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# RESEARCH MEMORANDUM

## THE REACTIVATION PROCESS FOR THE READY RESERVE FORCE

Jodi E. Tryon, LCdr., USN

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## ABSTRACT

This memorandum is part of a study by the Center for Naval Analyses of the Mobile Logistics Support Force. It describes the role of the Military Sealift Command in obtaining needed shipping assets in a contingency, the reactivation process and associated costs for ships in the Ready Reserve Fleet, crewing and equipment issues for reactivated ships, and potential reactivation problems. The analysis emphasizes the portion of these activities associated with the Mobile Logistics Support Force.

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## **INTRODUCTION**

### **Background**

This memorandum is part of a study by the Center for Naval Analyses (CNA) of the Mobile Logistics Support Force (MLSF). Other CNA work on this study appraised the sealift assets available to support the fleet and the material and administrative arrangements for management of those assets [1]. It described the function of the Military Sealift Command (MSC) and its relationship to the operating forces of the Navy, to the Maritime Administration, and to private civilian owners and operators of merchant ships. It also described the makeup and goals of the National Defense Reserve Fleet (NDRF, the "mothballed ships") and the subset of the NDRF, the Ready Reserve Fleet (RRF), in augmenting active military sealift and mobile logistics support forces. This memorandum describes the MSC's role in obtaining needed shipping assets in a contingency, the reactivation process and associated costs for ships in the RRF, crewing and equipment issues for reactivated ships, and potential reactivation problems. It emphasizes the portion of these activities associated with the Mobile Logistics Support Force.

### **MSC's Mission and Responsibilities**

The Military Sealift Command has fleet status. Its overall mission is: "to provide the sealift capacity to deploy and sustain the military forces anywhere in the world as rapidly and as long as operational requirements dictate, in support of national security objectives [2]." The Commander, Military Sealift Command (COMSC), reports directly to the Chief of Naval Operations and, as the executive agent for the Secretary of the Navy, is the single manager for all Department of Defense sealift. The MSC functions as the Transportation Operating Agency for sealift under the Joint Operation Planning System.

During both peacetime and times of crisis, the MSC relies on U.S. flag commercial shipping companies to transport military cargo. The MSC also maintains its own controlled fleet, however, to fulfill worldwide Department of Defense sealift requirements when commercial shipping resources are inadequate. The controlled fleet also serves as a base for emergency expansion in times of war or contingency. If commercial and controlled fleet assets are inadequate to meet the needs, the MSC next turns to the RRF.

## JOINT OPERATION PLANNING SYSTEM

Reference [3] defines an operation order as "a directive, usually formal, issued by a commander to subordinate commanders for the purpose of effecting coordinated execution of an operation." During an exercise or true crisis situation, many commands and agencies are involved in developing an operation order. The efforts of each command and agency need to be closely coordinated with the efforts of the others so that supplies and other resources can be phased into the theater of operation in an orderly manner. The process that specifies requirements to MSC and authorizes MSC to bring ships out of the RRF involves a number of agencies. This section describes the process and the agencies involved.

### Joint Deployment Agency

The Command Post Exercise Nifty Nugget of October 1979 highlighted serious deficiencies in the planning and execution processes of military deployment, as well as in the management information systems in use at that time. Among those systems was the Joint Operations Planning System (JOPS). JOPS, in particular, was able to support planning, but it could not support the execution process [4]. As a result of the problems brought to light during Nifty Nugget 1979, the Joint Chiefs of Staff established the Joint Deployment Agency (JDA) in 1979 specifically to coordinate the planning and execution of military deployments [5].

The JDA has a three-fold mission. First, during peacetime, it participates in the deliberate development and coordination of contingency plans. When a crisis occurs, these plans are reviewed to see if any are applicable. Second, during times of crisis, the JDA coordinates and monitors time-sensitive planning and execution of force and resupply movements for deployment of CONUS-based Army and Air Force combat forces. It also coordinates and monitors deployment planning for Navy and Marine Corps forces. A third goal of the JDA is to "design, develop, and operate a computerized system to support crisis management and to use effectively the products of the joint planning process [6]."

A prototype Joint Deployment System (JDS) was developed and tested during subsequent JCS exercises. The JDS continues to be refined as each exercise is conducted and evaluated to show weakness in the current operating methods. Exercise Proud Saber in November 1982, for example,

demonstrated the need to improve MSC's method for quickly calculating closure estimates.

### **Deliberate Planning System**

Deliberate planning is a cyclic process carried out during peacetime. The ultimate result of the deliberate planning process is the creation of an operation plan (OPLAN), i.e., a feasible plan of operation to meet a defined threat. Plan development involves structuring the force list, determining the resupply and transportation requirements, and planning engineering and medical support. This process includes the development of the Time-Phased Force Deployment Data (TPFDD) computer file. The TPFDD file contains all of the information needed to describe a deployment. It lists what cargo is to be transported and from what port of embarkation to what port of debarkation, with a specified earliest arrival date and latest arrival date. The last phase in the development of an operation plan requires the supporting agencies to provide supporting plans.

A responsibility of the JDA is to ensure that the OPLANs are maintained and executable. To meet this requirement, the commanders of unified or specified commands must refine their TPFDDs semiannually. The TPFDD should be modified during the reviews to reflect any changes in the JCS Joint Strategic Capabilities Plan, which, as required by the JDA, is updated each quarter.

### **Crisis Action System**

A crisis is defined by [7] as:

... an incident or situation involving a threat from a source external to the United States, its territories, and possessions that rapidly develops and creates a condition of such diplomatic, political, or military importance to the U.S. Government that commitment of U.S. military forces and/or resources is contemplated to achieve U.S. national objectives.

The Crisis Action System (CAS) develops response actions during time-constrained operations. The time factor is one major difference between the Deliberate Planning System and the Crisis Action System. In the event of a

crisis, an existing operation plan from the deliberate planning process may be applicable to the crisis after appropriate modifications or expansion.

The Joint Chiefs of Staff will issue a warning order, i.e., a "planning guidance message to the appropriate commanders and agencies, with an information copy to the Services [7]." The order designates the supported and supporting commanders and also "initiates evaluation of course(s) of action, and requests that a Commander's Estimate be submitted [7]."

The supported commander considers the possible course of action within the warning order, as well as courses of action developed locally, and evaluates the limiting factors for each. The factors considered include force data about the major combat forces available and the total transportation assets [7]. At this point in the evaluation, the Transportation Operating Agencies (TOAs) are asked to provide closure estimates for each course of action. The closure estimates, which are produced by MSC for the sealift requirements, correspond to the deliberate planning process's gross feasibility that is required by the Joint Chiefs of Staff. After review by the JCS and National Command Authority, the supported commander completes the force list using actual forces, origins, and dates.

When an Executive order is issued to initiate the execution of the operation order, the TOAs develop detailed movement tables and schedules. The MSC, in turn, determines if ships from the RRF are needed to fulfill the those requirements.

## **READY RESERVE FLEET**

### **Resources**

Specific ships in the NDRF are designated as RRF ships. The RRF ship list is dynamic, with changes almost daily in the number of types of designated ships and their names. Various types of vessels are in the RRF. Although a majority of the ships are freighters, the fleet also contains several seatrains and tankers. The RRF is expanding rapidly. About 30 of the NDRF ships were classified as RRF ships in March 1983 [8]; the Maritime Administration (MARAD) Monthly Report for January 1985 shows about 55 ships in the group; and it is estimated that about 116 ships will be in the RRF by 1991.

RRF ships are kept in a state of readiness so they can be put into operation within 5 to 20 days. Each ship is identified specifically by name as either a 5-, 10-, or 20-day ship. The remaining NDRF ships are in a state of readiness so they could be put into operation within 1 to 6 months.

MARAD maintains custody of the RRF, and the ships are located in several places around the country. Most of them are at the James River RRF site, although some are located at Beaumont and Suisun Bay. One or more ships may also be activated to help meet sealift needs or to participate in fleet exercises. Periodically, the ships undergo yard work to maintain their equipment or install Merchant Ship Naval Augmentation Program (MSNAP) gear.

RRF ships are obtained from several sources. Some have been transferred from the active fleet; others are former MSC vessels. In addition, the Navy purchases some merchant vessels from commercial shipping companies specifically for RRF use. In 1984, for example, the Navy purchased 19 merchant ships for \$31 million and placed them at the James River site [9]. Such acquisitions are subject to ship availability and acquisition costs.

### **Management**

MARAD maintains custody of the RRF ships. Federal regulations permit MARAD to use general agents (civilian companies) as contract operators. These contract operators oversee specifically named ships. During peacetime, this responsibility involves ensuring that the ships and their equipment are maintained in a state of readiness so the ship is able to be reactivated within its assigned time frame (5 to 20 days). If the ship is reactivated, the contract operator is also responsible for crewing and acquiring the necessary stores.

### **Reactivation Process**

One or more ships may be activated to meet a sealift requirement. When COMSC, acting as the executive agent for the Secretary of the Navy, determines that commercial and controlled fleet resources provide inadequate shipping capability, MSC informs the CNO Strategic Sealift Division (OP-42) of the need to call up RRF vessels. OP-42 contacts the Secretary of the Navy for activation approval and adequate funding for yard work and crewing of the required ships.

When the activation is approved, the Chief of Naval Operations tells MSC to activate particular ships. MSC informs MARAD of the exact dates when the ships are needed and when cargo loading is expected to begin. MARAD in turn informs the contract operators to begin the activation procedures. Once the ships are activated, they are transferred to MSC's administrative control and to the fleet commander's operational control. In a crisis, the specific RRF resource requirements would depend upon the particular OPLAN in effect, as determined by MSC in its function as TOA.

### Costs

Ships can be maintained in the RRF for about \$700,000 per year per ship. Reactivation costs are about \$1.6 million per ship [10]. Crew costs depend upon whether Navy personnel, MSC personnel, or private industry merchant seaman crews are used. Navy and MSC crew costs are determined by military and government service pay scales. If the ships are manned with private industry merchant seamen, MSC must, by Executive order, honor the shipping agreements that the maritime unions have obtained from private industry. Wages, therefore, are governed by those agreements.

### Crewing

Former merchant vessels are crewed by private industry merchant seamen. The contract operator contacts the local maritime union hiring halls to obtain a crew for a reactivated ship. Union rules determine employment assignments. To ensure that trained key personnel (e.g., ship masters, engineering officers, and deck officers) are available, contract officers arrange with union officials to pre-identify by name personnel designated for key positions. More than one person may be identified for a key position on a particular ship, and one individual may be identified for manning several ships. This procedure ensures that a reactivated ship has all key position personnel and alternates identified and available.

Federal regulations permit manning former MSC and Navy ships with Civil Service mariners. MSC maintains a pool of qualified personnel who can be called upon to man reactivated ships. These ships can also be manned by private industry merchant seaman. The Navy determines which option to pursue on a case-by-case basis.

## **Equipment**

Most merchant ships are designed to transfer cargo in port environments. Cargo normally is secured when the ship leaves a port, and it is not broken out again until the ship reaches its destination. The ships are not designed to support underway replenishment (UNREP) operations at sea, but some UNREP ships are expected to enter the RRF in future years and will retain their UNREP equipment for use if activation is required. For other types of ships to undertake UNREP duties after activation from the RRF, ship modifications are needed; therefore, specified RRF ships have been selected for initial installation of Merchant Ship Naval Augmentation Program (MSNAP) equipment.

MSNAP is a program whereby selected merchant ships are modified with hardware and fittings to prepare the ships for the rapid installation of the equipment needed to support underway replenishment of the fleet. MSNAP equipment is scheduled to be installed on selected C-4 class cargo/ammunition RRF ships during their routine annual or bi-annual maintenance yard work periods. The equipment to be installed on the dry cargo ships include:

- Up to four sliding padeyes installed at the bulwarks to act as anchor points for the highline to Navy ships
- Specialized means to allow breakout of cargo underway without leaving the cargo in a dangerously not secured condition
- Additional living accommodations for the added crew necessary for UNREP. (Most merchant ships have crew accommodations for only about 30 people – an additional crew of up to about 40 individuals may be necessary for some UNREP functions.)
- Special communications gear packaged in a portable kit
- Forklifts, tractors, pallet jacks, and other material-handling gear
- Special safety rails below decks
- Special hatch covers
- Special lighting or electrical power gear.

As first envisioned, only the connections and adaptors were to be put on reserve fleet ships, with the actual replenishment gear installed just before the ships' sailing with the MLSF. Current planning now calls for the installation of sliding padeyes and hoses (on tankers) as they become available. The change in plans is an effort to avoid congestion in the shipyards in the event of a crisis; it also allows the ships to augment regular UNREP assets during peacetime. The change in plans is possible due to the recent growth in the size of the RRF [9].

Each dry cargo delivery system will cost about \$5 million. Installation costs for each reactivated ship are expected to be \$1.2 million for consolidation capability with station ships and \$1.8 million for delivery capability directly to combatant vessels [9].

More detail on the Merchant Ship Naval Augmentation Program is presented in [10].

## POTENTIAL REACTIVATION PROBLEMS

RRF ships are reactivated routinely to participate in fleet exercises or to provide other temporary sealift support. Because such reactivations seldom involve many ships, the shipyards and loading ports seem to have little difficulty accomplishing their tasks. During a major crisis, however, significant reactivation work may be needed. The shipyards and loading ports may become overburdened if they are unable to quickly expand their work forces or if they run out of room to handle the number of ships requiring service. Significant overburdening of these sites could delay the ship availability dates.

During both the Korean and Vietnam Wars, there were temporary crew shortages as ships were called up for reactivation. Most of the shortages were in key personnel, but the situation eventually improved as men sought duty in the Merchant Marine as an alternative to duty in the armed forces. If the build-up of the RRF is at a reasonable pace, the predesignation of key personnel for crews may help alleviate this potential problem in the future.

Many of the merchant seamen are untrained in underway replenishment techniques and may, therefore, be unqualified for duty on a reactivated RRF vessel. Unions are already addressing the issue of training their members in basic seamanship and perhaps could be persuaded to conduct training

in MSNAP cargo-handling operations and UNREP processes to help prepare their men for service on reactivated RRF ships.

There are currently about twice as many Merchant Marine union members as there are Merchant Marine seagoing positions. Because many union hiring halls assign ship duty by seniority, the older mariners tend to go to sea more than junior men. The junior men may, therefore, become discouraged with the profession – particularly as the number of merchant ships on active trade routes decreases. As the older Merchant Marine personnel retire and younger men find new careers, the merchant seaman pool diminishes. At the same time, the U.S. RRF is expanding, and there may come a time when not enough Merchant Marine personnel are available in some local areas to man the reactivated RRF ships. Ship reactivations may have to be delayed until available crew members from distant areas around the country can be flown to areas needing their skills. Unions may be displeased with the prospect of manning ships with personnel from several different union hiring halls or with personnel from several different merchant unions.

## REFERENCES

- [1] CNA Research Memorandum 86-19, *Navy Management of Support and Auxiliary Ships*, by Jodi E. Tryon, LCdr., USN, Confidential, Dec 1985
- [2] Military Sealift Command, *Backgrounder*, Unclassified
- [3] Armed Forces Staff College, Publication 1, *Joint Staff Officer's Guide*, Unclassified, 1 Jan 1982
- [4] Joint Deployment Agency, *Joint Deployment System Functional Description*, Unclassified, 24 May 1982
- [5] Joint Deployment Agency, *Joint Deployment System Functional Description-Executive Summary*, Unclassified, 9 Jul 1981
- [6] Joint Chiefs of Staff, *An Executive Overview of the Joint Operation Planning System, the Crisis Action System, and the Joint Deployment System*, Unclassified, 1 Jun 1980
- [7] Joint Chiefs of Staff, *Joint Operation Planning System - Volume IV (Crisis Action System)*, Unclassified, 15 Oct 1982
- [8] Naval Postgraduate School, *CLOSEST: A Model for Calculating Closure Estimates*, by Jodi E. Tryon, Lt., USN, Secret, Sep 1983
- [9] Meeting with Capt. Bolden, Office of the Chief of Naval Operations, Strategic Sealift Division (OP-42), 8 Jan 1985
- [10] CNA Research Memorandum 85-134, *Merchant Ship Naval Augmentation Program (MSNAP)*, by Jodi E. Tryon, LCdr., USN, Unclassified, Dec 1985