S. position throughout the Middle East and has weakened its relations with many pro-Western Arab nations. This practice of feeding arms to both sides and a continued interest in governmental relations with Iran and Iraq is occurring from the Soviet Union at the same time.

Nations throughout the Middle East have developed a simultaneous sensitivity to the position of both parties. A recent article quoted a Kuwaiti official's position on the subject of the U.S. protection of his nations vessels as "It (Kuwait) is reluctant to do so unless protection can be shared with the Soviet Union, in part because it does not want to appear to be moving toward either superpower." (Sciolino, 1987). U.S. Foreign Policy understands how the outcome of the current struggle could effect each nation's strategic position in the Middle East. Specifically, it is the vulnerability and proximity of Iran to the Soviet Union and the potential escalation of Iranian military and political dominance throughout the entire Gulf region that are the two most pressing concerns of the U.S. Government. A review of the facts just mentioned has been an underlying force behind the White House/State Department attempting to maintain some relations with these governments.

The U.S. has been involved with monitoring Iranian military action for years through the forward naval forces stationed in the Persian Gulf and through direct interaction with the Saudi Arabians. It has provided the Saudis with E-3A AWACS, early warning type aircraft, to support them in monitoring the potential threat which Iran has
presented for a number of years. The chart of the entire Middle East area in Figure 3 shows that the U.S. has geared its funding of major security assistance programs in strategic locations around the Gulf area. Most of these countries would not be used during an initial surge phase into Iran, but would provide ideal staging centers for resupplying a continued struggle.

The primary staging point that has been organized to support a U.S. intervention anywhere in the Indian Ocean region is the island of Diego Garcia. After decades of a dominant British presence in the Indian Ocean, in what was termed the 'British Indian Ocean Territory (BIOT)', the eventual decline of global power projection by this nation has caused their withdrawal from this area. The U.S., through what has been called a 'vacuum theory takeover', has stepped in and assumed the position previously held by the British (Adar, 1985).

Soviet presence in the Indian Ocean area has grown substantially over the last 15 years as it has expanded the global role of its Merchant Marine fleet. Simultaneously, the Soviets have also greatly increased their military presence in this area. There are several key factors that have driven the Soviets to expand their operations to this region: 1) they maintain continual access to the Persian Gulf, 2) forces on station can more closely monitor U.S. military operations, 3) their ASW forces can work to deter U.S. ballistic missile and attack submarine operations, 4) they gain an important link between their Black Sea and Pacific fleets and 5) they have developed extensive fishing interests in the southern African area. To a great extent, it is evident that superpower rivalry has hastened the
FIGURE 3
SECURITY ASSISTANCE PROGRAMS

strategic developments that are occurring in the Indian Ocean.

The central staging location for U.S. military forces, Diego Garcia, was officially leased to the U.S. in 1972 and a tremendous amount of buildup and development of this atoll has occurred since then. The island is occupied entirely by U.S. military personnel with the exception of some Mauritian citizens who live on the island and fill many support/labor positions. The natural inner lagoon, approximately 15 miles long and 4-8 miles wide, has navigational depths of up to 45 feet and provides a safe haven for the Afloat Prepositioning Force. Diego Garcia serves as a refueling port for Indian Ocean forces with a storage capacity of 640,000 barrels of fuel. In addition, the island provides facilities for food, parts replenishment, communications, vessel repair and some recreational needs for visiting ships.

The biggest problem faced with using Diego Garcia as a staging point is the tremendously long supply legs that exist to the primary interest points in the region and from logistic resupply points in the Mediterranean and the Southwest Pacific theater. Diego Garcia is located approximately 2700 NM from the Straits of Hormuz which represents about seven steaming days for most logistic support vessels. The normal operating range for most naval logistic vessels is designed to be approximately 900 NM and it is evident that the geography of the Indian Ocean, as presented in Figure 4, creates special problems in this regard. From a resupply standpoint, the distances to logistic stockpiles in Australia, the Philippines and the Mediterranean create delays of up to two weeks or more. Should
Diego Garcia to:
(1) Mediterranean via Suez Canal
(2) Mediterranean via Cape of Good Hope
(3) Western Australia
(4) Philippines via Straits of Malacca/Sunda Straits
(5) Straits of Hormuz

Distance | Transit Time (15 KTS):
---------|------------------
3300 NM  | 9 Days           
7800 NM  | 18 Days          
2800 NM  | 8 Days           
3000 NM  | 8.5 Days         
2700 NM  | 7.5 Days         

access routes, specifically the Straits of Malacca, Sunda and Lombock to the East and the Suez Canal to the West, become impassable, transit distances to supply points can almost double.

The biggest advantage of the island is that it is under, and will continue to be under, complete U.S. control and is not susceptible to the political fluctuation that can be found in most of the Middle East/North African countries. The heart of the prepositioning forces has been designed with this island serving as a specific staging point. This is not to say that relations with other countries have been discontinued. Ongoing studies continue to be generated to identify potential logistic resource points. From a regional standpoint the following nations have port facilities, airports and/or bunkering facilities that are of particular interest from a U.S. military standpoint: Kenya, Kuwait, Djibouti, Oman, Saudi Arabia, Bahrain, Somalia and Pakistan. There have been active diplomatic and financial ties with each of these nations in anticipation of using their facilities in support of potential military operations.
CHAPTER FOUR
PREPOSITIONING AND THE INITIAL SURGE PHASE

The stage has now been set. It is assumed that Iran has gained a strong foothold over the entire Gulf region following their victory over Iraq. They intend to spread their dominance throughout the Gulf and many pro-Western Arab nations are in jeopardy. The U.S., whose Indian Ocean presence until this point has been primarily that of a deterrent force, is now prepared to conduct direct military operations into Iran to confront this infiltration. The specific military actions that the U.S. would use in conducting such an operation would be designed around the specific Iranian military position. To accomplish this analysis, the following areas are considered: 1) the necessary logistic support measures that would be provided as the U.S. begins to stage its forces for a initial shoreline strike, 2) the development of shoreside supply points and 3) the progressive sealane supply routes that would be established in support of a continued struggle. The initial movement of forces into this area would be supported by the first two phases of logistic action mentioned earlier, those being prepositioning and surge.

From a sealift standpoint, the prepositioning program currently in place has been designated the Afloat Prepositioning Force (APF). This force is composed of units of the original Near Term Prepositioning Force (NTPF) combined with the current composition of Maritime
Prepositioning Ships (MPS). The NTPF was created in 1980 for the direct purpose of providing logistic pre-staging of equipment and supplies in this unique and isolated frontier area while the formal MPS fleet was being established. The primary group was stationed in Diego Garcia with additional support from tanker units positioned in Subic Bay, Philippines and an additional cargo prepositioned unit in the Mediterranean. A total of seven ships in the primary group had the capacity to supply an 11,000 man USMC brigade. The philosophy of prepositioning, since the inception of the program, is that the U.S. would be unable to conduct short notice military operations if a large quantity of equipment and supplies were not already in place in this geographic area. This is especially true in the Indian Ocean where great distances would preclude a rapid response without prepositioning. The prepositioned material is mobile and is not subject to land based politics which are very unstable in many nations of this region.

The initial NTPF was composed of (4) Lighter Aboard Ships (LASH), (1) Float-On/Float-Off (FLO/FLO) vessel, (3) breakbulk freighters and (4) tankers. When designing this type of a backup logistic force, a worst case scenario is always considered. In this regard, having to support operations on an essentially undeveloped beachfront would cause problems with the discharge of prepositioned as well as follow-on supplies. The purpose of the LASH and FLO/FLO type vessels is to be able to carry equipment to the beach with little outside assistance. The supplies are staged on their own platforms and need only to be placed in the water and propelled ashore. There are
causeway ferries and waterjet propulsion assemblies that are carried on the MPS vessels that have been developed for this express purpose. The breakbulk vessels initially assigned to the NTPF do not carry their own ship-to-shore equipment and must relay their supplies to previously positioned ferries. The tankers in the NTPF were designed to preposition large quantities of petroleum, oil and lubricants (POL) on station for use by other support vessels. What can be distinguished already is that the original force was very piecemeal and there was very little combination of logistic duties. If one segment was prevented from accomplishing its duties, then the entire plan was in jeopardy. The cost of operating this type of support force is enormous. It runs about 15 to 35 percent of the value of the cargo it carries and produces no revenues, thus in three to four years operating costs exceed the value of equipment and supplies contained onboard (Linville, 1984). Is it worth this price to have the prepositioned material available? The commitment to the MPS organization demonstrates that the answer to this question is, yes. The logistic organization just discussed is aimed primarily at providing this prepositioning for not just Navy, but also Army and Air Force units involved in the conflict. The new concepts developed with the creation of the MPS are designed to alleviate the specific pitfalls mentioned and are geared almost entirely toward supporting a landing of U.S. Marine Corps forces ashore.

This concept of USMC prepositioned forces is designed to support the mission of the Rapid Deployment Force (RDF) concept. What was originally a separate task force, is now incorporated as the primary
military tool to be utilized in Middle East operations as directed by the U.S. Central Command. The essential goal of the RDF is to deter and, if necessary, contain a conventional scale conflict anywhere in the world. Coincidentally, the real limitations of such a force were realized at the time the MPS concept was being developed. It was at this time that the U.S. encountered extremely difficult logistic problems in supporting the freeing of the hostages in Tehran. It became very evident that the geography of the area is unique and requires specialized support measures. The central group of MPS vessels, Squadron Two, is stationed in Diego Garcia and it is evident that their primary role is geared toward Middle East operations. These vessels combine the aspects previously segmented in the NTPF into a single platform. Each MPS squadron (four to five vessels) when positioned in the Mediterranean, Pacific and the Indian Ocean is designed to support a USMC amphibious brigade (approximately 16,500 men each) for up to a thirty day period (Rowden, 1985). To provide a perspective on the overall capacity, the five MPS vessels carry the equivalent of 1000 C-141 airlifts (Pettavino, 1986). Five MPS vessels have been built from the keel up for this purpose and eight have been converted from other merchant platforms. Depending on the construction used, these vessels are operated under 'Build and Charter' or 'Convert and Charter' arrangements with a civilian organization taking over actual operating responsibility of the vessel (Rowsey, 1985). All of these vessels are under five year renewable time charters and are manned by civilian crews entirely. The operational tasking of these vessels still falls under the cognizance
of the Navy's fleet commanders.

These vessels have been designated T-AKX ships by the MSC and are Roll-On/Roll-Off (RO/RO) in design. They are designed to carry the land vehicles, pre-containerized support equipment, fuel and water to support troops in their initial assault. They are designed to perform these tasks in an area where the shoreline is undeveloped. They have been given a 25-year service life, and recent studies have shown that these vessels and their pre-loaded cargoes hold up extremely well in their prepositioned staging areas and suffer very little damage (Sharkey, 1984). Operating costs of these vessels are less than half that to support the original NTPF and eventually all NTPF units will be removed from the forward areas. At present, the primary role of the MPS units is for the USMC. Additional units will have to be structured and equipped for Army and Air Force use to allow for the complete dissolvement of the NTPF. One major problem with the concept is that these vessels provide necessary equipment and supplies, but are not designed to carry the actual troops to the conflict area. Advanced intelligence that is essential for the placement of prepositioned material is just as critical for coordinating the movement of personnel to the designated staging locations. Troops must be emplaced through either airlift or other waterborne vessels. The continued relations and support of many of the nations in the area have been partially designed to allow for troop staging areas for personnel that are airlifted great distances to support forward operations.

A coordinated movement of both personnel and their equipment to a
designated mobilizing location is the key to success for the MPS concept. There must first be a secured area provided for this effort. The U.S. Navy's Amphibious Force is designed to provide this key ingredient. USMC forces currently deployed are composed in what has been termed Marine Amphibious Ready Groups (MARG). A MARG is composed of a large number of USMC personnel that are carried within a complete U.S. Navy amphibious ship group. Their purpose is to be able to conduct a forward amphibious assault of a beachfront with minimal outside support. Some land based equipment as well as fixed and rotary wing aircraft are carried by the group for use in the assault. The movement of a group such as this would be essential to allow for the clearing of the beachfront area so that the unarmed MPS vessels can be utilized. There is always a MARG on station in the Mediterranean as well as in the Pacific, but there is no designated MARG force assigned to the Indian Ocean. The Mediterranean MARG is geographically closer to the Persian Gulf, but the movement of such a large group through the Suez Canal/Red Sea could be difficult depending on the level of the particular conflict. There are fewer choke points to be encountered from the Pacific, but the distances to be traveled are much greater.

Regardless of where the actual amphibious support force comes from, the role of the MPS is essentially the same. The design of the MPS has been structured to allow for the emplacement of the necessary equipment to support a land based assault away from the shoreline. The ships themselves have undergone a tremendous design process and are uniquely suited for this role. When fully established, the fleet of
MPS vessels will triple the USMC supply capacity engineered into the original NTPF force (General Dynamics Corp., 1985). Figure 5 provides a detailed breakdown of exactly what capabilities have been incorporated into the MPS design. Given a worst case scenario, an MPS unit has the ability to use its own RO/RO capability in conjunction with a RO/RO staging platform that is constructed alongside the ship. There is a complete system of pontoons, causeways (both powered and unpowered) and what are called Side Loadable Warping Tugs (SLWT) that are used in assembling this platform. All components are designed to be carried on the amphibious vessels of the MARG and will be on station for use by the MPS vessels. Once constructed, this platform greatly facilitates the staging of vehicles for movement ashore.

The vessel is also configured to carry POL products for use by vehicles and aircraft ashore. The MPS vessel carries four miles of flexible hose that it uses to discharge the 1.5 million gallons of fuel held within its storage tanks to shore. In addition to the ability to carry large quantities of fuel, the vessel also is configured to carry refrigerated stores, dry stores and potable water. Once the water supply is exhausted, the ship has the capability to produce an additional 36,000 gallons of potable water per day which can also be piped to shore until shore distilling facilities can be arranged. The causeway and ferry components discussed previously are used to transport the rest of the equipment and supplies ashore after the vehicles have been moved. The MPS vessel also carries its own LCM-8 work boats and pontoon causeway sections to supplement those already in place and to serve as a backup system.
Figure 5
MPS VESSEL DESIGN FEATURES

**SPECIAL MISSION REQUIREMENTS**
- Anchor offshore in 50-knot wind and 3-knot current
- Discharge cargo with deck cranes in 5-ft waves
- Discharge amphibious craft over partly submerged stern ramp in 5-ft waves
- Provide landing capability for CH-46E helicopter
- Two 18,000 gal/day distilling plants supply drinking water
- Discharge liquid cargoes at distances up to 2 miles
- “Warehouse” mixed cargoes for long periods
- Cargo discharge rates
  - All vehicles and 16 percent of remaining cargo at pier in 12 hours
  - All cargo at pier in 3 days
  - All cargo when anchored offshore in 5 days

**MPS CARGO**

**VEHICLES**
- Access and storage for 1400 vehicles from jeeps to tanks
- 150,000 sq ft (about four acres over seven decks)

**BREAK BULK CARGO**
- 101,000 cu ft for general cargo
- 18,000 cu ft for refrigerated rations
- 230,000 cu ft for ammunition
- Petroleum lubricants and potable water
- 1,550,000 gal aviation gas, diesel fuel, gasoline (Mogas)
- 433 drums of kerosene and lubricating oil
- 82,000 gal potable water

**MISCELLANEOUS DECK CARGO**
- Two LCM-3 landing craft, ten 21-ft by 90-ft lighters (8 unpowered, 4 powered), 1 side loading warping tug, 4 pipe trailers, and 3 hose reels

Source: General Dynamics Corp. (1985) *Maritime Prepositioning Ships*, (unpublished advertising booklet)
Several other factors need to be addressed to fully understand the role these vessels will play should such a conflict emerge. The MPS units are unarmed and require protection enroute to the conflict zone as well as at anchor. In an Iranian conflict, the movement of these ships from their prepositioned location in Diego Garcia would require the escort of elements of the battle groups already on station in the area. Once in the area of the Straits of Hormuz, an operational decision would have to be made. The coastline of Iran is separated into two distinct areas. One section is exposed to the Indian Ocean directly and would allow for easier access and more continuous direct support from the combatants on station. This would also allow for a more direct approach by the initial MARG itself and would eliminate many of the problems associated with transiting a narrow passage. The amount of time necessary to fortify the beachhead to allow for logistic development would be contingent on the power of the occupying forces in country. This coastal area also has the advantage of being located near Pakistan. Our relations with that nation should allow us the ability to use their country for the airlifting of troops and additional supplies. The biggest drawback with an approach of this type is the extensive land movement that would be required to move forces to the dominant oil producing/refining areas as well as the capitol to the northeast. Approximately 500 to 800 miles of desert and mountains would have to be covered moving inland from the coastal area.

The other coastal area of Iran and the largest of the two, is that which fronts the Persian Gulf from the Straits to Iraq. This area
would provide the most direct and shortest access routes inland. The biggest drawbacks of this approach are the necessity to transit the Straits safely and the protection that would be required to guard the logistic elements once inside the Gulf. The Iranians have missile and air assets which are designed to be used fairly close to their shores. Recent news articles have also mentioned the development of Chinese made surface missile emplacements along the Straits of Hormuz. The carriers on station that would provide much of the air protection are navigationally prohibited from working in the Gulf and longer air routes would be necessary to provide aircraft at the conflict site.

From strictly a waterborne logistic prospective, the initial approach to the coastal areas that border the Indian Ocean are more advantageous from an access and protection standpoint. The status of the actual conflict will drive the ultimate decision on which approach to select.

A second major responsibility of the MSC during this initial phase is the replenishment of the naval forces on station. This is accomplished through the Naval Fleet Auxiliary Force (NFAF) which is currently the most visibly active sector of the MSC. The emphasis of the mission of the NFAF is on providing fuel support to these operating units. The inventory of the NFAF currently includes (11) oilers, (1) stores, (1) ammo and (3) combatant stores vessels. These units supplement the role of similar active duty replenishment vessels of the Military Logistic Support Force (MLSF) which accompany battle groups on station around the globe. The units of the NFAF are distributed around the globe, yet they are continually used to support
the replenishment of naval vessels whenever an opportunity exists. A good deal of advance intelligence is required not only to place MARG and APF units in an area expeditiously, but also to collect the available units of the NFAF on station. The basic role of the NFAF vessels is to supplement the MLSF vessels on station so that they can be directed to resupply points. In this planning scheme, the NFAF vessels are best utilized if they arrive on station as the MLSF units in direct support begin to run low on fuel, stores and ammo. Should this timing not occur as planned, these vessels would be used to replenish the short and long term resupply vessels which would begin their movements toward the conflict area. The NFAF units already designated are manned by Civil Service Mariners (CIVMARs) with only a small military detachment onboard to take care of basic communication duties. The ships of the current NFAF are government owned and current plans call for an augment of about 30 to 40 U.S.-flag merchants to the force should a conflict begin to escalate. Other units assigned to the NFAF, but which would not be used directly in a conflict like this, are: towing/salvage ships, Fleet Ballistic Missile Resupply ships and ocean surveillance vessels.

In summary, the initial phase of action is highly dependent on advance intelligence to reduce the transit delays associated with seaborne logistics. This is true for the initial assault mission of the MARG, as well as the placement of vessels proximate to the conflict area. The whole concept of prepositioning is dependent on this advanced information. The safe transit of these prepositioned platforms becomes the responsibility of the battle groups already
stationed in the Indian Ocean. The MPS vessels are the first logistic assets on station in the scenario being presented and they represent the key element for a successful military operation in this region. The facilities designed into the MPS vessel provide a critical array of supplies ranging from stores, to vehicles, to fuel. Because of the multi-purpose design of the units, the loss of a single MPS vessel, enroute to the conflict area, would not have as a dramatic an effect, as would the loss of a particular single purpose vessel.
CHAPTER FIVE
SHORT AND LONG TERM RESUPPLY

The initial logistic support phases should occupy a time span of about five to seven days. It takes at least that long to begin activation of backup units and to reposition other military and civilian units into the conflict region. Resupply occurs in two phases, those being immediate or short term resupply (one week to two months) and long term resupply (over two months).

As discussed in the introduction, resupply for as long as it is necessary comes from certain predesignated areas. The first area is predesignated overseas staging points and the second area is from war reserve stocks in the U.S.. Both of these include ammunition, food, equipment, parts and what has been termed Strategic Oil Reserves. In Figure 6, the sources for ship procurement to accomplish the resupply mission are most likely to occur in the order shown.

The coordination that is necessary to locate and direct all of these vessels is enormous. Realistically, it is the active duty naval vessels and vessels of the MSC which provide most of the initial logistics. By law, all vessels of the U.S.-flag fleet are subject to allocation for military use and their primary role falls into the area of resupply.

The communications network that has been designed to overcome many of the initial coordination problems as well as long term tasking is
FIGURE 6
SHIP EMPLOYMENT CHART

<table>
<thead>
<tr>
<th>SHIP SOURCE</th>
<th>PREPOSITIONED</th>
<th>SURGE</th>
<th>RESUPPLY</th>
<th>MLSF SUPPORT</th>
<th>ATTRITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>U.S. FLAG</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RRF</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>EUSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NATO/ALLIES</td>
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<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>OTHER NDRF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

state of the art. U.S.-flag merchants, as well as ships of the Ready Reserve Force, are currently being outfitted with the most modern satellite and high frequency communications gear which are essential if these ships are to be in direct communication with military routing commands. There is also a plan to create what are termed Naval Embarked Advisory Teams (NEAT) to be placed onboard merchant vessels that have not been previously outfitted. This arrangement is essentially a portable communications suite which can be installed on any vessel and are operated by a Merchant Marine radio officer. Depending on the disbursement of the vessels designated, the initial transit legs to the operating and stockpile points may be quite lengthy and involve considerable delay in placing these units in active role.

The one system currently in place to overcome this initial time delay, from a military standpoint, is the group of Fast Sealift Ships (FSS) that have been added to the MSC inventory. There are currently eight units in this group that were originally high speed SL-7 containerships which were purchased from Sea-Land Service, Inc. in 1981. These vessels have been procured for the MSC and have undergone extensive redesign to convert them to RO/RO units. Their purpose in the plan of logistic support is to provide the capability to lift mechanized armor divisions for the U.S. Army. In support of the mission of the Rapid Deployment Force concept, the potential need for additional logistic support in a Middle East conflict was a primary consideration in the development of this system. Some of the breakbulk and standard containership features have been left in place
to carry equipment to supplement the armored divisions. The ships are steam turbine powered and are capable of sustained transits of 33 knots. From a shipping standpoint, these vessels became prohibitively expensive toward the late 1970s, but from a military standpoint they are valuable logistic assets. These units are designed to provide a second wave of U.S. Army divisions to support the USMC brigades on station and can be activated and begin their transit from the U.S. within four days of mobilization. All of the FSS units are based in the U.S., but with their advertised speed they can make a U.S. to Europe transit in five days. They can then be in the Persian Gulf area within another seven to nine days assuming a transit through the Suez is uninterrupted. To put this in perspective, a similar transit for the average merchant would take about 18 to 20 days.

There are two specific redesign features that have been implemented in these FSS units that are also compatible for use in many U.S. and Allied-flag vessels that may become used in a long term resupply chain. The first of these is a concept known as SEA SHEDS which are made up of 35' decks that can be installed in the holds of a containership to carry various sized military cargo. As shown in Figure 7, these racks have open tops and fold away flooring that can be arranged one over another to facilitate loading and unloading. On the FSS units, extra crane capacity has been added to the main deck to give these ships the self-sustained loading/unloading capacity that may be necessary at an undeveloped resupply depot point. The SEA SHEDS are rated to carry 100 tons of equipment each. Due to their design, they do not have to be completely removed from the vessel at
FIGURE 7

SEA SHED DESIGN

the discharge point. This particular feature, whether installed on an FSS unit or as part of any commercial containership, allows the vessel to proceed on with very little configuration change. The FSS units specifically are fitted with eight of these units. A total of 200 SEA SHEDS are planned for construction to support this growing area of logistic development.

The second concept that has been developed is the use of FLATRACKS to carry oversized cargo. Although the rated capacity of these features is only 60 tons maximum, their design allows these same FSS units or other commercial vessels the ability to carry unique military cargo. Examples of cargo that can be carried with this design are the M-1 tank and some fixed wing and rotary wing aircraft. As shown in Figure 8, these racks have an open top and open sides and they must be completely removed as the cargo is discharged. Once unloaded they can be stored easily for future use or reloaded onto the ship and carried back to the original stockpiling points to be reused. Each FSS will have the ability to carry 78 of these FLATRACKS. A total of 7000 FLATRACKS have been planned for delivery by 1990.

These two features which have been incorporated for use with FSS vessels, have to a great extent, been planned for use primarily for commercial containership reconfiguration. The goal of the MSC is to have enough of both SEA SHED and FLATRACK units to supply 50 containerships (U.S. Department of Defense, 1986). By law the initial allocation of U.S.-flag units has already been designated through what has been called the Sealift Readiness Program (SRP). Ships that have received construction subsidies and ships receiving
FIGURE 8

FLATRACK DESIGN

operating subsidies are automatically enrolled in this program. In addition, any U.S. company that carries DOD cargo must commit at least 50 percent of their U.S.-flag vessels to this program. The fact that any U.S.-flag vessel can be commandeered, if necessary, for military use can be misleading since specific support commitments must be analyzed. Although there are a large number of U.S.-flag units, unless special modifications are provided only a limited number of them have military operational advantages. The specific SRP incorporated by the MSC has specified which vessels hold the primary capabilities that can be of use to military resupply efforts. The Roll-On/Roll-Off and barge carrying vessels are considered the most useful from a military viewpoint (Pettavino, 1986). The primary advantages of a system such as this are the formation of a pre-planned arrangement for vessel allocation and that the ships designated are crewed entirely by U.S. personnel.

The next sources of ships to be utilized in the scenario are the Effective U.S. Controlled Fleet (EUSC) vessels and the ships of our NATO Allies. These pools are extremely large, but at the same time there are some major problems with their use. The term EUSC refers to those merchant vessels who have at least 50% U.S. business ownership and who fly the flags of Liberia, Panama, Honduras and the Bahamas. Vessels flying these flags of convenience have been specifically chosen because their governments have no active legislation forbidding U.S. procurement of the vessels. In a global conflict, the U.S. would probably allocate EUSC vessels no matter what flag they fly, but in a conflict such as is being analyzed that may not be quite as easy.
Vessels which may be used in this role are covered by War Risk Insurance provided by MARAD. Of the approximately 400 vessels in this category, there are only about 80 that have any appreciable military usefulness. The biggest problem to be faced, other than diplomatic repercussions, is that the crews are primarily foreign. Because of this there must be a planned restructuring of the crew so that the ship can be sent into a hostile area. This same problem must be faced when examining a potential pool of NATO ships that may be available. Some of these units are designated for military use already so that a joint agreement between nations for their use with their crews would probably be the easiest alternative. The total number of NATO ships in this pool is about 600 and most of these have some military usefulness. The actual conflict being supported would have to be fairly lengthy (six months +) and in some way directly involve the interests of a particular NATO country before ships in this pool would be utilized. From an organizational standpoint, the requisitioning of both EUSC and NATO vessels would be an extremely lengthy process in terms of locating the actual units, reconfiguring them in terms of carrying capacity and crew makeup, placing them under logistic command control and, finally, delivering them to the conflict area with their cargoes. For the purpose of this study, this pool is not utilized.

As the conflict progresses, there is another large backup reserve force that has been formulated to provide resupply capacity. That force is part of our National Defense Reserve Force (NDRF) and is designated as the Ready Reserve Force (RRF). There are currently 73 ships (63 cargo and 8 tankers) in this mothball fleet inventory with a
programmed increase in this fleet bringing the number to 119 ships by 1991. Vessels in this category are mostly older breakbulk ships with additional groups of RO/RO, tanker, LASH and other specialized carriers. These vessels have all been obtained from commercial shipping corporations by purchase agreements created by the Maritime Administration (MARAD) who has been given cognizance in this area. Each ship in the inventory has been placed in a five, ten and twenty day readiness status. This sliding scale of activation dates is designed to allow the smooth transition of these ships from their storage points into active service with a pre-planned specialized grouping of vessels designated for each activation phase. The vessels are currently at three locations, those being: James River, Va., Suisun Bay, Ca. and Beaumont, Tx.. The initial mission of the RRF is to support military actions in Europe and the Pacific. A conflict in the Middle East/Indian Ocean would greatly add to the time delay in placing these units on station in an active role. Many of these RRF vessels are in the age category of 15 to 20 years and older and are not capable of high speed transits. Another consideration currently being examined is that there is no concrete organization in place to establish the crews for these vessels. Both MARAD and the Merchant Marine Associations maintain files of personnel who have the background and training to man vessels of this nature, but a structured crew arrangement has not been pre-established. The vessels themselves are maintained in their respective readiness levels at a cost of about $1 million dollars/vessel/year with funds provided by the U.S. Navy and administered by MARAD. From a logistic standpoint,
taking vessels from their storage points and transiting them through a process to an active level will be extremely lengthy.

Another factor is that most of these vessels were not designed to work in remote areas with an undeveloped unloading system. To overcome this particular difficulty, twelve auxiliary crane ships are being added to the current RRF inventory. These specialized vessels have been refitted with several heavylift cranes and could transit to an area and be tied up alongside vessels that lack their own unloading equipment. This particular plan is especially helpful in an area such as the Persian Gulf. One of the eleven vessels will actually be placed in service in the Indian Ocean area to support potential logistic operations and the rest of the vessels will be phased into a five day RRF readiness level. Two of the units of the RRF will serve as training platforms for Navy and Army personnel who will be placed on station in logistic support roles should a conflict occur. The training for these personnel will be conducted in the area of loading/discharging standard cargo loads as well as the SEA SHED and FLATRACK configurations. This entire plan will be in place by the end of FY88.

The last category of resupply units that may be utilized will be the remaining vessels of the NDRF which will replace vessels that are attrited through actual conflict or mechanical problems. The vessels in this category, which number about 140, are primarily the World War II Victory type breakbulk vessels that are still in mothball. Once again, the conflict that would have to emerge to justify the activation of these vessels must be global in nature. Since the
advertised activation times for these vessels is a minimum of 30 to 60
days, they will most likely not be used in the interdiction being
analyzed. Under current planning, all of these vintage vessels will
be scrapped in the early 1990s.

It would be unfair to analyze short and long range resupply
through just the vessels themselves. Current technology has created
several systems that can be utilized in easing the flow of cargo, both
in liquid and dry form, ashore in an undeveloped area. These systems
have been constructed to be carried to a conflict area after the
initial phases to ease the transport of cargo ashore. The one system
that has been chosen to move liquid cargo ashore is a commercial, off­
the-shelf apparatus that has been procured by the MSC. This system,
known as the Offshore POL Discharge System, is shown in Figure 9. The
piping system used can carry POL from a distance of 4 miles offshore
to bunkers established on land. With the initial arrangement setup,
approximately 1.2 million gallons of POL can be moved in a 20 hour
period. This initial system, which takes about 48 hours to set up, is
similar to that described for the MPS vessels and is essentially
piping and a temporary mooring for the vessel. This temporary
arrangement is used until the Single Anchor Leg Mooring (SALM) is
installed. The installation process for the SALM takes about another
seven days, but once in place it can handle continuous pumping in much
higher sea states. There are also systems designed for dry cargo that
are similar to the powered causeways. These will be used in
conjunction with more advanced temporary pier structures that are
established at the beach. These systems will be utilized to ease the
FIGURE 9
SINGLE ANCHOR LEG MOORING (SALM) DESIGN

flow of equipment and supplies ashore, but set up will not occur until the actual conflict has most likely moved inland.

Another plan to support long term resupply is the augmentation of commercial vessels with underway replenishment (UNREP) gear that can be used with the associated naval units on station. While the task of UNREP is conducted primarily by the naval auxiliary ships and MSC vessels, there has been a program developed to equip and train commercial vessels for this task. This program includes UNREP gear installation for both fuel and dry store transfer. This entire concept is incorporated into a sealift enhancement process which has been designated Civil Reserve Auxiliary Fleet Ships (CRAFrS). Within this program, privately owned U.S.-flag commercial vessels are designated for this purpose and are to be outfitted with the UNREP gear. At the present time, only units of the MSC and RRF are actually undergoing the physical installation process. The U.S. Navy pays for the installation of these features either as a modification to existing ships or as a supplemental feature added to new construction. U.S.-flag ships that have not been directly fitted do have rigs designated for their use which are now in government storage. The process for installation has been designed to be quick and once installed the Navy will pay to maintain these rigs for 15 years.

This overall concept of sealift enhancement encompasses many of the logistic features which have been addressed. The SEA SHED, FLATTRACK and communication upgrades have all been included in this program. Other programs in planning include the modification of LASH vessels to carry extra causeways for beachhead development, siderail
and maindeck modifications so that vessels can carry extra lighters and specialized container strike-up systems to facilitate the loading/unloading of container vessels which have been used for military cargo.

Two other support concepts that are noteworthy are the hospital ships and the aviation logistic support vessels. Two commercial tankers have been converted to forward deployable, acute care medical facilities. Each vessel has twelve operating rooms and a 1000 bed capacity. They will be manned entirely by civilian personnel. One unit will be based on the West Coast for use in the Pacific and the other will be located on the East Coast for Atlantic tasking. Each hospital ship has an activation timeframe of five days. The second concept, that of an aviation support unit, was developed to provide repair facilities at the conflict area for all types of aircraft. These vessels have been pre-planned to carry repair parts as well as an array of elaborate technical and machinery repair equipment. Two Seabridge class commercial vessels have been procured and converted for this concept. They will be placed in a five day RRF readiness status upon completion.

In summary, this resupply phase has been composed of structured programs of logistic support, each with a specific timeframe for utilization and a designated purpose. In a conflict, such as the one being analyzed, resupply will be primarily conducted with active MSC, U.S.-flag and RRF vessels. Unless the particular situation escalates out of the Gulf region, the assets available from our NATO and other foreign allies are not necessary. The initial surge and
prepositioning plans for this geographic region are firmly established. This does not seem to be the case when examining resupply measures. The initial logistic tools have been prelocated and their plans for employment automatically occur when operational commanders initiate the strike, while the resupply lines and available assets are generally widespread and less defined. Nothing except the normal resupply for operating forces stationed in this ocean has ever been tested. There appears to be more problems associated with long, rather than short term resupply. This is due to the coordination and staffing of commercial and reserve units that would be necessary. Much has already been written on the decline of our Merchant Marine force. Many experts believe that we have reached a point where it would be impossible to support resupply without the aid of other nations.

The development of our RRF seems to be the key in solving this particular situation. Some of the RRF units should be stored in African and Asian ports to facilitate their activation for use in this region. Granted, there are some potential security and protection problems associated with this idea, but there also could be two advantages. First, using other nations to help maintain the upkeep will provide some money into a country's economy as well as to help foster good relations from a military and diplomatic standpoint. This type of program could be included in the security assistance programs already in existence. Second, the placement of units into this region will reduce the extremely long activation delays that will accompany the stationing of designated RRF vessels into the conflict
area. It will be a lot easier to airlift a crew to the region than it will be to wait for the ship to complete its transit from the U.S.. If only a limited number of ships are involved in this program, then it may be advantageous to station a permanent crew aboard the vessel in its overseas location. This is similar to what is already being done on the MPS vessels.
CHAPTER SIX
SUMMARY AND CONCLUSIONS

There are two major purposes in writing this paper. The first is to give the reader an introduction into the concept of Strategic Sealift and the second is to highlight the specific tools and philosophies that are available today, to attain the goals of the concept.

Chapter One introduces the concept of logistics and presents that idea from a military prospective. History has demonstrated over and over again, that with a strong logistics force, the favorable outcome of any military operation is enhanced. This was most recently demonstrated in the British victory in the Falklands campaign. The understanding of the integral role of three major concepts is vital when military logistic plans are formulated. These areas are: airlift, sealift and prepositioning. This paper deals primarily with sealift and prepositioning and discusses the role of those ideas within the overall Strategic Sealift concept. This idea is presented through a simulated (yet potentially real) military interdiction of U.S. forces against Iran. The two specific hypotheses that are tested are: 1) That we do in fact, have the necessary logistic tools to support a military conflict in the Persian Gulf and 2) That we have analyzed the unique external variables that this geographic region presents and that we have the ability to overcome them.
and are comprised of the original Near Term Prepositioning Force (pool of single purpose vessels) and the newly acquired Maritime Prepositioning Ships (multi-purpose logistic vessels). The primary mission of this force is to supply the vehicles, equipment, stores, fuel and water for a 16,500 man USMC brigade which would be the initial ground force landed in the conflict area. This concept as it has been developed for the Middle East is the heart of the Rapid Deployment Force strategy, originally devised in 1979. The function of the logistic force, as well as that of the combat forces, is addressed in this section.

The next chapter describes the short term (one week to two months) and the long term (over two months) resupply assets that would be vital to sustaining military forces on station. The broad array of available resupply assets includes: 1) those owned and hired directly for MSC use, 2) U.S.-flag Merchant Marine vessels, 3) the Ready Reserve Force, 4) the Effective U.S. Controlled Fleet, 5) NATO assets and 6) other vessels in the National Defense Reserve Fleet inventory. Each of these assets could play a vital role in resupply to the Middle East and each is evaluated as to its potential in the scenario given. In this situation, the units of the MSC, the Ready Reserve Force and U.S.-flag vessels would provide the majority of the resupply functions. There would have to be a more global escalation of the conflict to involve the acquisition of the other assets. The current ability of the assets is considered, as is the Sealift Enhancement Program, which will upgrade both military and non-military vessels for use in actual combat support roles.
In retrospect, the answer to the first hypothesis stated in the introduction should lead the reader to an easy conclusion, yes. From a sealift standpoint, the U.S. by far holds the greatest array of military logistic assets on the face of the earth. History has demonstrated that this type of logistic support power is an essential element in global power projection. The Indian Ocean, and specifically the Persian Gulf, is a unique area of the world which poses special conditions that must be faced by U.S. forces involved in military operations there. The ability to overcome these special conditions was the foundation principal behind the creation of the Rapid Deployment Force (RDF). Many of the physical assets previously discussed were formulated to support just such a special mission.

From a hardware and technology standpoint, the U.S. should feel secure that it has the physical tools and personnel to accomplish the bottom line goal of the RDF, which is the rapid insertion of troops to deter and halt opposing force aggression.

Has the U.S. then properly considered the rest of the variables which may come into play in such a situation as has been discussed? The three factors which are addressed most frequently in studies about just such a conflict are: the sustainability of resupply lines halfway around the world, free access to the region and the protection that needs to be afforded the logistic assets. In many ways, a limited conflict in the Persian Gulf would be similar to that encountered in supporting sealift to South Vietnam. The area into which equipment and supplies are being sent is a great distance from U.S. shores and the opposing forces have a limited capability to disrupt the sea lines
intervention occur, this same type of support can be structured in spite of the decline suffered by the Merchant Marine. Our conventional forces on station in the Indian Ocean and the Persian Gulf can easily protect our logistic assets from an Iranian attack. The military assets of Iran are closely monitored and even though arms shipments are being provided by both the U.S. and the Soviets, the Iranians are not being provided with excessive firepower.

The mission of the RDF is to act quickly to deter and halt aggression. If that is the objective in a Persian Gulf operation, then definitely yes, the U.S. does have both the tools and the ability to overcome the external variables which could undermine success.
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