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Report to the Assistant Secretary of the Navy (Shipbuilding and Logistics)

August 1986

## NAVY SEALIFT

Observations on the Navy's Ready Reserve Force





United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division B-223763

August 18, 1986

The Honorable Everett Pyatt
The Assistant Secretary of the Navy
(Shipbuilding and Logistics)

Dear Mr Pyatt.

We have completed our review of the Ready Reserve Force (RRF), the Department of Defense's (DOD's) main source of quick response sealift in a contingency. Our review disclosed a number of managerial issues that, in our view, could affect mobilizing the ships in the required 5- to 20-day mobilization period. These include

- · congestion at fleet sites,
- questionable availability of shippard resources and merchant marine crews,
- behind schedule ship maintenance,
- incomplete inventorying of spare parts,
- · limited test activations, and
- lack of systematic evaluation of test results.

We discussed these issues with officials from the Navy's Strategic Sealift Division, Deputy Chief of Naval Operations (Logistics), and officials from the Maritime Administration's (MARAD's) Office of Ship Operations. We found that officials in this Division and MARAD have instituted actions that they believe will address our concerns. (See app I for a more detailed discussion of our concerns and the actions taken by the Division and MARAD)

Although we are concluding this assignment, we will continue to monitor the program to determine whether the actions are implemented properly and have the desired effects. In the interim, we would appreciate your keeping us advised of the status of the implementation efforts Mr Joseph Walsh of my staff will be responsible for monitoring the program and can be reached on 557-1756

Sincerely yours,

John Landicho

Senior Associate Director

John Landicko



In October 1976, we reported that the National Defense Reserve Fleet (NDRF) could not be activated within the 10- to 15-day period DOD required at that time. The RRF—a quick response sealift component of the NDRF—was subsequently established as a joint program of MARAD and the Navy to provide cargo ships for use in a contingency within 5 to 10 days of notification. These Navy-owned ships will be activated by commercial companies, using private shipyards or repair facilities, and will be crewed by civilian merchant marine personnel hired from union rosters. As of January 1986, the RRF consisted of 72 ships; current DOD planning calls for expansion to 136 ships (100 cargo ships and 36 tankers) by fiscal year 1992.

# Objectives, Scope, and Methodology

We performed this review because of increasing congressional concern over the country's ability to provide adequate sealift capacity to meet the deployment and resupply needs of the military services in a crisis and because the RRF may be DOD's primary source of quick response sealift in regionalized conflicts that do not involve allied forces. Our overall objective was to assess the adequacy of Navy and MARAD program planning and management efforts to assure the readiness and sustainability of the RRF. Specific objectives were to evaluate Navy and MARAD efforts to

- assure RRF ships can be activated within required time periods,
- · prepare to activate numerous RRF ships concurrently; and
- assure the availability of key resources, such as shipyard berthing space and manpower, merchant marine crews, and critical spares.

We conducted our review at Navy and MARAD Headquarters, two MARAD regional offices, and the three MARAD reserve fleet sites. Our review covered the period from April 1984 to February 1986 and was made in accordance with generally accepted government auditing standards.

To assess Navy and Marad efforts to assure the readiness of RRF ships, we reviewed (1) RRF readiness standards and reports, (2) American Bureau of Shipping and Coast Guard certification requirements and records, (3) Marad inspection and maintenance procedures, (4) ship activation and deactivation procedures, and (5) Marad and Military Sealift Command reports on the results of RRF test activations and operations in military sealift exercises. We also toured RRF ships in lay-up status at all three Marad reserve fleet sites and discussed ship readiness with Marad fleet and regional officials. In addition, we observed the activation of

the SS Cape Ann, participated in its sea trials, and observed its operations in a sealift exercise

To evaluate Navy and MARAD efforts to assure the availability of resources to mobilize the RRF and to adequately prepare for the concurrent activation of RRF ships, we (1) analyzed MARAD RRF activation plans, (2) surveyed shipyards targeted to activate RRF ships during a mobilization, (3) reviewed MARAD studies and the availability of merchant marine manpower and discussed ship manning with selected union officials, and (4) tested MARAD controls over shore-based spare parts inventories During our survey, we visited four shipyards—two on the East coast and two on the West coast. We contacted the remaining shipyards by telephone.

We did not request agency comments on this report. However, in April 1986, we discussed the report with selected Navy and MARAD officials, who suggested additions and changes based on recent initiatives. We have updated the report to reflect these changes

# Congestion at Fleet Sites

Since the establishment of the RRF, all ships have been located at three fleet sites, one each on the East, West, and Gulf coasts. This grouping has created congestion, overburdening of the skilled labor pool at nearby shipyards, and unberthing delays when ships were activated. For example, at the James River reserve fleet site, located on the East coast, MARAD personnel estimated that fewer than three ships a day could be unberthed when 25 ships were anchored. Similar congestion problems brought out in this review were also discussed in a 1984 House Committee on Appropriations Survey and Investigations staff report on the RRF

Navy and MARAD, recognizing these problems will intensify as the RRF grows in size, established a dispersal plan for these ships. Contracts were recently awarded to 15 firms to relocate 51 RRF ships, with most required to be activated in 5 days at over 20 locations throughout the United States. This action should help correct or eliminate fleet congestion, unberthing delays, and overburdening of shipyard labor pools because ships will be dispersed at ports throughout the United States.

#### Questionable Availability of Shipyard Resources to Activate RRF Ships

A general agent under contract with MARAD is responsible for managing an activation during which shipyards, tugboat operators, electronics technicians, divers, and other personnel provide specialized services.

Early in our review, we questioned officials from each of the 25 ship-yards included in the MARAD RRF activation plan about their abilities to meet emergency plan roles and found that most were unprepared for these duties. Most importantly, officials from eight shipyards said they were partially or completely unable to meet their scheduled assignments. Some said they lacked berthing space and/or personnel, some were out of business, and some already had a full Navy work load. In addition, 17 of 25 had not received copies of activation specifications, which are needed to prepare for the expected work; 22 did not know which ships they were to activate; and 13 were unaware that they were included in the plan.

After we discussed this information with MARAD and Navy officials, they conducted a simulated RRF activation by telephone in November 1985. Its purpose was to educate those persons that would be involved in an actual activation. During the exercise, it was assumed that all ships were simultaneously activated at all fleet sites and outporting locations. As part of this exercise, contacts were made with designated shipyards, merchant marine unions, tugboat operators, and other key personnel and activities to determine their response capabilities and the availability of resources. The results of the exercise indicated that most of the resources would be available when needed and that designated personnel were aware of their duties.

The discrepancies between the results of our inquiries and those of the Navy and Marad exercise can be possibly attributed to (1) the prior written notification Marad gave to major participants and (2) the exercise's assumption that RRF ships were dispersed to over 20 additional locations, which occurred after our inquiries were made. According to the Navy, this dispersal is expected to reduce the strain on the skilled labor pool at nearby shipyards and the congestion at fleet sites.

#### Availability of Merchant Marine Crews

Although the exercise indicated full crewing was available for all RRF ships, we are concerned that three aspects of crewing may delay RRF breakout. There is little assurance that (1) available crews would have the skills and experience to operate the older RRF equipment, (2) crews can actually be assembled within the critical 5- and 10-day activation periods, and (3) there would be no competing demands for manpower

such as would be expected during a period of national mobilization. These aspects were not addressed in MARAD's simulated telephone activation. In addition, maritime union personnel have voiced concerns regarding a shortage of certain classes of crew members as well as possible logistics problems in locating and assembling the approximately 6,000 crew members needed in fiscal year 1992 and beyond to crew 136 RRF ships.

MARAD and Navy personnel believe that any or all of these concerns could affect their ability to activate RRF ships within the stated activation periods and are exploring ways to address these issues.

#### Ship Maintenance Behind Schedule

Our review disclosed that Marad's declining work force at the three fleet sites and the increasing number of ships in the RRF have caused RRF maintenance to fall behind. Recognition of the problem by the Navy and Marad has resulted in the preparation of a Request for Proposal for the maintenance of RRF ships by private contractors when the fleet site work load exceeds the capabilities of the Marad personnel. In addition, Marad has been authorized additional personnel slots for the RRF maintenance program in fiscal year 1986. The cost and degree of success of these initiatives cannot be determined until they are implemented

# Incomplete Inventorying of Spare Parts

During the early part of our audit work, the inventorying of shore-based spares had not begun and the process of recording shipboard spares had been slow due to a lack of funding for personnel and a large influx of ships into the RRF. After we discussed this matter with both MARAD and Navy personnel, the computerized inventorying of both shore-based and shipboard spares improved. As of July 1986, 60 of the 72 RRF ships were in various stages of completing the inventory process for shipboard spare parts and the inventorying of shore-based spares was almost complete. We did not determine the accuracy of the computerized inventory of these spare parts because, at the time of our audit, preliminary inventory work had begun and a Department of Transportation inspection team had been asked to review the inventory process for spare parts. Follow-up work in this area may be necessary pending the completion of the inventorying of spare parts of all RRF ships and the findings of the Department of Transportation inspection team.

#### Limited Test Activations

Since 1978 the Navy and MARAD have conducted numerous test activations to determine RRF readiness. MARAD and the Navy consider most of these activations to have been generally successful. However, these tests were limited because they did not demonstrate the RRF's ability to mobilize for an emergency. Specifically, these activations

- repeatedly used the same ships and shipyards,
- consisted mostly of single-ship tests rather than concurrent activations of several ships from the same anchorage site, and
- involved mostly 10-day, rather than 5-day, ships

Although the activation of a 5- or 10-day RRF ship requires the same procedures and amount of work, the completion time varies. Thus, when a 10-day ship is activated, a greater amount of time is available to correct activation malfunctions than when a 5-day ship is activated. Consequently, the activation of a 5-day ship becomes critical because there is little or no time to correct serious activation malfunctions

The only concurrent activation of three RRF ships to be activated within 5 days at the same shipyard was conducted in January 1985. This action demonstrated the Navy's realization of the need for concurrent tests of this type. Of the three ships, two were activated within 5 days; the third took 71 days to activate

The recent contract award for outporting RRF ships involves the berthing of ships by private contractors at selected locations other than the three MARAD fleet sites. This action was instituted to alleviate the overburdening of shipyards and the industrial base in the activation area. Personnel of the Navy's Strategic Sealift Division assured us that test activations would be performed to validate the ability and responsiveness of the personnel and the shipyards, which are unproved, at these locations

Although we feel that these actions are a step in the right direction, we are concerned that the large number of ships in the RRF, as well as budgetary constraints, may interfere with the Navy's goal to activate all 136 ships at least once every 5 years (27 each year). In addition, since the Navy is restricted from preempting cargo from the U.S. merchant fleet, only military cargo generated as a result of military exercises is available for use during test activations. Furthermore, due to the limited number of these exercises and the small volume of cargo transported, the Navy has found it difficult to activate and exercise 27 ships a year

for 30 days. Consequently, the Navy and MARAD are relying on dock trials when cargo from military exercises is not available

#### Lack of Systematic Evaluation of Test Results

During our audit, MARAD and the Navy revised their system for evaluating ship performance and problems encountered during activations by incorporating the recommendations of reports prepared by the Military Sealift Command and general agents with MARAD evaluations. Although these steps are helpful in evaluating test results, we are concerned because the reports we reviewed varied in format and content and often provided little detailed information as to the type of problems experienced, the causes of the problems, and the solutions. Until these areas are addressed, problems experienced in one activation could recur indefinitely

To illustrate, during the 1981 test activation of the SS Washington, a worker winched the ship's crane beyond its limits, causing the cables to snap and the massive block to drop into the water. The activation report, however, did not mention this incident. In 1984, during a second activation of this vessel, the same incident happened. This time the block dropped onto the pier. Had the 1981 incident been documented, MARAD may have been able to prevent its recurrence by disseminating information on the accident and on the proper operation of the crane to its operators.

Even when reports highlight problems, MARAD lacks (1) a system to ensure their correction and (2) formal procedures to disseminate such information to activation participants to prevent the problems from recurring. For instance, in two separate activations of the SS Washington, shippard personnel failed to shut off fire-main valves and consequently the ship's gyro room flooded. Although this problem was recorded in the 1981 report, it recurred in 1984. Had procedures for following up test results been more rigorous, MARAD could have alerted the shippard of the problem in 1981 and thereby possibly prevented a recurrence.

MARAD officials agreed with our overall observations and recognized the need for a better follow-up system on activation test results. They agreed to incorporate such a system into their RRF activation reporting process.

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