STRATEGIC SEALIFT

Summary of Workshop on Crewing the Ready Reserve Force

GAO

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

National Security and
International Affairs Division

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The Honorable A.J. Herberger
Administrator
U.S. Maritime Administration

Dear Admiral Herberger:

To assist your agency in its pledge to host the next forum on maritime crewing issues, we are providing this summary of the views expressed at the GAO-sponsored Ready Reserve Force (RRF) crewing workshop held on April 5, 1994. We conducted the workshop as part of a review requested by the Chairman of the Subcommittee on Readiness, House Committee on Armed Services, to determine whether recent improvements to RRF are meeting defense needs. A separate report will be issued in response to this request. The workshop was designed to (1) discuss the impact of the declining U.S. commercial ocean-going merchant marine manpower pool on U.S. sealift capability, (2) identify impediments to timely crewing, and (3) discuss various crewing proposals.

This report reflects the panel members' and workshop attendees' views, which are not necessarily those of GAO. Detailed papers submitted by the participants in the order of their presentation are included in the appendixes.

Results in Brief

The workshop served as a forum for reaching consensus among government agencies, commercial ship managers, and organized maritime labor on various crewing concerns. It also served as the genesis for further discussions. Highlighted points that the workshop attendees agreed on included the following:

- The key to crewing RRF is maintaining a viable U.S. merchant marine industry.
- The current state of the U.S. maritime industry demands passage of reemployment rights for mariners who volunteer for RRF duty during a crisis.
- Some form of permanently assigned crews will help maintain a base of skills and experience to operate RRF ships.
- Cooperation among the groups involved with crewing RRF is needed to resolve many issues, such as improvement of the mariner database.

Representatives from the involved groups pledged to continue joint discussions aimed at achieving maritime reform consistent with national sealift requirements.

Impact of a Declining U.S. Merchant Marine Industry

Workshop participants agreed that the best approach to providing crews for RRF vessels is continued reliance on the civilian mariners working in the commercial U.S. merchant marine industry. However, they stated, U.S. maritime policy reform is needed to maintain the commercial base from which the crews can be drawn. Current U.S. maritime policy, according to some participants, seems to be driven more by budgetary factors than by national security considerations. Officials in the national security decision-making process, they said, need to be more cognizant of the contribution that the civilian merchant mariners can make to national security.

Reemployment Rights Are Important

The participants generally agreed that establishing reemployment rights is a necessary first step to improve RRF crewing in a crisis. Some participants believed that enough qualified mariners currently exist to crew RRF, but not enough ocean-going jobs exist to keep them fully employed. Therefore, many qualified mariners have taken jobs ashore or in other fields. According to workshop participants, mariners would sail in a national crisis if they had a guarantee that they could return to their jobs after the crisis ended.

Use of Reduced Operating Status to Maintain Skills Base

The reduced operating status[1] (ROS) concept was widely accepted by workshop participants as a good method for maintaining a cadre of mariners with the knowledge, skills, and experience necessary to activate and operate RRF vessels. Although the maritime academies and the industry schools teach subjects such as steam engineering, the ability to maintain those skills in the commercial sector is limited. Many mariners would therefore find it difficult to maintain their proficiency in the older technology found on RRF ships. Assigning mariners to RRF ships in a reduced operating status would help maintain the experience level required for operating ships with these older systems.

[1]ROS means that a partial crew is assigned to a ship and continually maintains it. When the ship is activated, the crew is complemented by additional crew members drawn from the maritime unions.

ROS crewing also maintains the core group necessary for timely ship activation. These ROS crews would familiarize the union-supplemented crews with the particulars of that ship during an activation.

Use of Automated Systems to Speed Notification of Mariners

The U.S. Coast Guard, working in cooperation with the Maritime Administration, is implementing a new computer database that will more accurately reflect those mariners who are actively sailing. The Maritime Administration has suggested that an identifier be placed in the files of mariners who have said that they are willing to serve on RRF ships during a crisis.

Organized labor representatives proposed that the Coast Guard database be compatible with their systems and said that they would be willing to work with the Coast Guard and the Maritime Administration on this matter.

Merchant Marine Reserve Proposals

The workshop participants did not discuss the potential of merchant marine reserve programs in detail. Such programs have been proposed by the Department of Defense and the Maritime Administration. However, participants agreed that reliance on the commercial sector would be cheaper and the experience and skills would be greater than could be developed in a reserve program. Some representatives for organized labor voiced opposition to any merchant marine reserve program. The Maritime Administration representative introduced the idea of ship activation teams—presumably a form of reserve—that would assist in the RRF vessel activation and then step aside when the union crew arrived.

Plans to Continue the RRF Crewing Dialogue

Participants agreed that the workshop was informative and that a continuing dialogue was needed. The Maritime Administration representative suggested that it was his agency's responsibility and pledged that it would pursue hosting the next forum. Workshop participants suggested the topic for the next forum involve developing a set of crisis operation guidelines. They said that contingency procedures could be established in advance among government agencies, ship managers, and the maritime unions regarding wages, health plan benefits, pensions, and other labor issues. These prearranged agreements, workshop participants said, could facilitate RRF crewing in the event that one union could not supply the needed mariners within the required time.

It was also suggested that an agreement between government and industry could be developed to allow RRF vessels to be used for various short-term research and development efforts or chartered for use in trade routes where there are no American competitors. This proposed partnership, workshop participants suggested, could provide the Maritime Administration additional funds for RRF.

Scope and Methodology

We sponsored this workshop to facilitate discussions on the various factors affecting RRF crewing. During our review of RRF, we identified major groups involved with RRF crewing, including government officials, organized labor, ship management companies, and research organizations. We consulted noted maritime experts and selected panel members and audience participants for the workshop from those involved groups. We also selected a moderator who had knowledge of the subject matter but no vested interest in RRF.

The workshop consisted of presentations of papers by each of the panel members and a dialogue between panelists and audience participants. The papers, including a summary presentation, are printed verbatim in appendixes I to IX. A list of the panel members and participating organizations is in appendix X.

We did not select as a panel member a representative from one of the maritime labor unions representing unlicensed mariners. However, we included a joint paper from two of these organizations, which was prepared after the workshop, in appendix IX.

We are sending copies of this report to the Chairman, Subcommittee on Readiness, House Committee on Armed Services; other appropriate Members of Congress; and the workshop participants. Copies will also be made available to other interested parties on request.

Please contact me on (202) 512-5140 if you or your staff have any questions. Major contributors to the workshop were Brenda Farrell, Colin Chambers, Penny Berrier, and Robert Eurich.

Sincerely yours,

Mark E. Gebicke
Director, Military Operations
and Capabilities Issues

Contents

Abbreviations

GAO	General Accounting Office
ROS	reduced operating status
RRF	Ready Reserve Force

Manning Requirements of the Ready Reserve Force—Department of Defense

Paper presented by James L. Johnson, Director, Projection Forces Division, Program Analysis and Evaluation, Office of the Assistant Secretary of Defense

MANNING REQUIREMENTS

OF THE

READY RESERVE FORCE

Department of Defense Paper
for the
Ready Reserve Force Crewing Workshop
Sponsored by the
General Accounting Office

April 5, 1994

The ability to deploy military forces to protect U.S. security interests worldwide has remained a constant requirement of defense planning in the post-Cold War era. If anything, with fewer forces stationed outside the United States in peacetime, rapid mobility has become increasingly important to ensuring timely U.S. responses to crises.

The Department of Defense (DoD) has a long-standing policy of relying on the commercial sector to the maximum extent that it can meet the requirements for transporting military forces. We use commercial trucks and rail lines to move cargo to air and sea ports of embarkation. We use commercial airlines to move nearly all of our troops and high-priority supplies. We use commercial shipping to move large amounts of residual supplies as well as some unit equipment. By using commercial carriers in this way, the Department conserves taxpayer dollars and ensures that the mobility systems it acquires do not duplicate capabilities available in the civil sector.

DoD transportation programs reflect this policy objective. We purchase cargo aircraft to move military material that cannot be accommodated on commercial aircraft. Similarly, DoD sealift programs are designed to complement the capabilities provided by commercial shippers.

The character of the U.S. merchant fleet has changed dramatically over the past 40 years, and DoD has adapted to those changes. During World War II, the United States made extensive use of commercial ships to move military equipment and supplies. Ships would sail

from U.S. ports, brave attacks at sea, and deliver cargo to theaters of operation. Many merchant mariners gave their lives in service to their country during the war.

The U.S. commercial fleet of the 1940s numbered some 1,200 ships and was supported by a merchant marine 55,000 strong. By the time of the Korean conflict, the fleet had dropped to about 700 ships, supported by over 50,000 merchant mariners. Today, the U.S.-flag fleet includes about 350 ships, supported by a merchant marine of about 24,000. While the number of ships and merchant mariners has declined, the tonnage shipped on U.S.-flag vessels each year has remained relatively constant. The changes in the merchant fleet reflect the efficiencies of the intermodal system introduced by U.S. carriers. Those efficiencies--shipping containers and significantly larger and faster ships--greatly increase the amount of cargo that can be moved per person working in the industry. The result has been a reduction in the cost of transportation services of which the industry is justly proud.

The larger, more productive ships in service today are also reflected in force deployment patterns. During Operation Desert Shield/Storm, seven DoD-owned fast sealift ships (converted commercial containerships first constructed in 1972) provided the delivery capability of 116 of the breakbulk ships used during World War II. In terms of manpower, the change has been equally striking: the crews for the seven fast sealift ships totaled 294, whereas those for the 116 breakbulk ships would have numbered over 4,600.

DoD has adapted to the changes in the commercial fleet in a number of ways. Along with industry, it has invested in the use of containers. It has purchased container-handling equipment and designed container systems that meet ISO standards yet are built up from smaller containers that can be divided and dispersed on the battlefield. During Operation Desert Shield/Storm, DoD used commercial ships to move military supplies, and it is taking steps now to improve its ability to move ammunition on containerships.

Another adaptation has been the acquisition of the fast sealift ships mentioned earlier and the addition of roll-on/roll-off (RO/RO) ships to the Ready Reserve Force (RRF). Ships of this type are particularly valuable to DoD because of the relatively short time needed to load and unload them and because they can carry the full range of military equipment, including items that cannot be transported in containerships. Following our policy of relying primarily on the commercial sector, we have not established reserve crews for the fast sealift ships or the ships in the RRF. Rather, we have called on merchant mariners from the labor unions to operate these vessels during military contingencies.

During Operation Desert Shield/Storm, for example, 74 vessels from the RRF were used. While most of the ships did not meet their breakout objective, more than half were activated in less than 14 days. This fact demonstrates that the concept of an RRF is viable, although additional emphasis must be given to peacetime planning and additional investments must be made in annual operations and maintenance.

The 74 RRF ships that took part in the Persian Gulf deployment required a total of 2,500 crew members. The crews were drawn from a merchant marine with an available pool of about 11,000 mariners (personnel in the U.S. merchant marine not sailing at a given point in time). During Operation Desert Shield/Storm, there were no shortages of manpower for RRF ships; the lesson of that deployment was that we need to improve our planning during peacetime so that crewing can proceed more smoothly should the RRF be needed for future contingencies.

As we build our plans for the future, we must recognize several factors that are changing. First, the RRF is growing in size. DoD expects to add about seven more RO/RO ships to the fleet, and plans to maintain these vessels at a relatively high level of readiness. Further, there is the question of how many tankers are needed for the RRF. These issues are currently being examined by the Department. In addition, the Administration has proposed a new Maritime Security Program designed to assist ships operating under the U.S. flag.

The steps that must be taken to ensure that adequate manpower is available for the RRF depend on the future size and readiness requirements of the fleet as well as on the number of merchant mariners projected to be available. Both DoD and the Department of Transportation (DoT) are exploring potential needs for reserve programs, and the FY 1995 DoT budget request for the Maritime Administration (MARAD) includes $2.2 million for a reserve initiative. To determine the size and content of possible future programs, DoD and MARAD must first compare the crewing requirements of the RRF with potential manpower

sources in terms of numbers, skill levels, and response times. If a reserve program is deemed necessary, we can select among several options on a cost-effectiveness basis.

RRF Crewing Requirements

As noted earlier, manning requirements for the RRF are a function of the number and type of ships maintained in the fleet. Manning levels also depend on the guidelines used to establish crewing requirements for various types of ships.

Table 1 shows potential manning levels for the future RRF, based on crewing standards established by the U.S. Coast Guard (USCG) and on MARAD recommendations. The first six lines of the table show the number of dry cargo ships recommended in the 1992 Mobility Requirements Study (MRS), along with the number of tankers in the fleet today. Earlier plans had contemplated adding 23 more tankers to the RRF. The continued need for these ships in the post-Cold War era is now being evaluated by the Department. Therefore, pending a decision on the ships' acquisition, the crew numbers associated with these vessels are shown separately in the table.

Table 1.
Estimates of RRF Crewing Requirements

Ship Type	Number Of Ships	USCG Minimum Crew Size Per Ship	Total USCG Crewing Requirement	MARAD Recommended Crewing	Total MARAD Crewing Requirement
Aux. Crane	10	24	240	39	390
Breakbulk	48	28	1,344	34	1,632
Barges	7	24	168	37	259
RO/RO *	36	24	864	33	1,188
Troop	2	45	90	70	140
Tankers	13	24	312	33	429
Subtotal	116	--	3,018	--	4,038
Tankers for MRS Goal	23	24	552	33	759
Total	139	--	3,570	--	4,797

* Includes additional RO/ROs to meet the MRS goal of 36 by 1999.

Manning the dry cargo ships recommended in the Mobility Requirements Study plus the 13 existing tankers will require between 3,018 and 4,038 merchant mariners. If the 23 additional tankers noted earlier are added to the fleet, crewing requirements would rise to between 3,570 and 4,797. In any case, the total requirement will be larger than it was in Operation Desert Shield/Storm.

The projected availability of manpower will determine in large part whether a reserve program is needed to provide crews for the RRF. If the oceangoing merchant marine remains at its current size, there would be about 11,000 merchant mariners to draw from to

man these ships. If RRF crewing requirements are as low as 3,000 and the merchant marine does not decline significantly in size, a reserve program probably would not be needed. If, however, the merchant marine drops significantly below today's level and RRF requirements are in the 4,000 to 4,800 range, we would have to look for alternative ways of providing crews. Sources of additional manpower that would be evaluated include mariners engaged in the Great Lakes and inland waterways trade, graduates of the federal and state merchant marine academies, and various forms of reserve programs.

In either case, the steps that would be followed in determining crew requirements and designing programs are similar. First, DoD will complete ongoing work to determine the future size and composition of the RRF. Second, the Department will work with MARAD to identify the number of merchant mariners that would likely be available in a crisis. Third, DoD will work with MARAD and with private industry to devise a plan for crewing RRF ships during crises. Finally, if alternative sources of manpower are needed, the cost and capability of options available to DoD and DoT can be compared to select the most cost-effective program to meet RRF crewing needs.

Manning on Ready Reserve Fleet Vessels—U.S. Coast Guard

Paper presented by Captain Jack McGowan, Chief, Merchant Vessel Personnel Division, U.S. Coast Guard

MANNING ON READY RESERVE FLEET VESSELS

By 50 United States Code (USC) App. 1744 Sec. 11 the Secretary of Transportation (SECDOT) shall maintain a National Defense Reserve Fleet, including any vessel assigned by the Secretary to the Ready Reserve Force component of the fleet, consisting of those vessels owned or acquired by the US Government that the SECDOT, after consultation with the Secretary of the Navy (SECNAV), determines are of value for national defense purposes and that the SECDOT decides to place and maintain in the fleet.

Except as otherwise provided by law, a vessel in the fleet may be used --
1) for an account of an agency of the US Government in a period during which vessels may be requisitioned under section 902 of the Merchant Marine Act, 1936 (46 APP. USC 1242); or
2) on the request of the SECNAV, and in accordance with memoranda of agreement between the SECDOT and the Secretary of Defense (SECDEF) for:
3) testing for readiness and suitability for mission performance;
4) defense sealift functions for which other sealift assets are not available; and
5) support of the deployment of the United States armed forces in a military contingency, for military contingency operations, or for civil contingency operations upon orders from the National Command Authority (Executive or SECNAV order);
6) for otherwise lawfully permitted storage or transportation of non-defense-related cargo as directed by the SECDOT with concurrence of the SECDEF

Vessels of the Maritime Administration (MARAD) Ready Reserve Force (RRF) are public vessels. They are inspected by the Coast Guard as required by title 46 USC §2109 and as modified by a Memorandum of Understanding between MARAD and the Coast Guard when the ships are in the inactive RRF reserve fleets. During times of active operation RRF vessels are under the control of Commander, Military Sealift Command, (MSC), however ownership does not transfer from MARAD to MSC, nor does MSC assume responsibility for manning or maintaining the RRF vessels from MARAD at anytime. MSC does operate and maintain a fleet of its own vessels which are separate from the RRF and which MSC has requested that the Coast Guard inspect. MSC vessel inspection is not mandated by law as is the RRF, however the MSC has agreed that their inspected vessels will be operated, including manning, in compliance with the Certificate of Inspection (COI). Manning of the RRF is as would be required. I make this point only because their is a tendency to confuse the MSC (Navy owned or demise chartered) vessels and their inspection status with the RRF vessels owned by MARAD, they are separate and distinct fleets from the Coast Guard's perspective. See Enclosure (1).

Inspection of vessels is covered in Title 46 USC. Code Chapter 33. The types of vessels subject to inspection for certification by the Coast Guard are listed in Section 3301. Exemptions to this list are found in Section 3302. The public vessel exemption as previously mentioned is in Section 2109. The

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Coast Guard inspects commercial vessels in order to ensure that minimum standards designed to ensure the safety of the mariner, the public, and the environment are being met. When an inspection has been successfully completed, 46 USC 3309 directs that a COI be issued to the vessel.

The manning requirements for all inspected vessels are found in Title 46 USC. Code 8100 series. The manning regulations for inspected vessels are found in 46 CFR 15.500 series.

When a vessel has applied for inspection, Marine Safety Office personnel determine, in the course of their inspection for certification and review of the vessel's plans and other paperwork, the proper manning required for the vessel. This required manning is placed on the COI of the vessel. A typical merchant vessel is required to have one Master, one Chief Mate, one Second Mate, one Third Mate, six Able Seamen (A/B), one Ordinary Seaman, one Chief Engineer, one 1st Assistant Engineer, one 2nd Assistant Engineer, one 3rd Assistant Engineer, three oilers, and 1 wiper. Manning for the steward's department varies. Unless exempted, this manning level must be maintained whenever the vessel is operating under the terms of its COI. Traditionally the Military Sealift Command has been reluctant to ask for waivers to the established manning unless it has been absolutely necessary.

MARAD has established four degrees of readiness for RRF vessels: 1) 4 day readiness, length of time in which the Operational Control (OPCON) of the vessel must change from MARAD to MSC. Ten permanent crewmembers are assigned to these vessels at all times; 2) 5 day, meaning the vessel must be ready in all respects to change OPCON before the end of that time; 3) 10 day, which allows 10 days for the change in OPCON, and; 4) 20 day, which allows 20 days for the change in OPCON. The 10 man crew on the 4 day readiness vessels are responsible for the day to day maintenance and upkeep of the vessel. Additionally, they form the core of the regular crew of the vessel. The remainder of the 4 day readiness vessel crew must be brought aboard before the vessel sails. No full time crewmembers are assigned to the 5 day, 10 day, or 20 day vessels.

The MARAD/Coast Guard MOU allows MARAD to extend certain inspection requirements such as drydock intervals, tests of equipment and operation of systems only when the RRF vessels are in an inoperative status in the reserve fleet. This allows RRF vessels to maintain their inspected status and hopefully accelerate their breakout if needed for sealift or military support missions on short notice. During times of active operation, RRF vessels must comply with the same requirements and inspection intervals dictated by U.S. law and regulation as any other inspected commercial vessel.

Presently, there are fourteen different companies who operate RRF vessels. Each company has a manager for its RRF vessels. They are responsible, among other things, to ensure that the vessel is properly crewed and ready to go if recalled for exercises. Each company has a contract with maritime unions to man their vessels.

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The Coast Guard allows modifications to the manning regulations during declared emergencies. Emergency modifications were utilized during the Vietnam conflict and war with Iraq.

During the Vietnam conflict, several modifications were made to regulations by policy which made more seafarers available for merchant service. Maritime academies were allowed to concentrate their curriculum into a shorter time frame and graduate students earlier. In addition, licensed officers were allowed to sail one level higher than the license they held, as long as they had at least 6 months' service at the level of the present license held.

Similarly, modifications were made to regulations by policy during the war with Iraq in order to maximize the availability of mariners to participate. The required licensed deck officer department was revised to 1 Master, 1 Chief Mate and 2 licensed mates. The required licensed engineer department was revised to 1 Chief Engineer, 1 1st or 2nd Assistant Engineer and 2 Assistant Engineers.

In the unlicensed deck force, 50% of the unlimited A/B billets were allowed to be filled by A/B--limited or A/B--special personnel. The use of specially trained Ordinary Seamen was encouraged. The only requirement to utilize these modifications was that the Master had to provide the OCMI with a written statement that the vessel's safety would not be impaired with these modifications.

In the unlicensed engineering force, if no engine room manning reductions were already in place due to the engineroom being automated, the OCMI was given authority to consider other QMED ratings for the oilers required by the COI. To take advantage of this opportunity, the Chief Engineer had to provide the OCMI with a written statement that the vessel's safety would not be impaired with these modifications.

If an individual had met all requirements for either an original license or an upgrade except for completion of the firefighting course, a temporary letter good for 1 year was issued to allow that individual to serve on RRF vessels.

If a licensed deck officer had a radar endorsement that was either current or had expired less than 1 year previously, a one year extension was given to allow that individual to serve on RRF vessels.

If an individual had lost his or her merchant mariner's document (MMD), the request for a duplicate was handled as quickly as possible. In addition temporary MMDs were issued to some mariners as soon as a complete records check was performed.

The responsibility for military sea service evaluations normally completed at Headquarters was delegated to the REC level.

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If an individual had a deck license which had expired more than one year previously, he or she had to demonstrate continued professional knowledge to the OCMI by passing a closed book examination and a deck examination emphasizing rules of the road and piloting. Individuals with engineer's licenses which had expired more than one year previously had to pass a closed book examination emphasizing safety and propulsion modes.

Because of lessons learned during Desert Shield/Desert Storm a new MOU was executed between the CG and MARAD which no longer allowed MARAD to request waivers for inspection and manning requirements directly to the Commandant (46 CFR 6.01(b). According to the new MOU waivers must be requested by Commander, Military Sealift Command under 46 CFR 6.06(b). It was difficult for the CG to evaluate the National Defense need for the vessel and its cargo and the marine hazard involved with the granting of a particular waiver. The CG felt it more appropriate for the Commander, MSC to make that decision.

The reason that all of these waivers were utilized is that an insufficient number of mariners volunteered to serve aboard RRF vessels during past declared emergencies. However, because the Coast Guard maintains arguably the best records in the world of its maritime personnel, projects are presently underway which should assist us in enlarging the maritime personnel force available for the RRF fleet in future emergencies.

The Coast Guard is developing a plan which will assist MARAD in contacting merchant mariners in case of a national emergency like Desert Shield/Desert Storm. Because regulations mandate that all licenses and merchant mariner's documents expire every five years, the Coast Guard will have contact with every merchant mariner at least that often. Whenever a license or document transaction takes place, the applicant will be asked to fill out a form which indicates if he or she is willing to be contacted to serve on American flag vessels in the event of a national emergency. The contents of the form, including up to date addresses and phone numbers, will be entered into a computer program to be utilized when necessary.

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Other programs being undertaken by the Coast Guard through the Office of Marine Safety, Security and Environmental Protection:

- MERCHANT MARINER LICENSING AND DOCUMENTATION SYSTEM (MMLD)

One of the tasks of the Merchant Vessel Personnel Division is to provide information, guidance, and support for the Marine Licensing (ML) Program to the Regional Examination Centers, ship operating companies, merchant mariners and maritime unions. Extremely important elements of the ML program is the maintenance of personnel and employment records, effective and efficient issuance of Merchant Mariner Documents (MMD) and Coast Guard licenses, and customer satisfaction in accomplishing these tasks. To meet our goals, the Merchant Mariner Licensing and Documentation (MMLD) System has been developed.

MMLD is a National centralized data sharing system which was developed by a contractor under the direction of the Coast Guard Research and Development Center in Groton, Connecticut. The existing MMD and license information will be converted from the Headquarters MMDOC system. The sea service information will reside in MMDOC with access by the RECs from the MMLD system. MMLD will provide the 17 REC's and three monitoring units immediate access to over 1.8 million mariner personnel records and sea service. The efficiency of the evaluation process will increase because the evaluators will have access to the information instantly. Another timesaver will be verification of ratings and duplicate number for lost MMDs or licenses. The information will be available in the MMLD system which will eliminate the requirement for verification by Coast Guard Headquarters personnel. All pending and completed transactions reside in the database. REC personnel can quickly determine a mariner has a pending application in another port before the evaluation and testing process begins MMLD will also contain test information such as type of examination, module number, date of exam, and test scores. Another exciting feature of the MMLD is the management reports which will provide a measure of effectiveness of the ML program.

The prototype was installed at Seattle, WA and New Orleans, LA in July 1993 and tested from July 1993 through February 1994. Some major problems were identified and have been resolved with program changes which were installed in Seattle and New Orleans in February 1994. The system is now operational at these RECs. MMLD is a major step into automation of merchant mariner records.

MMLD was chosen as a reinvention laboratory for the National Performance Review and for presentation to Vice-President Gore. We are proud to be a part of a program which deserves national recognition.

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- MARINER'S IDENTIFICATION CARD (MID)

The Mariner Identification Card (MID), a credit card type document, will contain all the information now on the existing document, including a digitized photograph and thumbprint. It will have a magnetic strip with the same information and the capability of being scanned. It will be a time saver to REC personnel in retrieving records and to shipping companies by allowing them to electronically produce Shipping Articles, Master's List and Certificates of Discharge and transfer the information to the Coast Guard. Companies that do not automate immediately can use the MID in the same manner as the present MMD and submit sea service information to the Coast Guard as they do presently. It is anticipated that the paper documents will be received from only a few small operating companies.

The MID system will be integrated as part of the Merchant Mariners' Licensing and Documentation (MMLD) system allowing information to be transmitted from the MMLD system to MID to eliminate duplicate work for REC staffs. The MID should be operational when the MMLD system is fully operational; however, in the event that MMLD is delayed, the MID system can be used as a stand-alone system to produce the documents.

The MID system will be beneficial to the shipping companies as it will provide software to allow electronically transmitted sea service information to the Coast Guard. They will also have the capability to electronically prepare and store shipping articles, master's list, and certificates of discharge. The mariner will be the ultimate benefactor by:

- Continuing to receive Certificates of Discharge.
- Receiving/validating/correcting sea service at any REC; eliminating the need for a Privacy Act request from Coast Guard.
- Having accurate records.

It will provide a cost savings of approximately $1,000,000 per year to the shipping companies by allowing electronic preparation and transmission of sea service data. The Coast Guard will realize a like savings over the next five years by eliminating clerical, data entry, and managerial positions.

- REGULATION PROJECT: REMOVE REQUIREMENT FOR LETTERS OF COMMITMENT FOR EMPLOYMENT

Currently there is a regulatory project which will remove the requirement for a mariner to obtain a letter of commitment for employment before obtaining an entry level MMD. This will remove another hurdle from the time consuming process of obtaining an entry level MMD.

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- MARITIME REGULATORY REFORM

Consistent with the Vice President's National Performance Review and as a follow-on to Secretary Pena's efforts to revitalize the U.S. Merchant Marine, the Coast Guard is developing a Maritime Regulatory Reform (MRR) project. The goal of this project is to eliminate unnecessary regulation of the U.S. Merchant Marine, provide the industry with the maximum possible compliance options, utilize industry and classification society standards to the maximum extent possible, and leverage limited Coast Guard assets to allow for reassignment of personnel to areas of greater need, such as port state enforcement.

This new approach is composed of four major elements:

1. Establishment of compliance options such that a ship builder or owner could rely on identified industry standards or classification society standards, rather than specific U.S.C.G. regulatory requirements;

2. Acceptance of regulatory compliance verification by qualified, responsible classification societies;

3. Establishment of a Model Company Program whereby the vessels of a company which instituted a rigorous system of quality management would be inspected less frequently by the Coast Guard than is currently provided for by law; and,

4. Establishment of a Coast Guard Oversight Program consisting of verification of the quality management program of participating shipping companies and verification of the quality of classification society regulatory compliance inspections and examinations.

This new approach will free up resources that can be refocused on port state control and passenger vessel safety, relieve regulatory burdens on the industry, eliminate duplication of effort between the U.S.C.G. and American Bureau of Shipping (ABS), promote the competitive posture of the U.S. maritime industry and reward responsible companies.

- MARITIME PERSONNEL REFORM

The Coast Guard is engaged in an effort to achieve a consensus between labor and management interests in the maritime industry on a legislative initiative to revise the existing manning statutes. In place of current restrictive manning provisions, the proposed revisions would introduce a balanced framework which would allow flexibility in the operation of U.S. vessels and set the stage for enhanced training and job opportunities, while providing for essential safeguards. The proposals being developed would allow operators of U.S. flag ships to take advantage of modern technology and innovative management concepts while preserving employment opportunities for U.S. merchant mariners and shoreside support personnel.

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12.D.3. Recreational Motorboats At Military Installations. (TO BE DEVELOPED)

E. Vessels Of The Military Sealift Command (MSC).

1. Inspection Agreement. The Commander, MSC (an arm of the U.S. Navy (USN)) has requested that the Coast Guard inspect and certificate MSC vessels, which are operated by civilian merchant mariners. Such a vessel is normally designated "MSC, in service, civilian-manned" on the COI; the term "in service" contrasts with "commissioned" naval ships, which are manned by military personnel. MSC intends that no civilian-manned vessel will be operated without a COI, unless military requirements make it necessary. However, the Coast Guard will not normally be asked to inspect and certificate the following vessels:

   a. Those vessels controlled by the Commander, MSC Far East Area;

   b. Landing craft-type vessels, such as Landing Ships, Tank (LST's) and Landing Crafts, Medium (LCM's); and

   c. Vessels that are essentially military in character, by virtue of assignments or construction standards.

   The Coast Guard will inspect MSC vessels for which inspection requests are filed to verify that they comply with the appropriate requirements. OCMI's shall certificate MSC vessels that comply with the regulations (as modified by further agreements or instructions). COI's shall not be issued to MSC vessels that do not meet the requirements.

2. No Application Of The International Convention For The Safety Of Life At Sea (SOLAS) 74/78. Vessels certificated as "MSC, in service, civilian-manned" are Department of Defense (DOD) vessels used for public purposes. They are not subject to the requirements of the 1974 SOLAS Convention and its 1978 Protocol, and shall not receive SOLAS certificates, even if the vessel meets SOLAS in full and a certificate is requested by MSC. [NOTE: This provision does not apply to those commercial vessels on time charter to MSC from MARAD.]

3. Modifications Of The COI.

   a. General. An asterisk shall be inserted at the word "thereunder" in the eighth line of COI Form CG-841. In the space for "Route Permitted and Conditions of Operation" there shall be inserted an asterisk and the notation "In accordance with the standards applicable to MSC vessels."

   b. Class. In the space provided for the vessel's class, insert the designations "Naval transport/cargo vessel/tankship (as appropriate), in service, civilian-manned."

   c. Manning. In the case of P2, C3, and C4-type vessels, the presence aboard of three additional Able Seamen, not required to stand watches, shall be included for persons authorized to be carried in the crew.

ENCLOSURE 1

12.E.3. d. Persons In Addition To The Crew. When deemed necessary for defense purposes by the Commander, MSC, inspected MSC vessels may carry civilian or military personnel in addition to the crew expressly to carry out vessel missions. Such personnel shall not be involved in the navigation of the vessel, and are not considered members of the crew or passengers. Their presence shall be indicated in a separate endorsement of the COI and reflected in the total of persons allowed aboard.

4. Modification And Explanation Of Standards.

a. General. In addition to material normally accepted by the Coast Guard, the OCMI may accept materials and equipment on MSC vessels that meet the requirements of any of the following authorities:

(1) The technical bureaus of the Department of the Navy;

(2) Military specifications (MILSPEC's), including Joint Army Navy (JAN) specifications;

(3) Federal specifications used for military purchases; or

(4) National Military Establishment (NME) specifications.

b. Vessels Of Special Design. The Commandant may, in cases of specially designed MSC vessels, permit variations from statutory and regulatory requirements that are necessary for the special purposes for which the vessels are intended. Initial inspection files shall include correspondence and other information on the variations allowed; these should be consulted at subsequent inspections for certification.

c. Structural Steel Renewals. These must incorporate at least the minimum requirements of the Coast Guard and the American Bureau of Shipping (ABS).

d. Lifesaving Equipment. Requirements for lifesaving equipment on inspected vessels are shown in Figure 12-1. Percentage requirements are based on the total number of persons on board.

e. Pyrotechnics. USN pyrotechnics may be carried in lieu of Coast Guard approved pyrotechnics.

f. Lifefloats. USN lifefloats that are identified by nameplates as complying with the provisions of MILSPEC MIL-F16143 are acceptable, provided they are in good condition.

g. Canned Drinking Water. Emergency drinking water canned under MILSPEC MIL-W-15117 may be accepted in lieu of Coast Guard approved drinking water. Such cans are undated and may remain in service for an indefinite period. Rejection shall be based on deterioration of cans or other defects that the inspector judges to make the water unusable. Coast Guard approved water cans will be rejected after 5 years.

MARINE SAFETY MANUAL

FIGURE 12-1

LIFESAVING EQUIPMENT FOR OCEANGOING MSC VESSELS

Item	Approved by	MSC vessels	Regularly inspected vessels
Passenger vessels			
Lifeboats	CG	50% (minimum)	100%
Life floats	CG or USN	Sufficient to total 150% when added to percentage accommodated in lifeboats	0
Buoyant apparatus	CG	0	25%
Life preservers S/B (adult)	CG or USN	100%	100%
Life preservers S/B (children)	CG or USN[1]	10%	10%
Freight vessels			
Lifeboats	CG[2]	200%	200%
Life preservers S/B (adult)	CG or USN	100%	100%

[1] In the case of austerity transports in which troops and troop officers are the sole passengers, 10 percent children's life preservers will not be required. However, 50 such life preservers shall be carried on each such vessel for emergency purposes.

[2] If vessel meets requirements for one compartment subdivision and damage stability in accordance with 46 CFR Part 73 and 46 CFR Part 74, lifeboats for only 100% will be required.

12-5

12.E.5. Inspection Waivers. Waivers from inspection requirements shall be made in accordance with the provisions of 46 CFR 6.06.

F. Vessels Of The U.S. Army Corps Of Engineers (USACE).

1. Inspection Agreement. Upon application for inspection, the Coast Guard will inspect and certificate USACE vessels that comply with applicable statutory and regulatory requirements. When a USACE vessel does not comply with requirements, a written statement of the conditions found will be forwarded to USACE, with the returned application.

2. Modification Of Standards.

a. Lifesaving Equipment. At the request of the Chief of Army Engineers, the Commandant has accepted unicellular plastic lifesaving ring buoys, MILSPEC MIL-R-0016847, for use on USACE vessels. Agreement has been reached with USACE on upgrading of the safety standards for lifesaving equipment. The USACE has agreed to replace unicellular plastic foam work vests (MIL-L-17653) with Coast Guard approved personal flotation devices (PFD's). The old work vests will be replaced on all USACE vessels except those engaged on river routes, in quantities specified by Coast Guard regulations. However, they may be retained for use by crewmembers working near or over the water, as per the regulations.

b. Manning. See volume III of this manual.

G. DOD/National Aeronautics And Space Administration (NASA) Instrumentation Ships.

1. Introduction. Special-purpose ships that are owned by the U.S. and operated as public vessels to provide instrumentation facilities for DOD and NASA missile and space programs are classed as "instrumentation ships." These are under the control of the Commander, MSC.

2. Inspection And Certification. Upon application, these vessels will be inspected and certificated by the Coast Guard. 46 CFR, Subchapter I (Cargo and Miscellaneous Vessels) applies to instrumentation ships, insofar as practical. The entry for "Total persons allowed" on the COI shall be the maximum number permitted by the Coast Guard (normally, the capacity of the primary lifesaving equipment aboard will be the determining factor). Such vessels manned by military rather than civilian personnel will be awarded Letters of Inspection in lieu of COI's. Civilian crewmembers must be licensed or certificated as a condition of employment on such vessels. When the number of persons aboard exceeds normal manning standards, or the vessel varies significantly from the standard "cargo ship" configuration, additional requirements for improved access and fire protection may be imposed.

3. Special Instrumentation Equipment. In regard to such systems, the Coast Guard exercises plan approval and inspection of electrical distribution systems only to the point of the vessel's electrical power takeoff. The Coast Guard's concerns are fire, personal hazard, and interference to the

Crewing the Ready Reserve Force—RADM Carl J. Seiberlich, USN (Ret.), American President Lines, Ltd.

AMERICAN PRESIDENT LINES, LTD.

CREWING THE READY RESERVE FORCE

INTRODUCTION: A discussion of our topic "Crewing the RRF" would be incomplete without first considering the mission of the Ready Reserve Force. Simply put, it is what the name implies, the mission is one of readiness. On February 28, 1994 General John Shalikashvili, Chairman of the Joint Chief's of Staff, in a speech to the Veterans of Foreign Wars convention, stated that Secretary of Defense Perry had recently issued an order to the Armed Forces, an order unprecedented in our nation's military history. That order stated that the first mission of the Armed Forces henceforth is readiness. All other missions are subordinate. Each Armed Service must first ensure their forces are in a high state of readiness. That is an appropriate beginning since the most important readiness concern in discussing the RRF is people: experienced and trained deep sea mariners capable of rapidly responding in a contingency or national emergency.

In determining the state of readiness which must be maintained in the RRF, both material and personnel, affordability versus military risk must be assessed. This is basically a part of the entire sealift asset equation. National assets include dedicated government owned and crewed ships, the Ready Reserve Force, the U.S.-flag merchant marine, the Effective U.S. Controlled Fleet (EUSC) and foreign owned and operated vessels. The balance among these various elements must be determined by affordability versus both economic risk and military risk. The RRF would be included in a military risk assessment while the U.S.-flag merchant marine would be involved in both military and economic risk determinations.

READY RESERVE FORCE

BACKGROUND: A discussion of this topic would not be complete without a brief review of the history of the RRF and the trends and developments within the U.S. maritime industry which impact upon crewing the RRF.

The RRF was formed in 1976 as a result of the Department of Defense recognizing the only way in which the military strategy of the United States; one of forward deployment and coalition warfare, could work successfully would be the ability to form a "Steel Bridge" of ships from the United States to whatever point in the world a conflict occurred. Many ships operated by the U.S.-flag Merchant Marine, which were militarily useful, had been phased out because they were no longer economically viable, particularly in the international trade. From a modest force of out-moded World War II Victory cargo ships and a few retired Navy auxiliary vessels, as ships were placed out of commercial service, the hardware of the RRF evolved to a fleet of 96 ships on the eve of

1

the Gulf War. Of these 78 were activated and transported cargo and vehicles to Saudi Arabia.

APL has been a General Agent or Ship Manager for the RRF since 1979 with an average of 10 to 12 ships assigned. During this period, 35 ships have been activated which included the first, no notice multi-ship activation test and the 12 ships activated and operated in support of Desert Shield/Storm.

As General Hansford Johnson, CINC, of the U.S. Transportation Command (CINCUSTRANSCOM) pointed out in his report to Congress on April 23, 1991 concerning sea lift in Operation Desert Shield/Storm, there was literally a "Steel Bridge" of ships, one every fifty nautical miles from the United States to Saudi Arabia. While Operation Desert Shield/Storm is the one military experience based on a real situation that we have for developing "Lessons Learned" and for projecting our sea lift needs forward to ensure future readiness, it is a poor example for a number of reasons. We enjoyed having the fortunes of war on our side, and most importantly, we were permitted the luxury of time. We had over six months to activate ships, and carry out the sea lift mission. There were sufficient petroleum supplies in-country as well as other logistic support. In addition, all ports and airfields remained operational throughout the conflict. That element of institutional memory must never be forgotten. No one can envision the United States ever being involved in a war which will be fought as planned, thus Secretary Perry's unusual order to our Armed Forces. The four core "Lessons Learned" in the Gulf War were: 1) the difficulty of activating laid up ships, 2) the crewing of the vessels, 3) that highly qualified Port Engineers, well experienced in ships repair and maintenance were required to tend the vessels during laid up periods particularly when funding was austere, 4) that a program of frequent activations of both vessels in Reserve Fleet locations and out-ported ships should be implemented. The Maritime Administration (MARAD) recommendations to Congress addressing these issues were:

1. A Reduced Operating Status Program (ROS) for high visibility RRF Ships with great military utility i.e. the Roll-on/Roll-off (RO/RO) vehicle carriers and out-porting the vessels near load berths;

2. The strengthening of the RRF Ship Manager Program to ensure that only companies with good technical skills and rapid access to a pool of deep sea mariners be employed as ship managers;

3. The requirement that only port engineers with a minimum of three years of actual ship repair, vessel maintenance and shipyard repair experience be retained by ship managers to tend the vessels;

4. A program to activate each RRF vessel each year with dock trials being performed one year and sea trials the next.

Today those "Lessons Learned" are implemented in the RRF Program, however budgetary constraints are already eroding the effectiveness of these programs, a topic we will return to later in our discussion. At this point it is appropriate to discuss briefly the maritime industry and the trends and developments which are influencing the industry and their impact upon the ability of the private companies engaged as ship managers of the RRF to perform their assigned tasks in the husbanding and crewing of the RRF ships.

THE U.S. FLAG MARITIME INDUSTRY

BACKGROUND: The continuing decline of the U.S.-flag maritime industry despite significant gains in technology, was primarily caused by the continued inability to achieve Congressional and public support for an effective maritime policy. The United States is an "Island Nation" with over 95% of our waterborne imports and exports being transported by foreign owned shipping, therefore, a functioning maritime strategy is a necessity to our economic and military health.

According to a study done by the USTRANSCOM the U.S.-flag merchant fleet declined from over 5,000 ships at the end of World War II, to 894 in 1970, and has declined further to less than 400 ocean going vessels of all types as of January 1991, and this figure includes all of the RRF ships. Of further interest, MARAD has noted that only 168 of these ships have any military utility, and that in the same report, MARAD predicts only 35 militarily useful vessels will remain in the U.S.-flag fleet by the year 2005, just eleven years from now. The response to this trend has been for MARAD to conduct an aggressive ship acquisition program for the RRF purchasing both U.S.-flag and foreign vessels with a concentration on buying militarily useful RO/RO vessels.

In keeping with the shrinking merchant fleet, deep sea mariner employment has shrunk from an estimated 110,000 people in 1945 to less than 27,000 persons who fill less than 12,000 seagoing positions.

The Administration has proposed a maritime reform program which is under consideration in the Congress. At this time, the final provisions of the program have not been determined.

THE READY RESERVE FORCE REQUIREMENTS

The same USTRANSCOM report to Congress cited previously, predicted that based on a study by the Commission on Merchant Marine and Defense conducted in 1988 that there would be a shortfall of mariners to man the RRF of 4,383 persons by the year

2000. That study having been done prior to the Gulf War was based on a 96 ship RRF. One must remember that during the Gulf War the 78 vessels activated required that approximately 2,400 seagoing positions be manned. The planned 140 ship RRF would require approximately 5,000 personnel. Everyone is well aware that great difficulty was experienced in meeting the 2,400 manning level during Desert Shield/Storm. Of particular concern was the shortage of experienced, unlicensed engineering personnel.

The solution to the RRF manning problem, which is affordable with a low military risk factor, is to maintain a viable, active U.S.-flag commercial fleet with a supporting work force capable of manning the RRF in times of national emergency. Proposals have been made to create a Merchant Marine Reserve. This plan has risk factors associated with it. As a maritime union official stated in the Congressional hearing referred to above, "It makes no sense to have a Reserve when you are not going to have a commercial fleet for them to be a Reserve for. After all, would you have a Naval Reserve, if you disbanded the Navy?" The issue here is the cost of maintaining a satisfactory level of competence of personnel who do not sail on a regular basis.

A similar problem would occur if the RRF ships were to be manned by naval reservists: an extensive retraining program would be required; Navy manning criteria would, *even under austere* policies, require larger crew sizes, and extensive training would be required to maintain crew currency. At best, this is a very high cost option for manning the RRF.

The current direction of the American Maritime Industry, without a viable maritime program in place, is to "out-flag" their fleets in order to remain competitive in international ocean shipping. Further, the continual eroding of Department of Defense support for the cargo preference acts which require that military cargo be carried on U.S. bottoms, together with the reduction of our overseas military garrisons, is going to further cause a loss of cargo to remaining American carriers. This has been a vital "back haul" service and while certainly not highly profitable, has provided an important cargo base to participating carriers.

Needless to say the "out-flagging" of the commercial maritime companies will further serve to erode seagoing jobs for American seamen and subsequently, in the long term, the ability to man the RRF rapidly with experienced personnel in time of crisis.

Having said that, we are compelled to observe that the decline of the commercial fleet and it's job opportunities for American seamen opens a window of opportunity for the RRF. The more rapid the decline, the greater number of licensed and unlicensed seamen who need work credit toward vested retirement in the various maritime union pension programs. These people, while reluctant to accept employment in what are virtually non-seagoing positions in the Reduced Operating Status Program of the RRF, will take these

jobs in the absence of seagoing positions. This situation will occur only in the short term, since more and more qualified personnel will find shoreside employment in view of the uncertainties of continued maritime employment as the active U.S.-flag fleet disappears from world trade routes. Perhaps the most difficult issue facing the RRF Program is that it has little political visibility with the exception of being highly visible to budget cutters. This lack of political visibility is further demonstrated by the failure of broad based support for the formulation and implementation of a national maritime policy to support a strong merchant marine to provide for crewing, maintaining, and operating the RRF in a national emergency. In 1989 while MARAD presented a logical and well thought out budget for vessel maintenance of $239 million, they received $89 million. This led directly to limited ship maintenance, and fewer activations and sea trials of the fleet. The final result of this was enormous difficulty encountered in activating the fleet for the Gulf War where every ship had a deferred maintenance backlog particularly for steam boilers. An important lesson learned was that the activation of these ships was slow and costly despite concentrated efforts by all involved.

The Mobility Requirements Study released in November of 1993 clearly states the requirements for sea lift necessary to support the deployment of a minimum force in a future contingency, and the readiness level for the Ready Reserve Force. The response to this has been the out-porting of the RO/RO ships of the RRF, and the placement of ROS crews on these vessels. The initial program envisioned 10-man ROS crews on these vessels, but, the budget to support this manning level has not materialized. Plans to "nest" ships in out ported locations with a 14-man ROS crew for 2 ships in order to improve capabilities and reduce costs are under review. This policy begs the question; "What is Readiness?"

A satisfactory level of readiness on a typical steam driven RO/RO manned by an ROS crew is the ability to activate the vessel in four days, and proceed directly to the loading berth on the fifth day. What does it take to accomplish this is the next question? First, the vessel must have been sea or dock trialed within the past year. All ship's deficiencies must be identified and reduced to those capable of being corrected without shipyard level industrial assistance such as dry docking, etc. In order to achieve this level of readiness, continual comprehensive shipboard testing and maintenance of all ships systems must be performed. By reducing crew size, the man-hours available to perform the needed level of maintenance is also reduced, resulting in a progressive deterioration of material condition. In the current RRF programs, it is possible that the ROS program will actually result in a variation of a Merchant Marine Reserve program. We now turn to a discussion of the ROS Program and the APL experience in the program.

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We at APL as a ship manager/general agent with 12 ships out-ported, with 3 of them in ROS, have had the following experience. As we stated earlier the "Lessons Learned" have resulted in a major tasking to the Ship Manager Program, i.e., the ROS Crew Program and the Sea and Dock Trial Program of more frequent ship activations. Within the past year APL has placed 3 ships in ROS. The S/S Meteor out ported at Hunter's Point Naval Shipyard in San Francisco, California together with the Cape Inscription and Cape Intrepid located at the Port of Beaumont/Orange, Texas. These vessels are all high visibility RO/RO ships and are of great military utility in transporting vehicles and other wheeled equipment.

We have been required to activate and sea trial the following vessels: the S/S Comet, Meteor, Cape Inscription, Cape Intrepid, Cape Isabel and the Cape Breton. The Comet, Meteor, Cape Isabel, Cape Intrepid and Cape Inscription have been ROS crewed vessels on and off during the opening months of the new program. In each case the vessels were capable of being tendered to the Military Sealift Command well under the required deadlines. The principal reasons for this have been the experience and familiarity of the ROS crew with the vessel. The readiness of these vessels has been tested and they have passed real time tests with flying colors. We have concluded that the out ported ROS vessel program is very effective and that it is indeed a true readiness program in the substance and spirit called for by Secretary of Defense Perry this year.

The National Defense Transportation Association (NDTA) Sealift Committee RRF Study Report utilizing cargo data from the Mobility Requirements Study and cargo delivery requirements provided by USTRANSCOM has determined that the RRF, in order to perform its assigned mission, must be comprised of the following:

1. 52 vessels with Activation Notice C1 to C4 based upon there being:

   a) 10 ships ROS 4 day status,

   b) 42 ships ROS 5 day status.

2. 26 ships with Activation Notice C5 to C15.

3. Total: 10 ships ROS 4 status, 68 ships ROS 5 status.

The ROS-4 program consists of 10-man crews on out ported RO/RO vessels. The 68 ship program for ROS 5 vessels consists of 14-man crews tending 2 out ported vessels with the ships being activated every year (dock trial one year, sea trial the next). This presents the highest state of readiness at the lowest cost.

The net crewing effect is that 100 highly experienced and qualified deep sea mariners are employed in the 10 ship ROS 4

program, and that 476 people are directly employed in the 68 ship ROS 5 program. These 576 people plus the necessary relief personnel pipeline of 25% form a cadre of over 700 people with a high level of familiarity and experience with the various vessels problems, requirements, etc. In our view this is the absolute minimum number of people necessary to maintain the RRF in the most minimal state of crew readiness. This addresses only the crew readiness issue. We can see no alternative except the early development of a National Maritime Policy which fosters and results in a strong commercial fleet capable of crewing and supporting activation of the Ready Reserve Force.

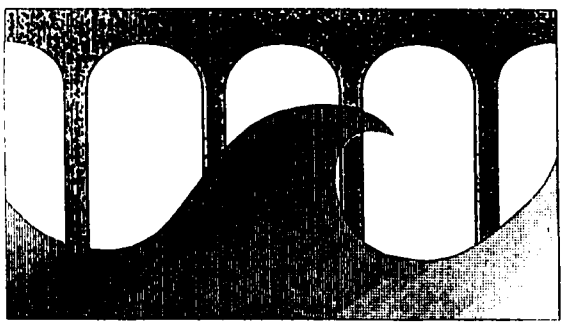
CONCLUSION

In the absence of a Maritime Reform Policy which could result in the re-vitalization of the U.S.-flag Merchant Marine, one capable of supporting sufficient seagoing positions to guarantee a large pool of the proper mix of deck, engine, and shoreside support personnel from which to draw upon to man the RRF, the only viable option, with its attendant cost and military risk, is the maintenance and strengthening of the Reduced Operating Status program to meet the nation's sealift readiness requirements and ONLY the readiness need, NOT the manning need required to actually sail the fleet. The RRF program must have the same priority for funding as any other element of the sealift program. The total manning requirements for the RRF, prudently balancing affordability and military risk, can only be met by a viable U.S.-flag Merchant Marine.

7

"Defining Issues" in Manning the RRF—Charles A. Bookman, Marine Board, National Research Council

Marine Board



"Defining Issues" in Manning the RRF

Marine Board
National Research Council

NAS Role

- Independent advisor to the nation on scientific and technical matters
- NRC is principal operating agency of the National Academy of Sciences
- Marine Board is NRC operating unit which advises on:
  - *use of the nation's ocean and coastal resources*
  - *health of the nation's marine and maritime industries*

Marine Board
National Research Council

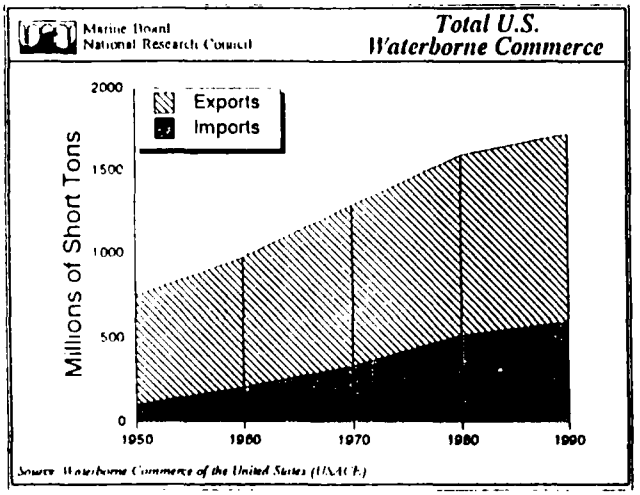
Issues Addressed at Recent Marine Board Meetings

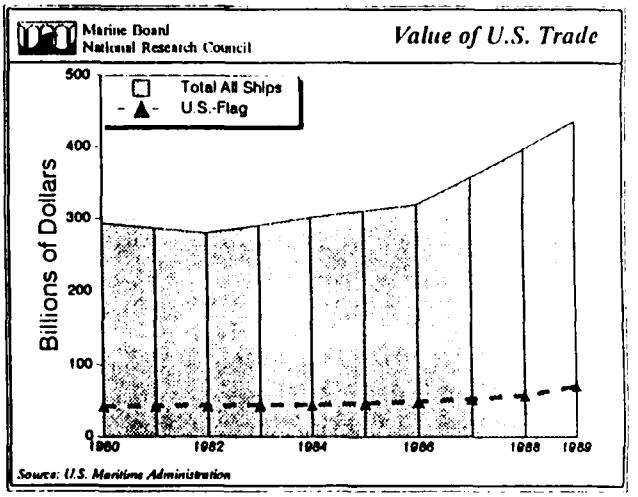
- Maritime Revitalization
- Defense Utility of Commercial Fleet
- Defense Conversion

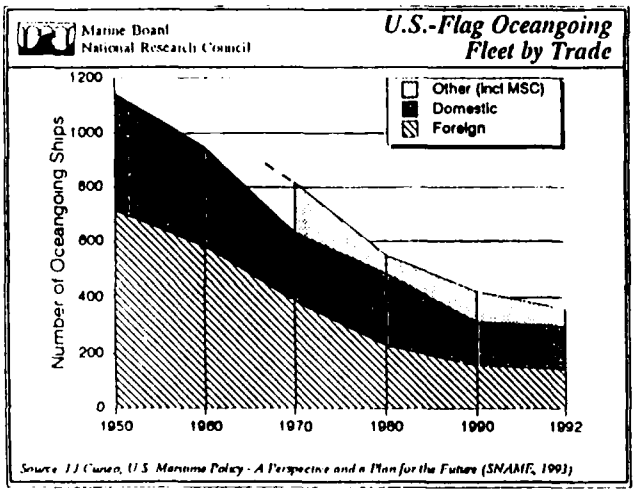
Marine Board
National Research Council

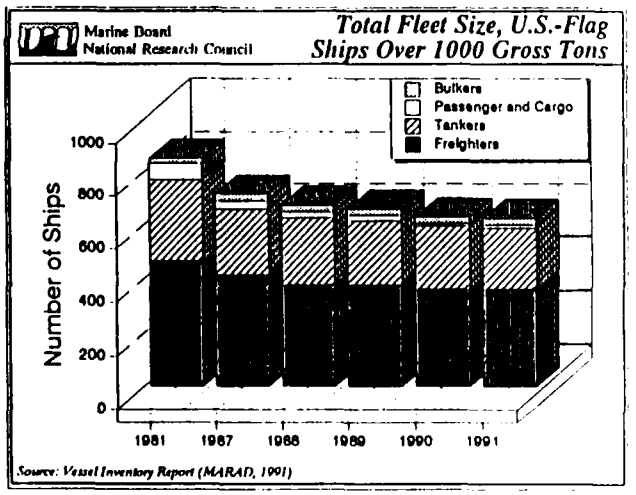
Marine Board Reports Relevant to RRF Manning

- Crew Size and Maritime Safety (NRC, 1990)
- Minding the Helm: Marine Navigation and Piloting (in press)
- Synthetic Voyages: Ship Bridge Simulation for Training and Licensing (preliminary title, in draft)


Marine Board
National Research Council
Total U.S.
Waterborne Commerce
Millions of Short Tons
2000
1500
1000
500
0
Exports
Imports
1950
1960
1970
1980
1990
Source: Waterborne Commerce of the United States (USACE)


Marine Board
National Research Council
Value of U.S. Trade
Billions of Dollars
500
400
300
200
100
0
Total All Ships
U.S.-Flag
1980
1982
1984
1986
1988
1989
Source: U.S. Maritime Administration


Marine Board
National Research Council
U.S.-Flag Oceangoing
Fleet by Trade
Number of Oceangoing Ships
1200
1000
800
600
400
200
0
Other (Incl MSC)
Domestic
Foreign
1950
1960
1970
1980
1990
1992
Source: J.J. Corbett, U.S. Maritime Policy - A Perspective and a Plan for the Future (SNAME, 1993)


Marine Board
National Research Council
Total Fleet Size, U.S.-Flag
Ships Over 1000 Gross Tons
Number of Ships
1000
800
600
400
200
0
Bulkers
Passenger and Cargo
Tankers
Freighters
1986
1987
1988
1989
1990
1991
Source: Vessel Inventory Report (MARAD, 1991)

2

Marine Board
National Research Council

Manning Trends

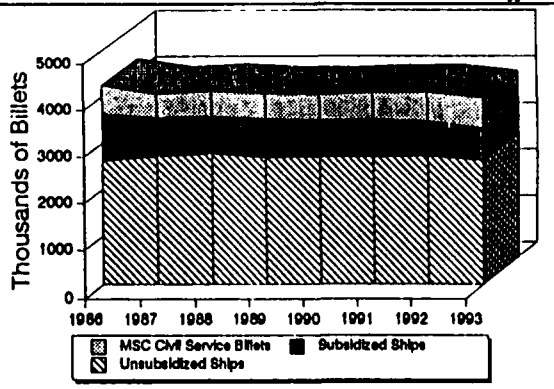
Average Crew Size

- Mid 60s 45
- Present U.S. 21
- Present Europe 14
- Present Japan 11

Source: Crew Size and Maritime Safety (NRC, 1990)

Marine Board
National Research Council

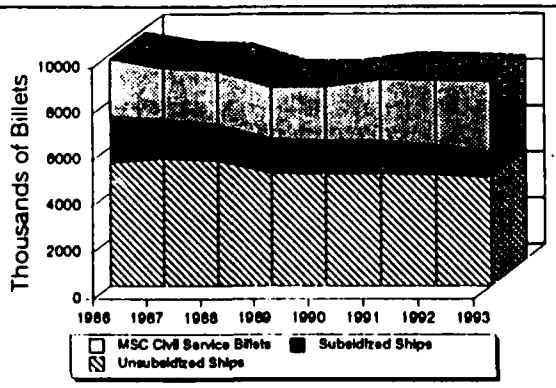
Oceangoing Shipboard Jobs: Licensed Officers



Source: MARAD

Marine Board
National Research Council

Oceangoing Shipboard Jobs: Unlicensed Personnel



Source: MARAD

Marine Board
National Research Council

Trends in Crew Availability

- Number of U.S.-flag ships continues to decrease
- Opportunities for sea service are decreasing
- Jobs Restructuring/Skills Changing
- Competition for the labor pool

Marine Board
National Research Council

Maritime Revitalization

- Two Separate Programs
  - *Strengthening America's Shipyards*
  - *Maritime Security Program*
- No Direct Link Between Programs

Marine Board
National Research Council

Strengthening America's Shipyards

- **Ensure fair international trade**
  - *Negotiate through OECD*
  - *End foreign shipbuilding subsidies*
- **Improve competiveness**
  - *MARITECH - Manufacturing and Information Technologies*
  - *Industry-initiated projects*
  - *Government and industry cost-sharing*
- **Eliminate unnecessary government regulation**
  - *DOD - Acquisition reform*
  - *USCG - Standardize international construction standards*
  - *OSHA - Update standards*
- **Finance ship sales**
  - *Title XI loan guarantees*
  - *Available to foreign carriers*
- **Assist international marketing**

Marine Board
National Research Council

Maritime Security Program

- Support 52 Liner Ships
  - *$2.5 million/ship/year thru 1997*
  - *$2 million/ship/year thru 2004*
- Commercially and militarily useful ships
- Deregulation
  - *No trade route or service regulations*
  - *OK to operate foreign-flag feeder vessels*

Marine Board
National Research Council

Nature of the Threat

- **Recent Military Deployments Requiring Sealift**
  - *Single theater (e.g. Desert Shield/Storm; Somalia)*
  - *Secure sea lines of communication*
  - *Broad allied & international support*
  - *Allied & non-aligned foreign-flag bottoms available on charter*
  - *Relatively short duration*
- **Uncertain Character of Future Crises Requiring Sealift**
  - *Single or multiple theaters?*
  - *Secure or challenged sea lines of communication?*
  - *Broad or narrow allied & international support?*
  - *Allied & non-aligned bottoms available?*
  - *Limited or extended crisis (and sealift requirements)?*

4

Marine Board
National Research Council

Perspectives on Manning the RRF

- **Appropriate goals**
  - *Man the projected RRF? or*
  - *Harsher contingencies?*
- **Skills needed in the maritime reserve force**
  - *Has anyone done a functional analysis and is it adequate?*
  - *What additional knowledge and skills will be required over and above normal peacetime manning requirements?*
- **Potential personnel resource pools**
  - *Have the pools been adequately identified with respect to functional needs, capabilities, and availability?*
- **Mensures to restore, maintain, and develop knowledge and skills**

Marine Board
National Research Council

Skills Needed

- Navigation
- Piloting
- Shiphandling
- Using assist tugs
- Naval Control of Shipping
- Wartime C3I
- Damage Control
- Cargo Handling
- Explosives Loading
- Physical Security
- Port Operations
- Other?

Marine Board
National Research Council

Potential Personnel Resource Pools

- Merchant marine personnel
- Coastwise shipping
- U.S.-flag foreign trade shipping
- U.S. mariners serving aboard foreign flag ships not under U.S. effective control
- Shore-based maritime academy grads
- Uniformed services
- Towing industry
- Fisheries

Marine Board
National Research Council

Matrix Analysis to Understand the Potential Contributions of the Pools

Functions

Personnel Resource Pools	Wartime C3I	Cargo Handling	Port Ops	etc.
Merchant Marine Personnel				
Coastwise Shipping				
USNR				
USCG/ USCGR				
Towing Industry				
etc.				

Skills

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Marine Board
National Research Council

Developing a Program to Address the National Need

- Clear statement of goals
- Analyze skills needed
- Assess potential of personnel resource pools
- Matrix pools & functions to provide point of departure for program design
- Attend to education training base

Marine Board
National Research Council

NRC Assessment in Planning

Maritime Education, Training & Licensing

Goal: To chart the course for improvements in career preparation and career-long skill development and training to improve professional competency, and to assure maritime safety and environmental protection.

Marine Board
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Issues

- Acquiring and maintaining professional competence (PC)

$$PC = \sum (Knowledge, Skills, Experience)$$

- Upgrading skills, knowledge (e.g. to use new technology)
- Assuring professional competence
- Implications/readiness for mobilization

Marine Board
National Research Council

More Issues

- Are we training undergraduates to be captains/senior managers at 22?
- What skills and knowledge are needed at the entry level?
- How should those skills be acquired and enhanced during a career?
- What are the implications for training? For licensing?

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GAO Ready Reserve Force Crewing Workshop—Jerome E. Joseph, American Maritime Officers

GAO READY RESERVE FORCE CREWING WORKSHOP

Presented by: Jerome E. Joseph
Executive Vice President
American Maritime Officers

INTRODUCTION:

I am greatly honored and pleased to be here representing American Maritime Officers, an organization which primarily represents, through collective bargaining, USCG licensed merchant marine officers employed on U.S. flag merchant ships. The vessels upon which our members are employed trade in the Great Lakes, inland waters and on the coasts of the United States as well as upon the oceans of the world. We also have contracts with several companies who, in turn, have contracts with the Maritime Administration for the maintenance and operation of Ready Reserve Force (RRF) fleet the subject of this workshop.

BACKGROUND:

When the "balloon" went up signalling the beginning of Operation Desert Shield, the commercial side of the United State Maritime Industry was called upon to serve as we did in every other war/emergency in which our Nation was involved. Before we get too involved, let me say that I will not engage in statistical rhetoric as to the significant role the U.S. flag merchant marine played in past wars and police actions where and when our Nation required its services. That part of history is well documented and known to all, but having said this, the Industry's importance is not to be minimized merely because it is not repeated here. I will say that this Industry is vital to our national security and is asked to serve two masters. One master is our Nation when in times of need and the other is the financial bottom line when no military scenario requires the

services of this Industry. During emergencies we are romanced like a spurned lover and during peace we are left to fend for ourselves to face foreign competition which is at times unfair as well as insurmountable. We, Americans, can compete head to head with foreigners only if one of the two prospects occur: foreign standards of living come up to our level or ours go down to theirs. Neither option is acceptable.

At the very beginning of DESERT SHIELD, surge requirements of material and troops, as everyone here knows, had to be accomplished in the most expeditious and effective manner. Of course, at that time no one could possibly have known the insane Hussein would allow the Coalition, commanded by the United States, all the time in the world to build-up its forces. The surge requirements were satisfied in all respects or nearly so. The sustainment of the constant flow of troops and material was also accomplished to command requirements with over 90% of same delivered to the beaches by ships. The RRF ships played a significant part in the carriage of surge and sustainment requirements as did the FAST SEALIFT SHIPS (FSS) and the MARITIME PREPOSITIONED SHIPS (MPS) along with many chartered-in commercial U.S. and foreign flagged vessels. For AMO's part, we supplied Licensed Officers to 43 activated RRF ships, all 8 FSS's and the MPS's which were engaged in this operation while maintaining our contractual commitments to commercial ships and a host of other MSC chartered vessels. In fact, the first vessels to arrive at the Persian Gulf were the AMO contracted MPS's for the U.S. Marine Corp. MSC's Commandant stated that during the height of

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DESERT SHIELD/DESERT STORM there was a ship every 30 miles from the United States to the Persian Gulf.

While there may be some comfort in the success of the mission of DESERT SHIELD/DESERT STORM along with the fulfillment of the sealift requirements, there were enough peculiarities in that operation which we can be assured will not exist in future actions. Permit me to list some of our observations:

1. This war was acted out on the world stage with worldwide public support and prosecuted by a Coalition consisting of many nations;

2. The Coalition was able to build-up its forces for about 6 months prior to any military action without interruption;

3. The shooting started after a completed build-up of friendly forces and supplies on the Coalition's time schedule;

4. The offending nation which was billed as having the third strongest army in the world had no navy or air force worth talking about;

5. There were no ships lost due to enemy action all through this Operation; and

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6. Because there was no threat to the sea lanes, the Coalition was not required to utilize forces, naval or air, to protect the flow of supplies.

To have a great deal of comfort, other than the humanistic National pride inherent in a victory of this magnitude, from this war is indeed foolhardy to say the least. This engagement, now history, will never be recreated again. Future engagements will not be prosecuted with the same favorable circumstances. That is favorable to our team. We must anticipate a more formidable enemy; One which will have an air force and navy capable of reeking havoc on the high seas interrupting the flow of goods and personnel. One which will not allow the engagement to be conducted on their enemy's time table. One which will have some ability to stop, by force or by economic threat, the use of other national flag ships required for the prosecution of the action by the United States.

DISCUSSION:

It is not for me or any other civilian to advise the military on how to engage an enemy, however, we will opine that the next enemy in war will be quite different than the last. Therefore, war scenarios must be planned on a "go it alone" basis because when we are committing American lives to an effort we should be prepared for the worst case scenario. This means no planned dependence on others for equipment or personnel of war and the ships to carry our material to our troops. There is no doubt in my mind that if the sea lanes were vulnerable to attack during DESERT SHIELD/DESERT STORM that the

number of chartered foreign flag ships and their crews would not have been available at any cost.

Defense of our Nation and the prosecution of any engagement in which our Nation is involved should not be dependent on any non-American entity. There can not be any "ifs" in situations where our National Security is in question and American lives are put into harms way.

The military might of any Nation, past, present and future, is limited to the degree of ability to supply personnel and material to the locale of the conflict. History tells us that without a high level of ability to support troops in combat military might does not mean a thing. In past wars, friends, good long time friends, turned down our requests for support for numerous reasons on several occasions. A strong U.S. maritime industry is truly the fourth arm of defense and the only logistical supply unit upon which our troops can rely without question or fear.

The subject of this conference, the RRF fleet, is an attempt to insure that there is a strong logistical link in the defense chain. The purpose of the RRF program is laudable to say the least. However, it contains distinguishable, serious and potentially fatal flaws. First, but not the most important, flaw is the ever growing cost to the Government to maintain idle ships for long periods of time at the level of readiness required by the Department of Defense. Second, is the problem of being able to obtain qualified, experienced mariners in the numbers that will be required for immediate assignment. The problem becomes

more acute with each passing year. Third, the condition of the ships and outdated technology housed on these vessels also becomes a significant factor over the years. Fourth, American shipyards are becoming a vanishing entity. The role of the shipyards in the new RRF fleet readiness plan is diminished somewhat because of Nesting and other new concepts. However, there is and will be a substantial requirement for speedy and effective shipyard repairs to activate the lion share of the RRF fleet.

Others here today will no doubt address the cost to the taxpayer for a program such as the RRF fleet. In the remote chance that no one addresses costs, let me say that it is large and will increase each year. Cost is one thing, but do we get the bang for the buck? With all the dollars spent in the RRF fleet, do we feel comfortable that there is 110% defense reliability for the long term?

The answer is no; there can not be long term reliability because of the inherent flaws contained in this program: Ships get old; industry technology passes them by; the mariners get old; and fewer and fewer new mariners come into the Industry.

I do not advocate the abandonment of the RRF program which includes the maintenance and Reduced Operating Status (ROS) crewing of these vessels. That is the furthest thing from my mind. What is uppermost in my mind along these lines is a modification to the program which will give our military the surge and sustainment sealift capacity it needs, save millions of taxpayers dollars

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and insures the availability of trained and experienced mariners. The best and only way to do all this is to have an active United States flag merchant marine viable to peace and formidable in war along with a RRF program which will insure the availability of those types of vessels needed during war.

I. WITHIN THE RRF PROGRAM:

The RRF Fleet is in existence to insure that the sealift requirements of any combat scenario will be available. Ships are the easiest part of this scheme, however we must recognize that a few out of this program, used in the last confrontation, had problems in making their schedule. The bigger problem is where and how are we going to find the trained and experienced mariners. As the active U.S. flag merchant fleet declines, the dependency on the RRF fleet increases and the number of available experienced and trained seafarers decreases. Even though ships put into the RRF will eventually become old and technologically stagnant, they may be replaced as age and usefulness become counterproductive factors. Manpower needs only one thing to remain available in high numbers... and that is jobs. Again, an active merchant marine solves all problems dealing with war time requirements of sealift capacities except one. The current program costs the navy about one million dollars a year per RRF vessel. MARAD and the Navy are always trying different ideas to reduce cost and not adversely affect the mission of this program. The idea of nesting two vessels side by side while having one ROS crew service both is, we believe, an idea worthy of pursuit and have pledged to support it. (We have the opposite view regarding the merchant marine reserve idea and will not support same but

remain open to further discussions.) But, I can not help harboring the same ugly feeling that over time, the number of mariners required to support this nesting idea and also fill the future need of ships to each's required operational manning will not be there.

Therefore, it is our firm belief that this program should have two parts; an active part and an inactive part:

ACTIVE PART:

Commercially useful vessels in the RRF program should be bareboat chartered to U.S. flag shipowners/operators who wish to do so. The charter hire rate should be at the market rate if the vessel(s) is to compete with other U.S. flag vessels and should be appropriately reduced if such vessel is to compete in trade routes where there are no American flag competitors. Obviously, the terms of the charter must include guarantees that the vessel will be made available to the Navy with the experienced crew when needed. The details of this can be worked without any difficulty through discussions once the Government decides this is a good idea. To help the government decide that this is a good idea let me relate the upside to this idea:

1. The outflow of cash from the Government's coffers becomes an inflow: A. The approximately one million dollar per ship per year cost to maintain the vessel in the RRF program now becomes revenue of somewhere around four million dollars per year; and

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2. The Navy will have a well maintained ship with a trained and experienced crew at no cost while our Government's income is further enhanced because those employed seafarers will be tax paying Americans.

As you can see, the conservatively estimated swing in cash flow will positively affect the budget by about $5,000,000.00 per ship per year not counting income and other tax revenues. Further, a trained manpower pool of American seafarers will be readily available to serve our Nation.

INACTIVE PART:

Many of the types of the vessels required for the logistical defense chain have no commercial application whatsoever, therefore should continue in the RRF program as it is now constituted with nesting, if appropriate, and with ROS crews. Again we endorse the nesting and ROS crewing concept as a way of ensuring that a sufficient number of trained and experienced Officers and crew will be available to activate these vessels when needed. Our endorsement does not include the so called merchant marine reserve program or any variation of same. (However, we stand ready to work with MARAD on manpower problems.) Additionally, at times of emergencies, manning should be a unified effort by all like manpower sources to insure that personnel can be immediately assigned to an activated ship regardless of which ship or who the operator is. At the on set of DESERT SHIELD, we waived all shipping rules and restrictions, closed our school and shipped out our school students and instructors. We also permitted non-members, retirees and others to be assigned to contracted

vessels. Our goal was to keep the flow of supplies to our troops going no matter what. Many former members with appropriate licenses and experience now engaged in unrelated employment ashore asked to be assigned but were given no assurance of keeping their shoreside job after the effort was over. Reemployment rights must be a matter of law for seafarers who volunteer to interrupt their shoreside careers to participate in a National emergency. This should be done now and to the same degree as that right given to participating non-volunteers of our Armed Forces. Let's get the MERCHANT MARINERS REEMPLOYMENT RIGHTS ACT PASSED!!!

COMPLEMENTING PROGRAMS TO THE RRF:

There are a number of ways to complement this program, which will guarantee that a sufficient number of trained and experienced seafarers will be available during emergencies. Many of these ideas will be of no cost to our Government and should not be put into the "protectionism" category. The United States is the only super power in the world and with that title comes demands and expectations by world citizenry to perform miracles and enforce peace wherever violence occurs. There is a huge cost associated with this responsibility. American dollars have built most of the world fleets. For the last two decades, over 95% of our international ocean trade was carried on foreign flag vessels for which we, as the consuming nation of the world, pay in our currency. It is our dollars that pay for the construction of foreign fleets and their use in our trade that causes our merchant fleet to decline each year. It is the U.S. Navy which guarantees the safety of the sea lanes of the world...

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paid for by U.S. taxpayers. A chart that depicts world standing of nations' merchant fleets has to be expanded almost on an annual basis to include the United States. We now rank no better than 16th in the world on a chart that is expanded from 10 when I began my career. Some suggestions of complementing programs are:

I. Amend the scope of cargo preference laws so that more types of vessels are included and insure that one American Industry is not favored over another American Industry.

II. Allow documentation of newly constructed ships on long term bareboat charters to American shipowners/operators for U.S. flag operation.

III. Insure that the demise of our shipyard is not on the horizon by doing away with any practices or policies, domestic or foreign, which adversely affect their ability to compete on a worldwide basis.

IV. Do not pass laws or institute policies which causes the U.S. flag to be even less competitive. Apply equally all such laws and policies to the better than 95% of the ships calling at our ports.

If our Government were to entertain any of these "no cost" concepts, the logistical link in our defense chain will always be unbreakable.

THANK YOU.

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GAO Ready Reserve Force Crewing Workshop—Captain John Walton, International Organization of Masters, Mates, and Pilots

Pursuant to the General Accounting Office (GAO) request that the International Organization of Masters, Mates & Pilots (MM&P), ILA, AFL-CIO respond to crewing policy issues, define the problem and offer suggestions as related to stated observations and objectives -- one is sorely tempted to engage in rhetoric. This, however, solves nothing. Furthermore, the record is full of MM&P's accomplishments in war and peace dating back to and beyond World War II. So, to recite a litany of deeds is but self-serving and not confronting the problem presented.

We are compelled, however, to preface any further discussions of the issues we perceive as important by commenting on the anomality between DOD's needs and deeds. DOD is represented in this context by the Navy through the Military Sealift Command (MSC). So, before we can discuss the problems at hand we must draw from the past - from our history - our heritage. Central to the identity of the U.S. Flag Merchant Mariner are the writings of that great naval historian/strategist Alfred Thayer Mahan, quote:

> "The necessity of a navy, in the restricted sense of the word, springs, therefore, from the existence of peaceful shipping, and disappears with it, except in the case of a nation which has aggressive tendencies, and keeps up a navy merely as a branch of the military establishment."

Why bring up Mahan, one might ask? The answer, simply stated, is that the Mahan philosophy on the definition of seapower has been the fundamental gospel practiced in both war and peace up to and through Desert Storm. Protect the sea lanes for merchant vessels. Protect the U.S.-flag merchant mariners providing logistical support to American troops and their allies, wherever they may be. It seems today, however, that the naval establishment has lost sight of this postulate. Now it appears that the tail may be wagging the dog. Let me explain.

MSC is probably the largest operator of commercial tonnage in the U.S. today. Yet, flatly and openly DOD has resisted giving up

even a small percentage of its multi-billion dollar budget to the cause of commercial carrier revitalization, prompting John Snow, Chairman, CSX Corporation to state, "We can draw an inference from DOD that they can live without us."

If this then is true, and U.S. shipping companies flag out - as the syllogism goes - no ships, no seafarers - no pool of professionals to quickly draw from in surge situations. And, the MM&P is a major provider to the professional seafaring pool.

While the MM&P has demonstrated that it is ever and always ready to put its shoulder to the wheel, as it stands now, the issues at hand are confounded by this dichotomy between DOD needs and deeds - making solutions much more difficult to resolve - regardless of the outcome on budget inclusions for maritime revitalization. These concern potentially active ships and potentially active seafarers. Surge costs for manning dormant RRF vessels are a discrete proposition.

So then, as the MM&P perceives the problem, three major players are involved: (1) the government through DOD; (2) management through the commercial carriers; and (3) labor through the various maritime unions.

Citing the often used three legged stool analogy, all three legs - all three components are equally needed, working in concert for the problems to be solved. If one leg fails, the stool collapses.

In the current scenario, the MM&P represents an integral part of the labor leg. Several of its contract companies husband a portion of the hundred or more RRF ships currently on stream in various states of readiness. The MM&P is a primary supplier of seagoing labor to not only these companies and their RRF vessels, but also to contract companies operating MPS and PREPO ships. MM&P also represents those licensed deck officers (LDO's) who are civil service mariners in the MSC fleet. We provided top quality professional licensed officers on instant notice during the Desert Shield/Desert Storm operation, even providing officers to

vessels under contract to another supplier of labor - both LDO's and engineering officers (LEO's) - when that union was unable to deliver.

We also maintain one of the most advanced seafaring technological training facilities in the nation - providing state of the art simulators of all types for advancement in professional craft. Therefore, we are proud not only of our human resources but of our capital resources as well. Incidentally, the Maritime Institute of Technology and Graduate Studies (MITAGS), of which we so proudly speak, was established during the Viet Nam crisis, at the government's request, as a supplementary training facility to provide sorely needed LDO's for the logistics pipeline. And this was provided by the MM&P at its own expense.

Bringing these resources to the table in light of the lofty demands of DOD and the dwindling supply of qualified seagoing labor, the MM&P suggests avenues of further exploration which neither come from the Book of Revelations nor may they be considered "ex cathedra."

At this point, we wish to emphasize that it is our belief that the most cost effective and reliable way to ensure against manpower shortages in time of crisis is to have a larger, more active peacetime merchant marine. The cost of purchasing and maintaining vessels for the RRF is steep. It is far more practical in an era of budget cutting to have these same vessels privately owned and operated and most importantly, working.

However, at a time when a merchant marine reserve is once again a subject of consideration, it must be remembered that there is nothing new when speaking of merchant marine manning. Dating from the "1108" reservists of World War II, through Sealift Readiness Studies, Civman and Partners at Sea, what the MM&P proposes is a suggested refinement of these historical programs.

Currently under the Ready Reserve Fleet program our contract companies husband fifteen ships. Of these fifteen, four are in 10S status, that is, on standby for full operation with five days

notice. The vessels remain on berth with a skeleton crew of ten seafarers who keep the vessels operational and ready for occupancy -- much like a house in move-in condition.

The MM&P believes that ROS status alone is inadequate, however, in that it does not address the seafarer surge needs should crises arise. Suggested in complement thereto, are the following:

1. A designated cadre of Licensed Officers (LO's) and Unlicensed Personnel (ULP) solicited from within the organizational ranks of the MM&P to be trained and ready for sudden surge recalls;

2. A trained force of LO's and ULP's three times the number required for ships under the operational control of MM&P contracted companies to be the target goal - to account for personnel at sea, or for others not immediately available;

3. DOD will set the standards of training to be required (coursework which will be provided by and at MITAGS). DOD will provide for training costs including transportation, lodging, etc.;

4. DOD will break out several of its RRF RO/RO's, breakbulk vessels, and tankers as well as a hands on training facility. All applicants for ready reserve certification will be obliged to spend two weeks on board for training and familiarizing themselves with RRF vessels. Bed, board, transportation, pay and vessel activity will be provided by DOD and passed through by the husbanding company;

5. The MM&P will maintain records of all applicants at all stages of training from start to and through certification with up-to-date files for immediate contact;

6. Entry into and discharge from the RRF program should be strictly voluntary. Significance of the proposed program is that it is MM&P sponsored and such members who desire to enter the program are obligated to remain in it only as long as they remain union members;

7. Contract companies may require RRF certification as a requisite to the employment of LO's and ULP's;

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8. Age should not be a primary factor in seafarer selection in that empirical evidence demonstrates that the working life span, particularly of LO's, increases with technological change.

While these suggestions remain broad and somewhat crude - it is hoped that they may provide a base for closer examination.

Crewing Sealift Ships in a Crisis: A Proposal for Action—Maritime Administration, Department of Transportation

Paper presented by Bruce J. Carlton, Director, Policy and Plans, Maritime Administration

Crewing Sealift Ships in a Crisis: A Proposal for Action

Submitted by the Maritime Administration
U.S. Department of Transportation

Introduction

In August 1990, the Maritime Administration (MARAD) and the American maritime industry had their first large scale, real time test of the policies and plans for emergency sealift since the establishment of the Ready Reserve Force (RRF) in the mid-1970's. The invasion of Kuwait by Iraq set in motion a massive response by a multinational force lead by the United States: Operations DESERT SHIELD and DESERT STORM. These Operations represented the largest U.S. sealift activity since the Vietnam war.

After-action analyses have been performed on virtually every aspect of these Operations by the Defense Department, the General Accounting Office, several Inspectors General and key agencies like MARAD. Of the many subjects analyzed, the performance of maritime labor in crewing the RRF and other sealift ships was cited frequently in these studies. The consensus view among these various studies is that U.S. civilian maritime labor performed admirably under unusually difficult circumstances. No RRF ship failed to sail due to the lack of qualified crew members, but some ships were delayed at least in part due to late arriving seafarers.

The key source of qualified seafarers, the handful of maritime labor unions, worked cooperatively with their employers (MARAD's ship managers and general agents) and with MARAD officials directly to expedite RRF crewing. Nevertheless, some labor sources were simply expended at various points in time. Stories of "ancient mariners" returning to work on sealift ships to fill out crew rosters outpaced reality, but their presence and contributions were in fact quite important. In the end, maritime labor's performance was recognized officially by a formal invitation to participate in the Victory Parade in Washington, D.C., and the award of a new MARAD merchant marine medal for service in the war zone.

The purpose of this paper is not to add to the already large body of studies and analyses of reserve ship activations and operations, and the role of professional mariners in those activities. That subject has been sufficiently addressed by others, and those reports and analyses are the basis of this GAO-sponsored symposium. Rather, this paper focuses on a general assessment of future capabilities in manning ships quickly in a crisis, and actions that can be taken now to ameliorate likely problems.

Putting the Problem in Perspective

For maritime labor analysts and union officials, the question of whether or not there is a sufficient supply of qualified mariners to fill all available shipboard jobs in normal commercial operations is a trivial matter. With few exceptions, the pace of crewing merchant vessels in peacetime is known, regular and subject to rules established freely in the collective bargaining process. All jobs are filled, either by rotational assignments from the hiring hall, or the still relatively new, permanent company employees. From a crewing perspective, ships sail on time. In point of fact, the real problem for organized labor is securing work from an oversupply of qualified members.

In the maritime industry here and abroad, job rotation is still the norm. In the aggregate, and over a relatively long period of years, maritime labor data show a "persons-to-jobs" ratio around 2.0-2.2 to 1. These data represent individual mariners who at some time in a calendar year have received a U.S. Coast Guard discharge certificate. Since the late 1980's, however, this ratio has been as high as 2.7 to 1, demonstrating a significant "surplus" of labor when measured against the pool of available jobs. We will return to this so-called surplus later in this paper.

As in every other maritime country, the average crew size on modern U.S. ships has declined precipitously in recent years in response to the introduction of labor-saving technology and automation. At the same time, the size of merchant vessels has been growing rapidly. The combined effect of these productivity enhancing trends has been a dramatic decline in shipboard jobs, even as the fleet's cargo capacity has increased.

In 1970, the combined deadweight tonnage of the 931 active and inactive vessels in the U.S.-flag privately-owned fleet was about 15 million dwt (excluding Great Lakes vessels.) This fleet provided nearly 43,000 jobs. In 1992, the number of vessels had declined to 394, and deadweight capacity had increased to about 20 million dwt. However, less than 11,000 jobs were available. Without these productivity increases and concomitant savings in labor costs, the U.S.-flag fleet would have no doubt diminished even more rapidly. Thus the positive developments in productivity for shipowners and the industry overall leads to a substantial dilemma for maritime labor and emergency crewing of reserve sealift ships: the pool of qualified and available seafarers is gradually shrinking.

In addition to this gradually diminishing labor force is the matter of the pace or timing of crewing sealift ships in an actual emergency. In August and September 1990, 45 RRF ships and two T-AVBs were called up for activation by Navy, creating an overnight demand for over 1,400 seafarers. Again in November and December 1990, the second large wave of 34 RRF vessel activations was commenced, with 1,100 new jobs to be filled nearly immediately. Eventually, 79 ships were activated from the RRF and two T-AVBs from the NDRF, creating over 2,500 jobs.

Delays in the arrival of personnel at activation sites and in matching people to their assigned ships, especially key personnel in the engine department, resulted in delays in activating laid-up ships. One special problem has been cited frequently: both activations occurred during normal summer vacation and holiday periods which exacerbated crewing problems. Other problems resulted from inadvertent mismatches of mariners with a specific skill background to ships requiring a different skill or experience base. Again, the result of these unfortunate mismatches was delay in the activation of the ships.

It is interesting to note that once these vessels were activated and running in regular service, the crewing of the ships resembled a large steamship operator's personnel department. Turnover of crew was normal (and even less than usual commercial operations), and no shortages developed in any skilled rating or officer billets. The ships became an important source of new jobs for all labor unions, albeit of a temporary nature.

With this as a brief background, the problem for discussion rests on two dynamic factors:

- o The overall size of the supply of qualified deep-sea mariners is likely to continue to shrink over time in response to an expected contraction in demand (i.e., jobs); and,
- o the pace of crewing reserve ships in a crisis is anything but normal.

The question we are all addressing in this symposium can be stated as follows: given the likelihood of a diminished maritime labor force supply in the not too distant future, and the need to crew laid-up sealift ships almost instantaneously in a crisis, what can be done by government, organized labor and the maritime industry to assure our ability to meet this challenge?

A Seven Point Action Plan

The following discussion represents one viewpoint of the manpower related steps that are necessary if we are going to continue to be able to provide emergency sealift in a crisis. There are without question other actions and proposals likely to be raised by the participants in this symposium, and those ideas and viewpoints are vital to developing consensus for action.

The rest of this paper is organized around a presentation of seven "action items". They are:

1. Enact the President's Maritime Security Program Initiative
2. Enact Reemployment Rights
3. Implement "Reduced Operating Status" (ROS) Crewing of RRF Ships
4. Convene a Union/MARAD Conference on Emergency Crewing
5. Augment the U.S. Coast Guard Seamen's Data Base
6. Reassess Mariner Supply Data and Demand Requirements
7. Consider an Emergency Manpower Program

Action One: **Enact the President's Maritime Security Program Initiative**

On March 16, 1994, the Secretary of Transportation, Federico Peña, publicly introduced the President's legislative initiative to revitalize the United States merchant marine. When taken together with the President's October 1993 shipbuilding initiative for stimulating commercial ship construction in the U.S., this Administration has offered the most ambitious and comprehensive program in several decades to rebuild and reinvigorate America's maritime industries.

No doubt everyone attending this symposium recognizes that the unveiling of this program is the culmination of many years of effort by consecutive Administrations to deal effectively with the decline of our maritime industry, even as we achieve parity with (and frequently exceed) the foreign competition in the application of technology and the attainment of world class efficiencies. This effort from the Executive Branch has been matched by successive Congresses, led by committed Committee Chairs and Ranking Minority members. The passage of H.R. 2151 in the House in 1993 is the latest example of Congressional efforts on behalf of the maritime industry. The process has consumed nearly 20 years of analysis, studies and hearings. The introduction of H.R. 4003 and S. 1945 in the 103rd Congress represents perhaps the last opportunity for a successful joint effort by the Administration, Congress and the industry to maintain a U.S.-flag merchant marine in the years ahead.

Why is enactment of this legislation important to the crewing of ships in a crisis? The answer is so obvious as to be frequently overlooked in public discussions of emergency sealift. In our view, the single best way to insure we will be able to crew reserve sealift ships rapidly in a crisis with skilled, experienced mariners is to have a vigorous employment base for those persons during prolonged periods of peace. Quality jobs on active ships engaged in the U.S. foreign and domestic commerce provide a means for professional mariners to support themselves and their families. Maintaining a significant number of modern merchant ships provides many other benefits as well, but jobs are our focus today.

Unfortunately, and well understood by us, the converse is also just as obvious: the absence of full time work for U.S. citizen mariners will drive them away from this segment of our labor force, most likely to other occupations or professions which may or may not be related to their professional maritime skills.

If we have a large "pool" of mariners actively employed on U.S.-flag ships (or awaiting their next rotational assignments), we gain both availability and recency of experience, two factors that are critical to the successful crewing of reserve ships. In addition to their work experience, working seafarers also receive training at the various schools maintained and operated by the maritime unions. These individuals represent the most robust source of reserve manpower, both from a qualitative and quantitative perspective. Thus while the Administration has proposed legislation to revitalize the merchant marine for many related reasons, the importance of the enactment of this legislation for emergency manpower reasons is certainly one of the most compelling. MARAD firmly believes that the crews assembled

for reserve ship activations and operations should come from the civilian labor force via our contracted ship managers and general agents. Enacting this legislation represents the most important measure we can take collectively to insure that there is a maritime labor force in the years ahead for this purpose.

Action Two: **Enact Reemployment Rights**

Our second proposed action to alleviate problems in crewing reserve ships is to enact reemployment rights for civilian mariners who wish to leave their present job to volunteer for a temporary job on board a MARAD or Navy sealift ship. At present, only military reservists recalled to active duty enjoy this benefit.

While we have no reliable means to quantify accurately the number of non-sailing but still actively working (and qualified) mariners, we are convinced there are substantial numbers of such people, both licensed officers and unlicensed personnel. Throughout all of Operations DESERT SHIELD/STORM, MARAD's Office of Maritime Labor and Training received dozens of inquiries from former (but still qualified) mariners asking whether they had the same rights to return to their present jobs as military reservists. We explained that no such right existed in U.S. law, but that we had prepared a written generic exhortation to employers, asking for their understanding and cooperation in allowing such individuals to take extended leave for the Persian Gulf war without incurring the penalty of losing their job. Not surprisingly, very few callers even asked for this letter, given the high risk of long term unemployment in the absence of a legal right to reemployment. (Included here were active mariners working for various ship operators who would not release their employees to take jobs on our reserve ships.) Our subsequent research of this subject revealed that even for military reservists, the preservation of civilian employment in the face of a recall to active duty has been far from perfect.

In a subject area usually awash with controversies, the issue of reemployment rights for civilian mariners needed in a crisis appears to have achieved a nearly unanimous level of support. Among those who have signalled their support for such legislation are organized labor, maritime academy alumni organizations, the Department of Defense, the Administration and certainly the House of Representatives. We were also pleased to learn that the Vice President's National Performance Review (NPR) singled out this subject as a priority action to achieve a greatly enhanced sealift crewing capability at no cost to the federal budget.

In order to tap this source of skilled labor, legislation must be passed. We were greatly pleased by Chairman Studds' and Chairman Lipinski's efforts on this front in moving H.R. 1109 through the House Merchant Marine and Fisheries Committee and to the floor for passage by the House early last year. That same initiative was repeated in the Committee's work on H.R. 3400, a compendium of budget rescissions and NPR recommendations, late in 1993. We are anxious to see this action taken up in the Senate, and we look forward to working with the Commerce Committee to achieve enactment in 1994.

Enacting reemployment rights would have no budget impact and would affirm the long held perspective of MARAD and the maritime industry (particularly organized labor) that America's civilian mariners can be counted on for future crises just as they have demonstrated in all prior wars.

Once this legislation is signed into law, a related action appears to be necessary in order to fully understand the degree to which we will look to this group of mariners working in shoreside jobs. We would propose a joint study involving MARAD, the Coast Guard, labor unions, maritime academies and others to estimate the numbers of individuals who might be able to take advantage of guaranteed reemployment rights in an emergency. This analysis should be designed to identify the best sources of such mariners, their skill levels and ratings, the recency of their seagoing employment, etc. Such a study should reveal at least the magnitude of this important, high quality source of temporary supplemental labor.

Action Three: **Implement "Reduced Operating Status" (ROS) Crewing of RRF Ships**

Over the last two years, and particularly in response to the lessons learned in DESERT SHIELD/STORM, MARAD has moved to design, fund and implement a higher level of readiness and responsiveness in the RRF generally, and certain high priority ships specifically, like the roll-on/roll-off component of the RRF. One aspect of this action is the implementation of a "reduced operating status" (ROS) program for these high priority ships wherein selected vessels receive a partial crew for on board maintenance and repair. It is our expectation these ships would be able to meet a four-day readiness requirement, thus the ROS-4 designation.

The benefits from this program for ensuring a higher level of physical preparedness are obvious. Focusing a higher degree of continuous maintenance on these ships greatly increases their readiness level and lessens the likelihood of mechanical failures at the point of activation. The system has been used by Navy with good success for the Fast Sealift Ships. MARAD's version is more modest in cost, but based on the same readiness criteria (four days).

The added benefits for alleviating crewing problems are equally obvious. First, these are real, full time jobs filled by qualified marine personnel through MARAD's ship managers. These jobs have expanded the base of maritime employment, a move which is necessary to retain skilled professionals. The ROS program began in 1992, and we have already seen the benefits of this effort. Activations of ROS designated ships have been on (or ahead of) schedule. In 1995, we plan to have all 29 RO/ROs in the RRF either in active status (with full crews) supporting DOD operations, or in ROS with crews of 10. Additionally, we have proposed to DOD to have 26 RRF ships enter a five day readiness category (ROS-5) also with crews of 10 on board. When combined with the jobs on the OPDS tankers in prepositioning, the total seafarer employment being generated by MARAD's enhanced readiness efforts would be 769 billets in 1995.

Secondly, the people who work aboard these ROS ships will become intimately familiar with the vessels and their particular strengths and weaknesses. That knowledge is critically important during an activation in order to avoid costly and time consuming start-up problems. Thirdly, these partial crews will form the nucleus of the required operating crew should an activation order be received, thus greatly reducing the overall burden of assembling a full crew quickly. Lastly, their familiarity with the ship will greatly improve the transition of the new arrivals to a level of full competence on what may likely be a new and unfamiliar ship. We are particularly pleased to note that every ROS crew member assigned to an RRF vessel ordered to activation has stayed with his or her ship, on the job and proving the value of this program.

ROS-4 ships have the following basic partial crew structure (10 persons per ship): Chief Engineer, 1st Assistant Engineer, 2nd Assistant Engineer, 3rd Assistant Engineer, QMED, Electrician, Chief Mate, Bosun, Steward/Cook, and Steward/Utility. These jobs are essential to improving the readiness of the selected RRF ships. Not surprisingly, they closely match the key people needed to commence a full activation. By having them on board at the beginning of any future activation we expect to circumvent many of the delays experienced in the Persian Gulf war breakout of the fleet, in part attributable to late arriving key personnel.

MARAD's ROS initiative underscores our belief in and reliance on American maritime labor as the key source of reliable, experienced personnel for crewing reserve ships in a crisis.

Action Four: **Convene a Union/MARAD Conference on Emergency Crewing**

MARAD has repeatedly stated that the primary source of personnel for the RRF (and Navy-managed sealift ships) is the maritime labor unions, through their collective bargaining agreements with our Ship Managers and General Agents. Given this expectation on our part, is there a set of actions which the unions themselves could undertake in order to improve their ability to provide personnel for the ships on which they hold contracts? We believe there is.

During the Persian Gulf crisis, we experienced several events in which the unions were having an extremely difficult time in providing required personnel on time; they were simply "tapped out" of people. Because of the unions' desire to fulfill their contract obligations, various arrangements were made to transfer personnel between unions in order to augment their supply of qualified people on a temporary basis. The administrative requirements between the affected unions were known and understood by all parties, but several days were lost to that administrative process. Nevertheless, the end result was that ships were crewed because barriers were dropped.

We learned, too, that some union pension plan rules prohibit a return to work by a retiree, even in a crisis; the penalty for violating the rule includes the loss of a pension. A valuable source of experienced and able people was thereby shut off from our supply.

MARAD would like to explore matters like these (and no doubt others) in a structured way with the leadership of all of the maritime unions, with MARAD serving as a facilitator. We would like to identify all potential administrative and rule-based barriers to temporarily augmenting the supply of labor during a crisis, and then work with the unions on a mutually cooperative basis to determine what actions might be taken to reduce these barriers. Our goal would be to establish a stand-by system wherein the unions have the ability to maximize the flow of trained and experienced people to jobs on reserve ships. Needless to say, this system would revert to normal conditions once the crisis has ended.

We recognize that the next several months are an especially busy time for most of the unions (and their labor relations counterparts in management). In light of this, we propose an initial meeting sometime in the fall of 1994 to discuss this matter further and determine a plan of work for both MARAD and the unions.

We would also propose to conduct a similar meeting with employers, especially those companies that have moved toward establishing permanent shipboard jobs. Like the meeting with the unions, the subject of our discussions would be an examination of ways the companies could release employees on a temporary basis to crew reserve ships, without harming their own operations.

Action Five: **Augment the U.S. Coast Guard Seamen's Data Base**

In the United States, the Coast Guard serves the dual role of certifying the competency of seafarers, and then tracking their work record through articles and discharges. These functions give rise to a potentially valuable manpower augmentation tool that could be made available to the seagoing unions.

We have in mind a modification to the Coast Guard's existing manpower data system which would allow a seafarer (licensed and unlicensed) to indicate his or her willingness to be contacted either by a maritime labor union or a government agency (MARAD) in a sealift crisis if crewing shortfalls are anticipated. To be effective, such a system would have to be strictly voluntary for seafarers, and any data collected in this manner (names, addresses, telephone numbers, etc.) would have to be protected from disclosure by the Privacy Act. The Coast Guard's data systems offer several useful points of entry for this information: the issuance of original licenses and Merchant Mariner Documents, the renewal of these credentials, and in signing off a voyage. To the degree this information and its collection can be fitted to the Coast Guard's existing (and evolving) data systems without undue disruption, overall administrative burden can likely be minimized. We are very interested in the reactions of the seafaring community to this proposal, and trust it will be seen not as an invasion of privacy but solely as a tool to be made available to the unions to assist in their efforts to provide manpower to ships quickly.

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Action Six: **Reassess Mariner Supply Data and Demand Requirements**

The question of the actual "availability" of the pool of civilian mariners actively employed (or seeking employment) aboard U.S.-flag vessels is a persistent theme in most analyses and discussions of this subject. In previous analyses of the supply and demand for seafarers in a crisis, we have tended to deal with this issue by assuming that some percentage (usually very high) of the seagoing labor force is ready, willing and able to volunteer for a job on a MARAD or Navy sealift vessel. We also tend to assume that there will be little (or no) turnover of personnel in the "surge" phase, and only slightly more during the prolonged "resupply" period.

These same issues appeared in real time during Operations DESERT SHIELD/STORM. The question was posed as follows: If our labor force data show manpower-to-billet ratios of over 2.5 to 1, where are all of the "surplus" workers and why are we experiencing delays in crewing these ships? I suggest that the answer has (at least) three parts.

First, the nature of the so-called "surplus" has changed considerably over the years. Many individuals who are not sailing at this moment are in fact just between jobs. They have become part of a regular rotation, and in a growing number of cases, they have become part of a permanent crew. Stated otherwise, they may not be working aboard a ship but they are nevertheless unavailable for a temporary job on a reserve ship.

Second, the jobs created on RRF ships are not long term, and the ships themselves tend to be older and less desirable in the factors of human comfort. If given a choice, many mariners (but certainly not all) would have a natural preference for work aboard a new, active ship as opposed to an old, reserve ship.

Lastly, the data that describe this manpower supply no doubt overstate the size of the pool of labor. MARAD (with source data from Coast Guard) has built a long run, consistent data base describing the mariner labor force using discharge certificates as the key piece of "evidence" of participation in this kind of work. However, the use of aggregated labor force participation data means that part-time and casual workers are also captured and counted. We need to re-examine this data and remove those individuals who are not truly in the maritime labor force full time. By doing so we will have a far better idea of the real magnitude of this labor pool. Of course, those culled from the group represent at least a potential source of short term reserve labor. However, the various reasons they have opted for less than full time seagoing employment will likely tend to work against this presumption; e.g., some individuals may be employed elsewhere and have only seasonal availability (like school teachers).

Another area now being studied by the DOD's Joint Staff is an assessment of manpower requirements. This "Bottom-Up Review Update" (BURU) study will take into account the many changes that are likely in the size and composition of the RRF. For many years analysts have focused on an RRF sizing of 140 or more ships; that goal is being reexamined.

Likewise, much thought is being given to changing the mix of ships in the RRF to include removing as many as 28 breakbulk (high crew) ships and replacing them with capacity from active vessels (including containerships). When combined with the partial crewing initiatives for RRF ships discussed above, we are presented with a substantially different basis on which to base our manpower projections and requirements. MARAD will be prepared to do the analysis and test it in the industry as soon as the RRF sizing decisions are made. We may find that with a more comprehensive examination of the available workforce, and a reassessment of our needs, the magnitude of the emergency manning problem may have altered considerably.

Action Seven: **Consider an Emergency Manpower Program**

The last action item I would propose as part of a plan to improve our ability to crew reserve ships quickly in a crisis is to consider an emergency manpower program. Presenting this proposal last was intentional. The above described six action items need to be undertaken first as a matter of priority.

The emergency manpower program I am discussing here is not a "reserve". Rather, the program would be built on the concept of ship activation teams. Each team of 10 to 15 people would be responsible for specific tasks or actions. At the present time, the highest priority task for these teams is to assist in the activation of reserve fleet ships, most likely those ships of relatively high priority use but not in a partially crewed ROS condition. Each team (or group of teams) would be comprised of individuals with special expertise in particular types of ships and power plants.

I have said several times in this paper that our reliance on the maritime unions to crew the RRF is central to our planning. This proposal supports that premise. The teams' quick response to activations would give the unions more time to assemble regular crews from the commercial sector and direct them to their ships. The teams would step aside to union crews reporting to their jobs. In other words, the teams would not compete for RRF jobs with the unions; rather, they would function as a safety net to fill crew positions missing or unavailable from the union. In that case team members would be tasked with filling those slots only for the period of time union crews are not available.

The teams would be developed strictly on a voluntary basis from among non-active seafarers, for two reasons: first, so as not to compete with the unions for the same people, and second because these individuals would have the requisite skill and experience base. Participants would be sought from both officer and unlicensed ranks in numbers proportional to projected needs. On a continuing basis, special refresher courses (procured by MARAD from both union school and maritime academy sources) would be made available to team members in such topics as radar, steam engineering, etc. Ideally, team members would also participate in RRF activations, dock trials and sea trials. Participants would be paid by MARAD for their time at the prevailing industry wage rate for their shipboard job rating (master, chief mate, oiler, etc.). Their travel and per diem costs would also be paid by MARAD. The

success of this initiative rests on its acceptance by the maritime industry, in particular the maritime labor unions, and on its clear definition as a rapid response group of teams with discrete functions.

Conclusion

Crewing reserve ships in the future could be a significant problem, depending on such factors as the size of our maritime labor force, the pace of the ship activations, the length of the crisis, etc. The seven action items identified here probably do not exhaust all of the possible remedial actions that could impact this problem, but we believe they set an appropriate policy course. All seven actions underscore our fundamental reliance on civilian seafarers to fill these critical jobs. We look forward to working with both maritime labor and management to implement these, and other, actions.

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Strategies for Crewing the Ready Reserve Force—Mary E. Lyons, PhD., California Maritime Academy

STRATEGIES FOR CREWING THE READY RESERVE FORCE

This workshop on crewing for the Ready Reserve Force (RRF) opened with the presentation of six panelists. It is now my intention to identify the particular thesis offered by each speaker, to locate the grounds of agreement they share, and to indicate some of the assumptions that informed their perspectives, especially those assumptions that might bear further examination. From this material, it may be easier to focus on some controversial issues and potential solutions that have emerged throughout the panelists' discussions.

Given the nature of the presentations thus far, we might agree that this workshop could bear a subtitle, the "Let's Get Real Conference:" let's get real because we are trying desperately to come to some realistic understanding of what our current status is with regard to the Ready Reserve Force, and particularly with regard to the crewing of that force; let's get real in terms of honesty about where are our weaknesses are as well as our strengths. A forum like this that represents a broad base of constituents is a safe and important place for trying to be real and honest about what the problems are. I will proceed from the presumption that the discussion that follows my summary will be as forthright and as candid as the previous speakers.

In brief, I mention the thesis of each panelist. First, we heard from Mr. James Johnson who represented a perspective from the Department of Defense. He said that the nation's sealift needs are still not firmly established, but that those crewing needs we establish must match the sealift needs. He identified maritime labor and reserve personnel as the likely sources for crewing. Captain McGowan offered the perspective of the Coast Guard. He emphasized that the United States Coast Guard can facilitate crewing in an emergency by relaxing regulations, upgrading mariner documents, and taking other measures that would hasten the availability of personnel for crewing. He also stressed the U.S. Coast Guard's ability to create and sustain a national data base of all licensed and documented mariners who may be available to crew RRF vessels. Admiral Seiberlich represented industry's perspective by talking about the importance of

seeing the Ready Reserve Force in the context of all U.S. shipping, and its crewing as well. He emphasized the importance of measuring all the issues attending to the Ready Reserve Force--especially its crewing needs--against the touchstones of affordability and military risk. From the National Research Council, Mr. Charles Bookman stressed that national maritime reform is absolutely essential if we are going to continue a pipe line of crewing for the Ready Reserve Force. He offered evidence that, among other things, suggested that careers at sea are becoming increasingly unattractive. Additionally, he noted the inherent difficulties posed by activating and crewing the Ready Reserve Force vessels that often require different technological expertise than is currently practiced in the commercial sector. Representing the American Maritime Officers, Mr. Jerome Joseph emphasized strongly that the best and only way to meet our contingency needs is to support actively the United States Merchant Marine and to consider that body as the most reliable source for activating the Ready Reserve Force. Captain Walton followed from the Master, Mates, and Pilots. Captain Walton underscored what Mr. Joseph had already asserted and made the point that we cannot depend on foreign flag carriers to provide our logistic support during a contingency. Finally, Mr. Bruce Carlton from the Maritime Administration offered his 7 point plan that argued for American Maritime Labor as the key source for both reliable and experienced personnel for any kind of emergency. While those theses alone arouse little controversy, plans for advancing and achieving these perspectives generate more lively debate.

Two recent anecdotes came to mind during the presentations this morning that characterize some of the issues surrounding the RRF. The first illustrates some of the oddities associated with finding crews for the RRF during national emergencies. Not long ago the Governor of California appointed to the governing board of my institution a retired academic administrator and scholar. While this man has superb credentials as a professor and former college president, he claims with pride that during Desert Storm he was able to dust off his World War II vintage mariner's document and set sail as an Able-bodied Seaman for the Military Sealift Command. This incident, many of you know, is more, not less, representative of how RRF crews were assembled during our last emergency. While the first anecdote tells something about our reliance on senior

mariners during emergencies, this second suggests something about conditions facing future mariners.

Last Fall, I attended a Nautical Education Conference in Veracruz, Mexico during which representatives from the International Maritime Organization (IMO) and from most of the Latin and South American maritime schools assembled to address common concerns. For example, maritime academies have great difficulty obtaining Spanish language IMO curriculum materials. During the conference, I visited the Mexico training ship, a vessel constructed in the Netherlands in the 1960's and designed specifically as a training platform for that country's cadets, numbering about 600. I could not help but note the contrast between this state-of-the-art vessel with its automated diesel engine room, its working bridge and training bridge, its fully outfitted classrooms, and the 54 year old steam ship that continues to serve as the California Maritime Academy's training vessel. Despite the superiority of Mexico's vessel, the cadets with whom I spoke echoed the same concerns of my own students: would they be able to compete successfully with "foreign" officers for jobs at sea.

These examples simply underscore Admiral Seiberlich's and others' earlier points that the problems and the issues associated with sustaining current and competent crews for the United States must be regarded in the context of worldwide shipping. Many of our issues are global concerns, shared more and more by those whom we have not traditionally considered maritime nations.

What complicates our ability to define an acceptable strategy for insuring the availability of crews for the RRF is the absence of a clearly articulated national maritime strategy. The Maritime Security and Trade Act of 1994, submitted by Secretary Peña, is an important step toward maritime revitalization. Its success or failure derives, however, from the goals of our National Security Policy. In all candor, those goals remain illusive for most Americans. Without clear direction, many in this assembly are charged with developing maritime strategies for meeting any number of anticipated or unanticipated national objectives. This is not entirely bad, as I am sure many of you realize. On one hand, the lack of commonly understood national objectives makes it difficult to promote derivative maritime revitalization strategies. On the other hand, national policies can

quickly become obsolete and rigid. The dynamic and changing arena of worldwide shipping demands that we respond flexibly and rapidly to shifting economic and political conditions.

Given that we are not always grounded by national policy objectives, what is the common ground upon which we stand? First of all it seems that our panelists agree that it is better to rely upon working commercial ships and experienced crews than it is to rely on reserve ships and reserved crews. The second upon which people seem to agree is the recognition that the end user, the primary stake holder, for strategic sealift is the Department of Defense. A third commonly held belief is that budget concerns essentially drive our maritime strategy not national policy. Conversations center primarily on cost effectiveness and affordability. It is neither coincidental nor incidental that this workshop is being sponsored by the Government Accounting Office. Another point of agreement is that the crews for the RRF required not only initial training but ongoing training, coupled with experience, in order to meet the needs of the RRF. Everyone recognizes that this continuing need persists in an atmosphere of diminishing sizes for commercial crews and increasing demands for more highly skilled and technologically sophisticated mariners. Above all, there is universal support and enthusiasm for legislation guaranteeing reemployment rights for mariners who respond to national emergencies. Finally, these panelists agree that there is much we still do not know about our future needs.

Aside from points of agreement, the perspectives of these speakers revealed many assumptions, some that may or may not be warranted, that may or may not beg for some further examination. The first assumption which, explicitly or implicitly, informed some speakers' perspectives might be summarized by the slogan. If you build and maintain them, they will come. In other words, a sufficient pool of maritime labor exists and will continue to exist to crew any ship that the country sends to sea. Another assumption held by many is that the best and only reliable mariners who would respond to a national emergency come from the ranks of the United States Merchant Marine. A third assumption is that our ability to meet strategic sealift needs in the past proves that we can also do it again. Related to this is a commonly held attitude that the mere

possession of a license or document indicates competency, and that specialized skills that might be needed in a conflict can be obtained with relatively little difficulty.

Along with this current of assumptions runs some issues of controversy, some only subtly suggested by the speakers. The first area is this. Who is going to pay? If the Department of Defense is the stake holder in and end user of the RRF, ought not DOD pay? On the other hand if the United States Merchant Marine is essentially a civilian, commercial, profit-making interest, why should it profit from taxpayers' dollars? One speaker commented on the primacy of market share for foreign carriers. It is very, very clear U.S. shippers have similar obligations to their share holders. Obligations to the "bottom line" cross all national frontiers. Thus, controversy arises when discussions about RRF crewing focus on who is going to pay the bill or who ought to pay the bill.

A second area of controversy is inherent in the assumption that there will always be a pool of mariners available to meet whatever needs the country has. I do not think that is self-evident. One speaker described the increasing strains to the labor pool as professional mariners look for and find other non-seagoing jobs. What about the potential problems associated with shipping companies using permanent crews for their vessels? If this becomes normative, what will become of the nation's major source of recruiting mariners both in peacetime and in emergencies, the hiring hall? No hiring hall? Where's the pool?

Another related issue of contention is the presumption that crewing needs for licensed officers could be recruited from existing sources, from academy personnel or the reserves. Given the dramatic shifts in maritime academy student demographics, this assumption cannot be supported. As a federally funded agency, the Merchant Marine Academy requires its students to qualify and receive, if offered, Merchant Marine Reserve commissions. Therefore, this institution continues to have a younger, more homogenous student body than the State maritime colleges. For example, the California Maritime Academy's entering class for 1993/94 ranged in age from 17 to 52. Approximately one half of the entire student population of 500 have had one or more years of education or work experience beyond high school. They have had professions, they have had careers, and in many cases they have spouses and children. The 52 year old student has a

Master's Degree in Mathematics, is a General Contractor, and owned a business before changing careers. Another student, 36 years old, was a middle level executive with a large organization before taking up an interest in the sea and becoming a cadet at our school. Our Corps Commander this year is 42 years old and owned his own business. Now the first two of those students also happen to be women. We have more women at our school all the time. We have older students, married students, who are not simply coming to these maritime academies and investing thousands and thousands of dollars in their education because they want a job. In fact, they had jobs; in many cases good paying jobs. What they seek are careers. They have researched their career options and believe as I do that the maritime industries are simply changing, not dying. They are willing to invest their time and their savings in a maritime college and licensing program--whether or not they will spend their careers at sea--because they have something to offer and something to gain from the multiple national and international maritime and maritime related industries. These are not men and women who see themselves primarily as potential crews for the RRF but as licensed professionals like their counterparts in medicine, law, or education.

What, if any, will be some reliable sources of mariners for the Ready Reserve Force? Clearly the answer requires further collaboration, great collaboration between public and private sectors, between government agencies and organized labor. This workshop teaches how essential but also how difficult it is for the private and public sectors to sit around the table and avoid the natural tendency to protect their "rice bowls." Many today have remarked on the tremendous rush of cooperation between the maritime unions and federal agencies at the outbreak of Desert Shield/ Desert Storm. As significant as it was, it is merely the beginning of the kind of collaborative work that has to be done by all sides in order to get this problem solved. Commercial shippers are obliged to show profit while government agencies are obliged to show accountability to the taxpayer. In between is this very expensive challenge.

Finally, I detected some potential contradictions throughout the discussions about tactics for recruiting mariners for the RRF. On one hand we can talk about relaxing restrictions, getting people on vessels quickly, making sure they are licensed or

documented as quickly as possible. But, we have not discussed suspending liability or accountability for ship operators or the ship owners. Does OPA-90 get suspended too? Does the presence of a hastily licensed officer or inexperienced mariner merely compound the problem? What happens if somebody has not been out to sea for the last 15 years and ends up with a grievance lodge against him or her for sexual harassment because the person did not have time for that kind of training. Is the person, is that crew, is that master not accountable? These are some of the hidden issues that surface when examining options for crewing vessels. Associated with this is the inherent contradiction in preparing men and women for today's commercial fleet while hoping that they will retain competence in old technologies, retaining skilled steam engineers in a diesel world.

Clearly, we are not without some direction, but it is also clear that we have insufficient data to draw reasonable conclusions that will lead to reasonable and cost effective solutions. Certainly, the personnel data base that the Coast Guard and MARAD are going to be looking toward is important, recognizing the limitations of a such an inventory. The need to expand our ability to provide training opportunities to meet contingency needs was an important lesson of Desert Storm. For this reason, the Marine Board of the National Research Council has sought funding for its study of maritime education and training. A study of that nature might contribute to the confidence by which crewing strategies are developed.

The changing dynamics of the maritime industry must be seen, in part, as part of a national dynamic that includes defense conversion. These forces are most prominent in the San Francisco Bay Area where almost every military installation is being closed down. Cities like mine throughout the country refuse to watch passively and allow these facilities to close, deteriorate, and die. The efforts to revitalize their communities hinge greatly on incentives offered to businesses and other investors. The parallel importance of building incentives into the plan for maritime revitalization cannot be understated. Concerns about crewing vessels for the RRF would predictably diminish as incentives increased for the persons who will be crewing these vessels, for ship owners and operators, maritime labor organizations, for government agencies as well.

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It is beyond the scope of this presentation to outline an entire incentive program. However, a few examples suggest a broader general range of possibilities. Personal incentives for entry-level mariners might include scholarships for programs leading to maritime licenses or documents. The President has proposed a national service program designed for young people who would receive financial assistance for college in exchange for community service. Why isn't the merchant marine, for example, considered part of national service? Linking that program to service in the U.S. Merchant Marine may be one way of attracting and retaining mariners for national service. Others have proposed affording tax incentives to U.S. mariners who stay at sea as do so many other countries.

What about corporations? What incentive might there be for some of our commercial maritime corporations to support this kind of partnership on behalf of the Ready Reserve Force. Speakers today have characterized the maritime industry as innovative. The containerization of cargo, for example, and other global advances in ocean transportation are attributed to the U.S. maritime research and development. Is there no reason why the Ready Reserve Force might offer these same industries platforms for basic and applied maritime research? Increased corporate interest in the RRF may show as investments made on these vessels enhance mariner training or provide direct benefits to participants from industry. Both industry training facilities and government regulatory agencies stand to profit from a vital design for the RRF, one that exploits the nature of a "ready" reserve force for commercial application in an increasingly safe marine environment.

Essentially, a narrow definition of this problem offers only a narrow scope of solutions. At some point we must examine the assumptions we hold about our place in a global world with global maritime assets and about the multi-national experiences we are having in all of our industries. Frontiers continue to expand and contract. NAFTA reminds us how few corporations are purely national, just as few products are purely "made in America." This forum is an important beginning for those invested in preparing for our 21st century world and for the challenges associated with sustaining the best and brightest mariners for this nation's commerce and security.

8

Manning the Ready Reserve Force: The Problem and Proposed Solutions—A Joint Statement of the Seafarers International Union and National Maritime Union

A Joint Statement
Of the
Seafarers International Union
and the
National Maritime Union

Submitted to the Government Accounting Office
April 26, 1994

**MANNING THE READY RESERVE FORCE --
THE PROBLEM AND PROPOSED SOLUTIONS**

Preface

Despite three wars and numerous regional conflicts since World War II, the United States continues to grapple with the problem of a sound, effective method of meeting the demands of surge shipping, including a break-out of a reserve fleet, in the event of emergencies.

America's reserve ships, known as the Ready Reserve Force (RRF), are erstwhile commercial carriers now anchored in stand-by status at three ports, one on each coast. The RRF, along with existing U.S.-flag commercial shipping operations, make up a significant part of the nation's sealift assets.

As Korea, Vietnam, Operation Desert Shield/Desert Storm and a host of limited conflicts such as Grenada and Panama demonstrate, the United States military has relied on sealift operations to transport the preponderance of matériel. It is likely that the conflicts concerning the United States in the future, as in the past, will be forwardly deployed. Thus, sealift capability is now, and will continue to be, critical to the nation's defense.

The end-users of this capability are the military's branches of service on the front lines. The U.S. Armed Forces is the customer which must be satisfied that the sealift program, including the RRF, is 100 percent reliable, meeting time constraints within the boundaries of fiscal responsibility and sensible management.

To meet these goals, the nation has in place an existing infrastructure -- the U.S.-flag merchant marine -- which has proved its ability to meet the operational and crewing needs of both a commercial fleet and a broken-out and increased U.S.-flag sealift operation in times of war or strife.

Inherent in the U.S.-flag merchant marine are experienced ship operators and managers who should be deeply involved in any RRF management program. Their expertise is an invaluable component of the nation's readiness assets.

Also inherent in the merchant marine's structure are union hiring halls which through a rotary shipping system maintain a ratio of 2.5 to 5 seamen per single shipboard job, depending on conditions within the industry. While not working aboard a vessel, many of the surplus seamen are registered at various union halls or are attending courses at the unions' training centers. This group of mariners represents an instant pool of manpower for an activation.

With much in place to address crewing needs in a mobilization, the Seafarers International Union (SIU) and the National Maritime Union (NMU) believe that in tackling the nation's current concerns regarding RRF manning, it is not necessary to reinvent the wheel; the task at hand is to augment existing systems and structures to ensure that the nation's sealift mobilization capability is swift and sure.

The SIU and the NMU believe the recommendations of the Maritime Administration (MarAd), presented at an April 5, 1994 conference of the Government Accounting Office, are, in general, meritorious and provide a sound basis for discussion and action. Additionally, the study prepared by the National Defense Transportation Association (NDTA) Sealift Committee outlines serious, reasoned proposals that the SIU and NMU think deserve consideration. Both MarAd and the NDTA Sealift Committee are to be commended for their efforts to provide direction to the process.

The work of the NDTA Sealift Committee reflects the findings of the recently issued sealift mobilization study of the Department of Defense (DOD). Once DOD issues its tanker needs assessment, the proposals of the NDTA Sealift Committee, as well as those in this paper, will be adjusted to include recommendations for meeting sealift demands in the liquid bulk carrier sector.

The Problem

During the Operation Desert Shield/ Desert Storm RRF activation in 1990 and 1991, the hindrance to on-time deployment was the decayed condition of the vessels. While crew complements were mobilized within the designated activation times, the vessels' deteriorated conditions, in many cases, were not overcome in the same period. The shape of the vessels, as described below, are a matter of record, including accumulated data from interviews with seamen and ship operating companies during the 1990-1991 activation.

No RRF vessel in the Desert Shield/Desert Storm operation sailed short of crewmembers. However, many ships sailed with a shortage of failsafe equipment, bolstered only by hastily jury-rigged systems which allowed the vessels to comply with minimal government standards.

Upon reporting to their assigned RRF ships, crewmembers found no end to the problems. Among the most common were failures in boilers, distillers, communication systems and sewage systems. There were countless frozen valves, rusted-over deck drains, dry-rotted wires in deck gear (cranes, winches), circuit breaker failures and failed tubes in boilers. Packing and gasket material was dried up due to the prolonged effects of dehumidification. Immediate attention to these problems was delayed in many cases because of a lack of basic deck and engine tools.

Additionally, crewmembers were inconvenienced, but not prevented from attending to their jobs, by the stripping of many brass items from the ships, leaving vessels without clocks and rudder indicators, among other things. In some cases, crew fo'c's'les were uninhabitable due to the flooding of raw sewage or uncomfortable due to the lack of mattresses. Galley gang members worked around the clock in foul water up to their ankles. Food spoiled from the lack of working refrigeration.

The readying of the vessels was hampered by a lack of shipyard personnel familiar with RRF vessels. Accustomed to building modern naval vessels and doing repairs on a world fleet in which the average age of the ships is considerably younger than that of any RRF ship, qualified shipyard personnel were hard to find. Additionally, because the shipyard crews had to work quickly on unfamiliar ships, mistakes were made that ate up vital time. On one vessel, fuel was put into the water system, and correcting the error took days.

Replacing broken parts slowed down the break-out process. Some parts had to be flown in from other regions of the country. The obsolescence of much of the equipment made finding parts near impossible.

This most recent break-out of RRF ships indicated that the conditions of the ships posed the most significant barriers to on-time sailing within the assigned readiness status. The recommendations of the SIU and the NMU contained in this paper address these problems.

The Unions' Role and Experience

The unions' experience, since World War II, is based on the sealift operations of Vietnam, Korea and Desert Shield/Desert Storm. In all conflicts the unions have played a pivotal role in that they have supplied the greater part of the employment pool and have been the center of employment of qualified seafarers.

In the most recent activation in conjunction with Operation Desert Shield/Desert Storm, the SIU and the NMU utilized the pool of seamen who were registered to ship in the rotary shipping system of the unions. Those seamen who were registered-on-the-beach provided an immediate base of manpower for an overnight activation. Those seamen who were on commercial ships were frozen in place and not replaced or relieved. As a result, hundreds of seamen extended their four-month sailing time to six-, eight- or ten-month periods, freeing their scheduled reliefs or replacements to serve on RRF ships.

The unions also combed their records, contacting physically-fit pensioners and inactive seamen. Rules of the unions' pension funds barring retired seamen from continuing work in the industry were lifted to allow pensioners to sail on RRF ships.

Union halls were kept open seven days a week for extended hours. The SIU's manpower center and 800 toll free number were manned 24 hours a day; the NMU maintained designated phone numbers on a 24-hour-a-day basis as well.

The training schools of the unions increased the number of young people in the entry rating programs and offered accelerated, back-to-back courses to assist seamen to upgrade to those ratings which were needed in the RRF fleet.

Many RRF vessels never received the necessary parts or repairs before sailing. Those RRF ships sailed due to the 24-hour-a-day efforts of crewmembers. Once onboard, seamen brought the vessels up to sailing standards by cannibalizing, jury-rigging, inventing and innovating.

Working cooperatively with ship managers and the MarAd Office of Maritime Labor and Training, the SIU and the NMU fulfilled the manpower needs of an RRF break-out. There were no glitches in supplying relief or replacement personnel for RRF crewmembers while the deployment and re-deployment were in full force. All RRF ships that were activated were sustained with manpower throughout the 10-month period of Operation Desert Shield/Desert Storm/Desert Sortie.

Additionally, the unions found that holidays did not pose insurmountable obstacles to crewing efforts. For example, two years ago at 1500 on December 24, the NMU was contacted to activate an RRF ship. By 2300 that evening, the NMU crew complement had been secured. All hands reported to the vessel by 0800 on Christmas Day, December 25.

Possible Solutions

Outlined below are recommendations of the SIU and the NMU which, if put into effect, the unions believe will assure the U.S. military a prompt, rapid RRF activation and a sustained, prolonged engagement.

Designation of a Lead Agency

Any plan of action must be the responsibility of one entity in order to be successful. A first step in addressing the issues surrounding the manning of the RRF is to vest authority in a lead government agency to coordinate any programs or mechanisms that will be put in place to ensure full readiness of RRF ships and their crews.

The Maritime Administration stands out as the agency most appropriately suited for this task. MarAd was deeply involved in meeting the Desert Shield/Desert Storm sealift requirements; thus, many MarAd staff members not only are versant with the process of breaking out RRF ships, but they also have firsthand and recent activation

experience. Also, MarAd's budget includes funding for maintaining the RRF. Those funds most likely will provide the basis for future RRF readiness programs.

Once the MarAd's designation as lead RRF agency is in place, it is appropriate that it hold a full scale conference with all unions representing sea-going labor. At another date, the agency should meet with ship operators. Joint meetings of all concerned parties also should be held.

A conference with MarAd and union representatives, as has been proposed by the agency, would allow those present to identify potential obstacles to crewing ships in times of emergency and develop methods to overcome such barriers which can be implemented in times of surge shipping. The SIU and the NMU welcome such a discussion and are fully prepared to be active and contributory participants.

The SIU and the NMU also recommend that MarAd convene an ad hoc Sealift Crewing Committee, made up of agency representatives, officials of the maritime unions and ship management companies. Such a group could meet annually to review the military's sealift needs, the status of the sealift fleet, the RRF management program and the mariner manpower situation. An annual day-long session could be hosted by one of the union's training facilities, alternating locations from year to year. The purpose of the committee would be to encourage frank and ongoing communication between the groups that will be called on to crew RRF and other sealift assets in times of emergency.

Development of a National Maritime Policy

No RRF program will be successful without being part of a comprehensive national maritime policy in which the U.S. government fully recognizes the essential role of commercial shipping to the nation's economic security and defense interests. This must be indicated in acts of the administration that vigorously enforce the nation's maritime laws and regulations.

Such a comprehensive vision of a U.S.-flag fleet in the future that befits America's status as the world's largest economic and military power must also encompass initiatives such as the one developed by the Department of Transportation and currently before Congress to establish a "Maritime Security Program" with the U.S.-flag liner

fleet. Additionally, the United States administration and Congress should promulgate measures that will expand the U.S.-flag cruise ship fleet and the number of U.S.-flag car carriers as well as enhance the competitiveness of American-flag liquid and dry bulkers in the world trades. Such actions will put scores of militarily-useful vessels at the beck and call of the U.S. Armed Forces.

However, recognizing that such programs take time to develop, the SIU and the NMU support actions that will be taken immediately to guarantee that the RRF fleet can be crewed today, tomorrow or a year from now. In this context, the SIU and the NMU back the following proposals.

Put 4-Day Activation Ships in ROS Status

Reduced Operating Status (ROS) solves the most significant factor -- the dilapidated state of a vessel which leads to mechanical failures -- in delayed sailing times encountered in Operation Desert Shield/Desert Storm. A vessel kept in repair will ameliorate the problem of having a ship that can not be readied within the designated timeframe.

ROS calls for a maintenance group comprised of 10 seamen who do continuous onboard maintenance, repairs and trouble-shooting. This work can be sensibly scheduled and tested. Equipment can be maintained and all certifications kept current. As obsolete auxiliary machinery is replaced, ROS crews will become familiar with the replacement equipment and understand how it works when integrated with the ship's existing systems.

Working diligently and thoroughly, utilizing low-cost techniques such as infrared analysis of equipment and structures, ROS crews can uncover the major deficiencies of a vessel, make assessments and diagnoses and propose and implement repairs.

During Operation Desert Shield/Desert Storm, the effectiveness of ROS crews and activations was clearly noted. There was a direct corollary between the RRF ships with more recent maintenance work and activations and the vessel's ability to meet a quick activation deadline. Conversely, the longer the period the vessel had been laid up with no attention, the longer it took to prepare the ship for inspection, sea trials and sailing.

The 10-seaman crew complement rendered by MarAd includes the following positions: chief engineer, 1st assistant engineer, 2nd assistant engineer, 3rd assistant engineer, QMED, electrician, chief mate, bosun, steward/cook and steward/utility. All of the unlicensed positions are maintenance workers.

It is recommended that ROS crews live aboard the vessel, duplicating a regular shipping schedule (such as four months on, two months off). This helps ensure that vessels are habitable. The Desert Shield/Desert Storm experience proved that a vessel was more likely to meet its break-out schedule if assigned seamen could live aboard as soon as they reported to the ship. Often, as crewmembers needed to work around-the-clock, being able to sleep on the vessel increased their productivity. Crews which had to be put up at hotels lost valuable work time.

An ROS program for a core number of RRF ships does not necessarily call for new monies. Funds that have been allocated to maintaining and repairing the fleet can be used. Also, evidence and data compiled by MarAd indicate that ROS programs reduce the expense of breaking out ships. It is a far costlier proposition to bring ships up to seaworthiness standards in hours or days than to take months and years of routine, scheduled maintenance coordinated in a cost-effective manner.

The difficulty of finding ratings specific to older vessels which have been phased out, for the most part, on ships built more recently, is resolved by an ROS program. The rated positions necessary for an RRF ship, but which are not customary in the commercial fleet (such as the position of fireman/oiler) can be included in the ROS crew complement.

To help ensure that RRF crewmembers have the proper U.S. Coast Guard ratings to meet the agency's certificate of inspection, the SIU and the NMU propose the creation of an oiler-maintenance rating.

Currently, ROS crewmembers receive seatime service credit from the U.S. Coast Guard on a three-days-worked-for-one-day-of-seatime basis. Seatime service is a component of the requirements a seaman must meet in order to take an examination to upgrade his or her rating or license. This policy stands in stark contrast to the day-for-day seatime service awarded to crewmembers on vessels with regular underway runs, and it penalizes the ROS seaman as he or she is only credited with 33 percent of the time he

or she actually works aboard a vessel in similar tasks to those performed on any ship. In order to provide RRF ROS mariners the same opportunities to upgrade as seamen who work on commercial ships, the SIU and the NMU suggest that day-for-day sealtime service be applied by the U.S. Coast Guard to the days seamen work aboard RRF ships in ROS status.

The ROS seamen, including among them individuals with the key hard-to-find ratings, will become the nucleus of any activation crew complement, thereby ensuring no RRF vessel sails without the proper mix of crew skills.

The ROS program would assure the nation an available supply of seamen likely to stay in the industry, maintaining and upgrading their skills while accumulating untradeable, essential shipboard experience. There is no substitute for permanent employment as a means of attracting dependable, skilled manpower for an activation. By offering job security in the U.S. shipping sector, a seaman is provided the wherewithal to be within easy reach of a call to join an activated ship and stay on it for indefinite periods of time. ROS jobs help keep accessible the kinds of people who will be needed for an activation.

Put ROS Crews on 2-Ship Groups

In order to meet a 5-day activation schedule for 74 RRF ships deemed necessary by the U.S. military, the NDTA Sealift Committee recommends that those vessels not assigned 10-seamen ROS crews be manned in a different configuration.

For the remaining ships, the NDTA Sealift Committee proposes a 14-seamen crew which would be responsible for two ships that would be nested together. The crew would live on a vessel, alternating between one and the other at one-year intervals while working on both ships.

The NDTA Sealift Committee, in its draft proposal, envisions a crew complement encompassing the following officers and rated positions: one chief engineer, two 1st assistant engineers, one 2nd assistant engineer, two 3rd assistant engineers, one QMED, one electrician, one chief mate, one bosun, one AB, one steward/cook, one steward assistant and one general utility.

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The benefits of this kind of program are outlined in the discussion above concerning 4-day activation ships. The SIU and the NMU endorse this concept in the belief it is a cost-effective approach to securing sufficient immediate sealift capability in any activation.

Readiness Teams for Swift Activation

The SIU and the NMU recommend using the hiring halls of unions representing sea-going labor as a first source for readiness teams. Such activation teams should be used to augment ROS crews.

Recently, this kind of designation has proved its worth in regard to oil spill cleanup teams. In the oil spill off Puerto Rico on January 7 of this year, Seafarers who were either in the SIU's Santurce hall or who were on the island and reached by phone, turned-to and became an instantaneous cleanup team. In the case of an oil spill onboard a Great Lakes vessel, which necessitated emergency cleanup crews, the NMU agent in the region was contacted at night, after normal working hours. He, in turn, called every NMU member registered at his hall and mustered a cleanup crew within hours.

In the case of RRF ships, the SIU and the NMU have union halls within close geographic proximity to the three areas in which RRF ships are situated. Also, the unions have their training schools within easy range of two of the fleets. (Beaumont, Texas is near the NMU's training program at Texas A&M; Norfolk, Virginia is close to the SIU's Paul Hall Center for Maritime Training and Education, including the Lundeberg Seamanship School, in Piney Point, Maryland.)

The SIU and the NMU propose that the maritime unions submit on a quarterly basis the names and ratings of individuals who have agreed to be on call for activation crew assignments during that period. Those individuals, who would not ship during the three-month period, would agree to be near-at-hand in order to comply with a hair-trigger notice. Such activation crewmembers also could participate in drills and exercises on RRF ships.

Annual Activations

RRF ships and their ROS crews should engage in sea trials and dock trials on a regular basis. The SIU and the NMU recommend underway activations at least once every two years and complete dock trials once a year.

It is vital that the RRF vessels go out to sea as a final test on whether all systems and equipment work when the ship is underway. Such activations will allow ROS crews and ship management companies to determine if maintenance and repair measures are working.

Underway exercises which replicate the kinds of military assignments in which a ship will be involved during a time of emergency, including underway replenishment maneuvers, will prepare a crew and a vessel to be aware of the kinds of issues that can throw a kink in any activation. For example, in Operation Desert Shield/Desert Storm, one ship received nine electric forklift trucks just before getting underway. It was only when the vessel was at sea that crewmembers discovered there was no place onboard to charge batteries. If that had been a sea trial, instead of a real activation, the military would have been better off.

Meeting the Skill Needs for the RRF

The maritime unions' training schools can implement programs to generate whatever evolves in the way of skill requirements for seamen assigned to RRF vessels. This existing asset can prepare seamen for the ratings necessary to man RRF ships but which are now superfluous in the commercial fleet.

Should additional training demands become necessary, the unions can institute the appropriate courses at their training schools and hiring halls. For example, the military is likely to make use of tugboats and barges or Great Lakes vessels. The SIU and the NMU not only have members who currently work aboard this kind of marine equipment, but both unions train mariners in the particular skills necessary for work aboard tugs and barges and Lakers.

The SIU would like to offer its Piney Point facility to be used as a prototype for a training program geared toward the systems and conditions of RRF ships. The program

Centralized and Up-to-Date Information

The Coast Guard reports that the agency is preparing an up-to-date database containing information on mariners. The result of the centralized and computerized database is that the merchant marine document (known as the z-card) and marine officer license of the future will look like a credit card and have a machine-readable strip.

The Coast Guard seamen's database will be useful in the future to meet activation needs. MarAd and the Coast Guard are holding talks on how to include information in the database on whether a seaman would like to be called in times of surge shipping.

The SIU and the NMU recommend that the Coast Guard work closely with the maritime unions as it develops its database on U.S. mariners. The unions further recommend that whatever information system is developed, the machine-readable information should be available to a broader audience than the Coast Guard.

In other words, today a union representative or a shipping company official can look at a z card and obtain certain information. What is available by sight today should be available through a machine-readable mechanism in the future. The equipment necessary to read the data should be inexpensive and purchasable by the unions and shipping companies. The data should be readable only to these parties. The U.S. Coast Guard solely should have the ability to manipulate the data.

Inter-Union Cooperation

Recognizing that in times of crisis RRF billets must be filled, and filled quickly, by qualified seamen, the SIU and the NMU have formalized the cooperation the two unions had during Operation Desert Shield/Desert Storm.

In the event of an activation, should either union find a temporary shortfall of a certain rating, the other union will be contacted by that union for assistance.

The SIU and the NMU are committed to guaranteeing that, at such times, belonging to one pension plan or health care plan will not be an obstacle to filling a vital job.

Conclusion

The SIU and the NMU are prepared to assist on this matter of absolute urgency in any way possible. The unions believe that continued discussions and communication should be maintained until an agreeable proposal is reached between all concerned parties.

Panel Members and Organizations Represented

Panel Members

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Organizations Represented

American Maritime Officers
American Maritime Officers Service
American Overseas Marine Corporation
American President Lines, Ltd.
California Maritime Academy
District No. 1-PCD, Marine Engineers Beneficial Association (AFL-CIO)
District No. 4-NMU/Marine Engineers Beneficial Association (AFL-CIO)
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International Maritime, Incorporated
International Organization of Masters, Mates, and Pilots
K Associates
Maersk Line, Ltd.
Maritime Institute for Research and Industrial Development
Maritime Administration, Department of Transportation
Military Sealift Command, Department of Defense
Mormac Marine Transport, Inc.
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Office of the Chief of Naval Operations (Strategic Sealift Division), Department of Defense
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