REPORT BY THE U.S.

General Accounting Office

A Time To Consider Alternative Sources Of Quick-Response Sealift Capability

The Navy's Military Sealift Command charters more commercial cargo-carrying ships than needed for normal peacetime operations to ensure quick-response sealift capability in military emergencies.

However, the Maritime Administration recently upgraded its National Defense Reserve Fleet. Now a number of Government-owned cargo ships are available to meet these quick-response requirements. The Navy could save millions of dollars annually by relying on this alternative source of reserve capability.

LCD-78-244

FEBRUARY 7, 1979

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

LOGISTICS AND COMMUNICATIONS
DIVISION

B-181714

The Honorable W. Graham Claytor
The Secretary of the Navy

Dear Mr. Secretary:

This report discusses the sources of quick-response, break-bulk shipping capability available to the Navy.

It contains recommendations to you on page 8. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the above congressional committees; the Director, Office of Management and Budget; the Secretary of Defense; and the Secretary of Commerce.

Sincerely yours,

R. W. Gutmann
Director

GENERAL ACCOUNTING OFFICE
REPORT TO THE
SECRETARY OF THE NAVY

A TIME TO CONSIDER ALTERNATIVE SOURCES OF QUICK-RESPONSE SEALIFT CAPABILITY

D I G E S T

Many commodities shipped by the military during hostile periods are unsuitable for transporting on modern containerships, and many overseas ports lack the specialized facilities needed to accommodate such ships. Instead, ships with cranes and cargo handling equipment, capable of loading and unloading alongside piers or barges, are needed. (See p. 1.)

In the past, an abundant number of these self-sustaining ships were available in the merchant marine. This condition is changing. The maritime industry is retiring most of these older self-sufficient ships and replacing them with containerships which rely on sophisticated ports to provide specialized material handling equipment. (See p. 1.)

The Navy has required the Military Sealift Command to make 10 self-sustaining dry cargo ships available to receive cargo within 10 days in the event of a contingency. In an effort to meet this quick-response requirement, the Military Sealift Command has begun a program of placing chartered commercial ships in a reduced operational status when not required for routine military sealift missions. These ships are docked and sometimes partially crewed, but otherwise in a ready-to-sail condition. (See p. 1.)

A number of self-sustaining cargo ships in storage in the National Defense Reserve Fleet recently have been upgraded to provide quick-response capability. This upgrading raises considerable doubt regarding the need to continue placing chartered ships in a reduced operational status to ensure quick-response shipping capability. In other words,

is it necessary to maintain two separate standby or reserve fleets? (See p. 2.)

The cost to maintain quick-response capability in the Reserve Fleet is far less than the cost to charter commercial ships, and the response time of reserve ships is within the time frame specified by the Navy. (See p. 3.)

Planned further strengthening of the Reserve Fleet, coupled with the commercial sealift capability pledged to the Department of Defense (DOD) under its Sealift Readiness Program, are additional reasons to evaluate the costs and effectiveness of the various alternatives for providing standby shipping capability. (See p. 3.)

Also, fluctuations in the number of ships in a reduced operating status--at times only a single ship--raise some question about the degree of reliance that can be placed on this alternative as a source of immediate response. (See p. 5.)

Discontinuing the reduced operating status concept could save an estimated $3 million to $6 million a year and would not, in GAO's opinion, compromise sealift readiness. (See p. 6.)

The Secretary of the Navy should reevaluate the need to continue this concept, particularly at its current level. He should determine whether more reliance should be placed on the National Defense Reserve Fleet and on expanded use of commercial ships--on an as-needed instead of a long-term charter basis--to satisfy normal surges in sealift demands. (See p. 8.)

Navy officials reviewed a draft of this report and stated that the reduced operating status concept should be continued. They cited administrative problems, occasional need for the excess ships, and the need to preserve self-sustaining cargo ships. GAO has found that

--administrative problems are being resolved;

--alternatives to meet the occasional need for excess shipping are available; and

--ships can be preserved in other ways, including the National Defense Reserve Fleet. (See p. 8.)

Contents

ABBREVIATIONS

DOD	Department of Defense
GAO	General Accounting Office
MARAD	Maritime Administration
MSC	Military Sealift Command
NDRF	National Defense Reserve Fleet
ROS	reduced operational status

CHAPTER 1

INTRODUCTION

The Department of Defense (DOD) must be ready to ship hundreds of thousands of tons of military equipment, ammunition, supplies, and subsistence items to overseas locations in the event of an outbreak of hostilities, either limited or general. Many commodities to be shipped are unsuitable for transporting on modern containerships, and many overseas ports lack the specialized facilities needed to accommodate such ships. Ships with cranes and cargo handling equipment capable of loading and unloading alongside piers or barges are needed.

In prior periods of military hostility, such self-sustaining ships--commonly referred to as break-bulk ships 1/--were available in the merchant marine, supplemented with those in the National Defense Reserve Fleet (NDRF). 2/ This condition is changing because the maritime industry is retiring most of its break-bulk fleet and replacing them with containerships which rely on sophisticated ports to provide specialized material handling equipment.

The Department of the Navy has required the Military Sealift Command (MSC) to make 10 break-bulk ships available to receive cargo within 10 days in the event of a contingency. In an effort to meet this quick-response requirement, MSC has initiated a program whereby chartered commercial ships are placed in a reduced operational status (ROS) when not required for routine military sealift missions. These ships are docked and sometimes partially crewed, but are otherwise in a ready-to-sail condition.

In January 1978, MSC controlled 23 dry cargo break-bulk ships each over 9,000 deadweight tons, 20 of which were commercial ships chartered by MSC. The ships were put

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1/Break-bulk ships are designed to transport palletized units or individual packages of general cargo. They are compartmentalized with several "holds" for stowing cargo. Each hold is serviced by shipboard cranes which lift the cargo from alongside the ship into and out of the holds.

2/The National Defense Reserve Fleet consists of ships laid up in a preservation status and maintained by the Maritime Administration. This fleet provides supplemental shipping capacity that the United States can rely on during a military or commercial shipping crisis.

in the ROS fleet when not needed to meet routine sealift requirements, rather than being returned to the owner. In this way, MSC maintained control over the ships, thus ensuring their availability on short notice.

A number of ships in NDRF have recently been upgraded to provide quick-response capability. Therefore, we wanted to see if the cost involved in holding chartered ships in ROS is still justified. In other words, is it necessary to maintain two separate standby or reserve fleets?

CHAPTER 2

NEED TO MAINTAIN CHARTERED SHIPS IN ROS FLEET QUESTIONABLE

The recent upgrading of break-bulk ships in NDRF raises considerable doubt regarding the need to continue placing chartered ships in ROS to ensure quick-response shipping capability. The cost to maintain ships in the Ready Reserve Fleet is far less than the cost to charter commercial ships, and the response time of reserve ships is within the time frame specified by the Navy. A recent test involving the activation of a reserve ship indicates that this time can be met.

The planned expansion of the Ready Reserve Fleet, coupled with the commercial sealift capability pledged to DOD under its Sealift Readiness Program, are further reasons to evaluate the costs and effectiveness of the various alternatives for providing standby shipping capability. Also, fluctuations in the number of ships in ROS--at times only a single ship--raise some question about the degree of reliance that can be placed on this alternative as a source of immediate response.

Discontinuing the ROS concept could save an estimated $3 million to $6 million a year and would not, in our opinion, compromise sealift readiness.

RESERVE FLEET UPGRADED

In early 1976, the break-bulk capability of NDRF consisted of 130 Victory ships of World War II vintage. The average time to break out one of these ships and have it ready for loading was about 22 days.

Recognizing that such activation time would not be responsive to military needs, the Maritime Administration (MARAD) and DOD initiated a joint program to upgrade the responsiveness of a portion of the fleet. The program originally contemplated a force of 30 Victory ships capable of being activated within 10 days. The upgraded ships would be designated the Ready Reserve Fleet of NDRF. More recently the program was changed because MARAD is obtaining larger and newer ships from U.S. shipping companies. These ships are being upgraded and brought into the Ready Reserve Fleet. As a result, the cargo-carrying capacity of the Ready Reserve Fleet will be much greater than originally envisioned.

At the time of our fieldwork, seven self-sustaining break-bulk ships had been upgraded and placed in the Ready Reserve Fleet. The fleet included five C-3 class break-bulk ships built in 1960-61; one intermodal ship converted in 1967 from a tanker by its former owner, Seatrain Corporation; and one Victory ship.

Plans call for upgrading 8 additional Seatrain-type ships and 14 Mariner class break-bulk ships through 1980.

These more modern ships with greater cargo-carrying capability have enhanced our fleet considerably. In fact, some of the ships in the Ready Reserve Fleet are newer and more modern than those currently chartered by MSC.

RESERVE FLEET CAN BE ACTIVATED IN TIME TO MEET DOD NEEDS

To test the responsiveness of the Ready Reserve Fleet program, the Department of the Navy and the Department of Commerce agreed that MARAD would periodically and without advance warning be asked to activate a reserve ship to evaluate its activation program. Specifically the tests would

--determine the time required to activate the ship and

--identify problems during activation that could be avoided in the future.

The first actual test began in response to an unannounced notification on May 7, 1978, by MSC. The ship activated was a break-bulk ship, formerly the MORMACPRIDE, now the SS PRIDE. Its activation involved full operation of the vessel and a 24-hour sea trial. Personnel of Moore-McCormack Lines--former owner of the ship--supervised the activation under an agreement with MARAD.

Although some problems were encountered, the PRIDE was activated, had a sea trial, and was reported ready to receive cargo 10 days after receiving the activation notice. Therefore, it met the 10-day response requirement established by the Navy.

MARAD officials, as well as Moore-McCormack personnel, felt that lessons learned from the problems encountered during the SS PRIDE activation could, by making program changes in future activations, shorten the time needed to break out a ship from the Ready Reserve Fleet.

A second test occurred on December 5, 1978, when MSC requested MARAD to activate the SS WASHINGTON, a Seatrain-type ship. This test was even more successful because the ship was activated and ready to sail in less than 6 days. It completed its sea trial on the 7th day and was kept steaming so that it would be available if needed for military exercises scheduled to start in December.

Another Ready Reserve Fleet ship, also of the Seatrain type, the SS MAINE, was scheduled to transport cargo to Europe in support of these same exercises. This ship, however, was already in a ready-to-sail condition because it had just been upgraded to ready reserve status and was maintained in a ready condition pending the start of the exercise. At the time this report was being prepared, both Seatrain ships were steaming and awaiting port call.

AVAILABILITY OF RESERVE SHIPS ASSURED--SHIPS IN ROS UNCERTAIN

The number of ships in ROS at any given time fluctuates greatly. For example, our analysis of ships in ROS between July 1, 1975, and December 31, 1977, showed that at times only a single ship was laid up; whereas, as many as 16 ships were in ROS at other times. Since a contingency cannot be predicted, there is no way of knowing how many ROS ships will be available when needed.

In contrast, ships in the Ready Reserve Fleet are not changing their standby status daily. Their sole purpose is to provide quick-response sealift. Other commercial and routine shipping requirements do not influence their status as is the case with a chartered vessel.

Another factor which detracts from the availability of ROS ships is their layup location. These ships are put in ROS when not required for routine missions. Contingency plans are not considered in berthing the ships. No effort is made to locate the ships in areas where the probability of need is greatest. During the period August 1976 through January 1977, no ships were in ROS on either the Atlantic or gulf coasts.

The Ready Reserve Fleet ships, on the other hand, are to be dispersed in a manner which will ensure adequate coverage of threat areas. Ships will be kept at three locations--one on each coast. Contingency plans with nearby shipyards can be formulated. Concerning ROS, some areas could conceivably be left without quick-response capability since those ships are not located in consideration of contingency plans.

SUPPLEMENT SEALIFT AVAILABLE FROM COMMERCIAL CARRIERS

In assessing the need to maintain ROS, sealift readily available to augment the Ready Reserve Fleet must also be considered. Under DOD's Sealift Readiness Program, commercial carriers bidding for DOD cargo in peacetime must agree to commit at least 50 percent of their U.S. flag shipping capability to meet DOD contingency needs. Currently, 10 carriers have pledged 105 ships to meet DOD needs. These include 54 break-bulk ships, 46 containerships, and 5 other types.

Although ships have never been requested under this program, ship operators we contacted stated that they would honor their commitments. Some operators stated that they are capable of providing routine shipping services to meet surges in normal DOD demands. This means that if ROS is abolished, only known requirements for sealift would be contracted, and any added service would be on an as-needed basis.

COST OF THE ROS CONCEPT

Eighteen MSC chartered ships were in ROS at various times during the period from July 1, 1975, through December 31, 1977. During this period, MSC incurred $10,005,970 for 2,675 ship days of ROS time. Individual ROS charter costs for these ships ranged from $41,229 to $1,318,333.

In fiscal year 1977, the Navy reimbursed MSC $3,092,379 to cover the cost of ROS. Before fiscal year 1977, funds for ROS came directly from MSC industrial funds, meaning that agencies using MSC services shared the cost of ROS. In fiscal year 1978, the Navy appropriated $6.2 million for the ROS concept.

The basic charter rate for ships in ROS ranged from $2,400 to $4,310 per ship per day. In addition to the ROS rates, there are other add-on costs, such as (1) crew overtime ranging from $60 to $70 per ship per day; (2) port charges ranging from $400 to $600 per ship per day (3) War Risk Insurance of $20 per day, and (4) master and chief engineer wage costs ranging from $428 to $673 per day. With these fixed add-on costs, the ROS charter rates for all chartered break-bulk ships ranged from $2,870 to $5,228 per day.

COST OF RESERVE FLEET

The cost to place the seven ships in the Ready Reserve Fleet in a ready-to-sail condition ranged from $2,916,519

for the Seatrain--a unique ship most suitable for carrying heavy unit equipment, helicopters, etc.--to $128,386 for a break-bulk type ship. The total cost to upgrade the seven ships was $4,587,388.

MARAD officials estimated that the annual costs to maintain a Ready Reserve Fleet ship at the James River NDRF site is about $24,000. If these same labor and material costs were incurred at the Beaumont, Texas, fleet site, the estimated costs would be about $26,500. This means the cost to maintain a ship in the reserve fleet is less than $75 per day.

In comparison, the cost of the two fleets--ROS and Ready Reserve--is about the same for the first year considering the upgrading costs associated with the reserve fleet. Thereafter, the cost of the concepts separates significantly. The ROS ships continue to cost $2,800 to $5,200 per day, while a ship in the reserve fleet is maintained for $75 per day.

CHAPTER 3

CONCLUSIONS, RECOMMENDATIONS, AND AGENCY COMMENTS

CONCLUSIONS

The idea of placing chartered ships in ROS or standby status when not being used for routine sealift missions was initially sound. It provided needed assurance that some break-bulk shipping capability would be readily available in contingencies.

The recent upgrading of a portion of NDRF, coupled with plans for even further enhancement of this fleet, now dictates a thorough evaluation of the cost and effectiveness of the various alternatives for providing quick-response shipping capability.

In our opinion, the need for the Government to maintain two separate sources of quick-response capability is questionable.

RECOMMENDATIONS

The Secretary of the Navy should reevaluate the need to continue the ROS concept, particularly at its current level. He should determine whether more reliance should be placed on the Ready Reserve Fleet and on expanded use of commercial ships--on an as-needed instead of a long-term charter basis--to satisfy normal surges in sealift demands.

AGENCY COMMENTS AND OUR EVALUATION

Navy Department officials reviewed a draft of this report, and they believe the readiness funded ROS concept should be continued. They said that several problems would arise if MSC had to rely solely on the Ready Reserve Fleet and commercial capability for less than full mobilization contingencies.

MSC officials contend that ships may not be withdrawn from the Ready Reserve Fleet without a Presidential proclamation, and they foresee possible political difficulties in issuing a proclamation when ships are needed. Department of the Navy officials and MARAD officials do not share MSC's opinion and believe that ships can quickly be made available. However, to resolve any possible questions, MARAD, with Navy concurrence, has proposed and prepared a draft Executive order setting forth the authority for releasing ships.

GAO agrees that this question must be clarified, regardless of any actions taken as a result of this report. The Navy already has firm plans to use ships currently in the Ready Reserve Fleet in the event of contingencies. Its multimillion dollar commitment to the Ready Reserve Program for quick-response capability has already been made, and any possible administrative, legal, or other obstacles to its availability in time of need must certainly be identified and clarified as soon as possible.

Navy officials stated that MSC's control of the additional readiness funded ROS ships enables MSC to be more responsive to peacetime normal operating surges. They stated that if MSC did not have this excess shipping capability under its control, it would have to use commercial services to respond to normal surge demands. They further stated that this as-needed procurement might even prove more expensive than ROS.

It is possible that additional costs might be incurred; to what extent cannot now be accurately forecasted. But, it is also possible that additional savings would be realized by eliminating MSC's excess peacetime sealift capability. Without ROS, MSC would have to find other ways to meet service requests for shipping. While commercial augmentation probably would be required to some extent, considerable cargo space is now available on most of MSC's controlled fleet sailings. By rearranging schedules, reviewing cargo priorities, and instituting other management initiatives, MSC could probably respond to service needs and more effectively use its controlled fleet.

Nevertheless, the current expense of the ROS concept is being borne by Navy Operation and Maintenance funds specified for readiness purposes and should not be used by MSC to maintain excess capability which might be needed during peacetime normal operating surges. If MSC determines that maintaining standby capability is economically more attractive than sporadic use of the merchant marine, then it is the MSC's user-reimbursed Industrial Fund which should bear the cost just as it would the cost of commercial augmentation.

The Navy also cited the need to preserve break-bulk shipping capability and argued that the ships chartered and placed in ROS might otherwise be abandoned by their owners. We believe that ships chartered and placed in ROS would not be abandoned if the charters were terminated. If no other trade exists for these ships and their owners decide to dispose of them, MARAD could acquire them for NDRF.

In fact, preservation of break-bulk shipping capability is a precise reason for the establishment of the Ready Reserve Fleet by MARAD.

Navy officials also cited nonmobilization requirements, showing a need for all ships currently in ROS and the Ready Reserve Fleet. They maintain that, as a result, both systems are needed. This report does not dispute the need for quick-response shipping capability. It only demonstrates that of these two systems, the Ready Reserve Fleet is less costly and equally responsive, and therefore, should be considered as the system to use. Tonnage capability in the fleet may have to be adjusted to make up for any shortfall resulting from an elimination of the ROS concept. Quite possibly, ships currently under charter to MSC will eventually be turned over to MARAD and, if suitable, become a part of the Ready Reserve Fleet.

MARAD officials also reviewed a draft of this report and agreed with the accuracy of our findings. Both Navy and MARAD officials offered other suggestions which were considered in the preparation of this final report.

CHAPTER 4

SCOPE OF REVIEW

We examined pertinent records and interviewed officials at MSC and MARAD. With respect to Navy requirements, we interviewed Chief of Naval Operation officials at the Pentagon. In addition, we spoke with representatives of various commercial break-bulk carriers, and we observed ships in the reserve fleet undergoing various stages of upgrading. At Norfolk, Virginia, we observed the test activation of the SS PRIDE Ready Reserve Fleet ship and accompanied the ship on its sea trial.

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