AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0006	05/01/2008		

6. ISSUED BY CODE 00091
DOT/Maritime Administration, MAR-380
400 Seventh Street, SW., Room 7310
Washington, DC 20590

7. ADMINISTERED BY *(If other than Item 6)* CODE 00092
DOT/Maritime Administration, SAR Acquisition
Office of Acquisition, MRG-7200,7737 Hampton Boulevard, Building 4D, Room 211
Norfolk, VA 23505

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and Zip Code)*

KEYSTONE SHIPPING SERVICES INC
SUITE 600, ONE BALA PLAZA EAST
BALA CYNWYD, PA 19004-1496

CODE * FACILITY CODE

	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
(X)	10A. MODIFICATION OF CONTRACT/ORDER NO. DTMA8C05003
(X)	10B. DATED *(SEE ITEM 13)* 07/25/2005

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

No Funding Information

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☑	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☐	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
☐	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor [X] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

3rd Comprehensive Administrative Modification, including Summary of Changes. Modified Contract Section attached, herewith.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)* Frank Bajo[redacted]	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. United States of [redacted] BY [redacted] *(Signature of Contracting Officer)*	16C. DATE SIGNED 05/07/2008

Line Item Number	Description	Delivery Date (Start date to End date)	Quantity	Unit of Issue	Unit Price	Total Cost

No Changed Line Item Fields

Previous Total:

Modification Total:

Grand Total:

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SECTION A -- SOLICITATION/CONTRACT FORM

A.1 SUMMARY OF CHANGES

The free form item ‘Continuation of Block 14 April 2008 has been added.
The free form item ‘INTRODUCTION has been edited.
The free form item ‘52.252-02 CLAUSES INCORPORATED BY REFERENCE FEB 1998 has been edited.
The free form item ‘GOVERNMENT FORMS has been edited.
The free form item ‘PERIOD OF PERFORMANCE has been edited.
The free form item ‘J-2 has been added.

A.2 CONTINUATION OF BLOCK 14 APRIL 2008

Ship Manager Contracts
DTMA8C05001 Thru 021

Comprehensive Modification
(Sections Impacted)

Global Change: Changed all references to "regions" or "regional" to reflect the Maritime Administration's new reorganization structure.

Global Change: Changed all references to MAR-613 to MAR-612. MAR-613 no longer exists under the new reorganizational structure.

Section C - Statement of Work

C.2.2.2 - Changed reporting methodology for material condition of vessels.

C.3.2.5.3 - Added language regarding Absence of the Master.

C.3.2.7.1.2 - Removed language storing special reports in RMS.

C.3.2.7.1.3.1 - Added language "Submit via e-mail or classified message . . . ".

C.3.2.7.5.2 - Added notification to MAR-612.

C.3.3.3.3.1 - Changed message notification.

C.3.3.8.1.4 - Deleted operational on-station discussion of OPDS vessels.

C.3.3.10 - Clarified Ad Valorem requirement.

C.4.2.3.1 - Added "NTVRP" and clarified COMSCINST 5090.1B.

C.4.2.3.2 - Added points of contact.

C.4.2.9.1 - Added language regarding EPA requirement.

C.4.3.2.1 - Added language to clarify Internal Security

C.4.3.7 - Format changed to include bullets.

C.4.3.13.1 - Added requirement for new Force Protection Report.

C.4.3.15 - Grammatical Correction

C.5.1.8 - Added language on Ship Tours and Training Visits - Procedures for Tours/Visits in ROS/FOS.

C.5.2.2. - Removed language stating medically ineligible crew members cannot sail with ship.

C.5.4.1.1 - Added language regarding Worker Identification Credentials.

C.5.4.3.2 - Added language regarding crew vetting for sea trials and subcontracts.

C.5.5.1 - Changed language regarding medical ineligibility for receiving inoculations/immunizations.

C.5.5.1.2 - Added language for FOS crew ineligible to receive inoculation/immunizations.

C.5.5.1.3.1 - Now reads "Reserved".

C.5.5.1.3.1 (a) - Removed Subclause. (a) Now reads "Reserved".

C.5.6.3 - Added language for CADET Training.

C.5.8.7 - Removed requirement to put Roster in RMS.

C.5.10.1 - Added reference to "J-21" and clarified language for changes to FOS manning levels.

C.5.10.2 - Changed language to clarify changes to FOS manning levels.

C.5.13 - Added language on ROS Security Clearances.

C.6.4.4 - Added language to clarify where questions on J21 should be addressed.

C.6.5.3.3.1 - Changed "actual" costs to "estimated" costs.

C.8 - Added language for public access to MARAD's Virtual Office of Acquisition.

C.8.2.1 - Updated titles and publications required in Standard Yellow Administrative filing Cabinet.

Section F -

F.9.e - Change of Government Personnel.

Section G -

G.6.a - Change of Government Personnel.

G.11.4 - Added language "Expedition of Task Orders for Activations".

Section H -

H.6 - Added word "written".

H.22 - Added element entitled "PHYSICAL LOSS OR DAMAGE TO THE VESSEL OR OTHER GOVERNMENT PROPERTY DURING DRY DOCKING OR SHIPYARD AVAILABILITY (Oct 2007)"

Attachment J-2 - Ship Manager (SM) Subcontract Purchasing Policies

3.3 - Add element entitled Service Disable Veteran Owned SB.

3.7.2 - Incorporate Service Contract Act within J-2.

3.7.4 - Update address of Division of Marine Insurance.

Attachment J-12 - Award Term Incentive Option Plan (ATIOP)

Global Change - Changed all references to MARAD "Regions" to become MARAD "Operating Areas" or Division of X Operations".

B.1 - Evaluation Scoring - Added language.

Attachment J-13 - Training

Updated required Training

TE 1 - RRF Operations Management Manual

Section 2 - Updated Definitions throughout.

Section 18 - Removed references to RRF vessels no longer in the force.

Section 19 - Clarified combination of the non-tank Vessel Response Plan and the Shipboard Oil Pollution Plan into the NTVRP/SOPEP.

TE 3

M-0004 - Title Report Readiness to COTR - Changed the method of reporting to "e-mail"

A-0004 - Title Activation Movement Report - Changed the method of reporting to "e-mail or classified message"

SEC 0006 - C4.3.13.1 Force Protection report - Changed method of reporting to using the "Spreadsheet provided by MAR-612 (Mike Franklin)"

TE-4

Removed columns - FY05 through FY07

TE-7 - Speed of RRF Vessels

Revised Speeds.

SM PEAS NOTICE - Self Assessments are not to be requested by any Government entity of Ship Manager in the preparation of Ship Manager evaluations in SM PEAS. A Ship Manager may reply to evaluations within SM PEAS in order to preserve a record of its viewpoint of the evaluation.

SECTION C -- DESCRIPTIONS AND SPECIFICATIONS

C.1 INTRODUCTION

SECTION C -- DESCRIPTIONS AND SPECIFICATIONS

C.1 INTRODUCTION

PERFORMANCE WORK STATEMENT (PWS) FOR READY RESERVE FORCE (RRF) SHIP MANAGER SERVICES

1.1 Mission

The Ready Reserve Force (RRF) is the high readiness subset of the Maritime Administration's, Department of Transportation (DOT), National Defense Reserve Fleet (NDRF) established to support the rapid deployment of U.S. military forces. As a key element of strategic sealift, the RRF is specifically structured to transport military unit equipment during initial surge for U.S. forces deploying anywhere in the world.

1.2 Background

This is a performance based service contract (PBSC) issued by the Maritime Administration for maintenance and operational services for the RRF. Previous fixed price contracts for these services were awarded in 1988, 1993, and 2000 to U.S. commercial ship operating firms. The Maritime Administration expects that this PBSC will improve quality of service, productivity, and maximize cost savings during performance. It is the policy of the Federal Government that agencies use PBSC methods to the maximum extent practicable when acquiring services.

1.3 General Scope

Ship Managers shall maintain assigned RRF ship(s) in Fully Mission Capable Readiness Status and efficiently activate and operate these vessels in support of national emergencies and defense objectives. Services required include labor and supervision to equip, provision, supply, replace, upgrade, maintain or repair structures, equipment, machinery, outfitting, spare parts or supplies. The Ship Manager shall provide administrative support to ensure that all requirements of this contract are accomplished in a timely and efficient manner. Administrative support includes: management personnel, technical support, supplies, materials and services necessary to maintain and operate assigned ships, to the extent that such materials, reporting, and services are not specified as being provided by the Government.

1.3.1 Reimbursables: The omission of any particular item required for the performance of this performance work statement (PWS) does not make the item Government furnished or reimbursable unless expressly provided for in Attachment J-9. All work to be reimbursed shall be authorized by Task Order (TO) prior to commencement of work. All work is to be carried out under competent supervision and completed in a timely and lawful manner.

1.4 Definitions and Abbreviations

Definitions and abbreviations used throughout the contract, Technical Exhibits (TEs) and attachments are contained in TE-1 Section 2.

1.5 The Ship Manager is responsible for the development, implementation, management, and maintenance, including updates and lessons learned, of all required plans under the contract. Ship Managers are responsible for establishing policy and procedures related to these plans, inclusive of all necessary training of supervisory and other appropriate personnel. Ships' officers are responsible for enforcement of Ship Manager policies, plans and procedures. All plans and any subsequent modifications will be incorporated by the Government into its Quality Assurance Surveillance Plan (QASP) (TE-2) as one of the standards which the Government will use to determine compliance. Compliance with all Plans is a performance measurement under the QASP.

1.6 The Order of Precedence Reference.
52.215-8 -- Order of Precedence -- Uniform Contract Format (Oct 1997) Deviation

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:
(a) The Schedule (excluding the specifications).
(b) Representations and other instructions.
(c) Contract clauses.
(d) Other documents, exhibits, and attachments.
(e) The specifications.

1.7 DELIVERABLES - Unless specifically directed otherwise, all deliverables, listed in Attachment J-4, shall be delivered in an electronic format. Advise COTR delivery has been made.

C.2 MAINTENANCE MANAGEMENT INCLUDING LOGISTICS

Performance Goal: Develop and execute a high quality, comprehensive ship-centric maintenance program. The maintenance management program shall ensure assigned ships are fully compliant to prescribed readiness and mission requirements.

2.1 Regulatory Compliance

The Ship Manager shall:

2.1.1 Perform maintenance, repair, and modification of RRF vessels to ensure compliance with all applicable regulatory requirements as dictated by the Government for U.S. Flag Vessels.

2.1.2 Maintain and operate vessels in accordance with the Code of Federal Regulations (CFR), as inspected by the United States Coast Guard (USCG) and classed by the American Bureau of Shipping (ABS).

2.1.3 Maintain and operate RRF vessels in voluntary compliance with the International Maritime Organization Convention for Safety of Life at Sea (SOLAS) except as specifically exempted in writing by the Maritime Administration. No exemption list currently exists. RRF vessels are exempt from International conventions and treaties only to the extent that those requirements are not promulgated in domestic regulations (CFR). Continue this practice on assigned vessels in their current configurations. Submit additional requirements to sustain voluntary SOLAS compliance to the Contracting Officer's Technical Representative (COTR) for review and approval. (CDRL M-0001)

2.1.4 Review existing regulatory compliance schedules and develops and delivers a comprehensive plan and schedule for accomplishing any regulatory requirements in RMS. (CDRL M-0002)

2.1.5 Ensure accurate scheduling of all regulatory compliance inspections, surveys, and tests. Do not apply for nor anticipate being granted any extensions to regulatory due dates by the regulatory bodies.
However, if the Ship Manager believes an extension is beneficial, it should advise the Maritime Administration COTR as part of its business plan. The Maritime Administration may direct the Ship Manager to request extensions if deemed necessary by the Government.

2.1.6 If at any time and for any reason the Ship Manager cannot maintain the vessel to Regulatory Compliance, shall notify the COTR immediately by telephone with written e-mail follow-up within 24 hours of discovery.

2.1.7 Resolve discrepancies found during the vessel inspection or survey process within the period granted by the regulatory body. Submit a change to their current year Business Plan for corrective actions to be accomplished during the current fiscal year or plan for the work in a subsequent year Business Plan.

2.1.8 Maintain cognizance over changes or additions to regulatory body requirements. The Ship Manager has responsibility to identify changes or additions to regulatory requirements. When changes or additions are identified, notify the COTR in writing. The notice shall clearly describe the change or addition and include a proposal for how the vessel will meet the changed or added requirement. (CDRL M-0003)

2.1.9 Alternative Compliance Program: The Maritime Administration has determined that all ROS vessels shall be enrolled in the ABS Alternative Compliance Program. The Government reserves the right to grant exceptions. Exceptions shall be in writing, by the Chief, Division of Ship Maintenance and Repair (MAR-611). Requests shall be submitted to the COTR. All vessels enrolled in ACP must meet the applicable eligibility criteria established by USCG including full voluntary compliance with ISM.

The following specific work items are envisioned as being required to bring a vessel into ACP:
1. All vessels shall within COI anniversary window submit CG 3752 form for inspection to OCMI with notification thereto of becoming a participating vessel in the ACP Program.
2. OCMI /ABS will coordinate with Vessel for joint inspections (hand-off survey)
3. After successful "hand-off survey" the OCMI notifies G-MOC of same.
4. G-MOC (USCG Headquarters, Office of Compliance - G-MOC) is the Program Manager and notifies the vessel's owner by letter (Copy to ABS Coordinator and OCMI) of vessel enrollment into the ACP.

2.1.9.1 Classification Surveys: ROS motor and steam vessels shall maintain machinery in an ABS approved Preventative Maintenance/Condition Monitoring (PM/CM) program to the maximum extent feasible within the guidelines of the scheduled sea and dock trials. Hull and machinery surveys for ROS-4 and ROS-5 vessels shall remain as continuous except where otherwise approved, in writing, on a case by case basis by the Chief, Division of Ship Maintenance and Repair (MAR-611). Requests shall be submitted to the COTR. The schedule and requirements associated with or supporting the Continuous Hull and/or Machinery Survey (CHS/CMS) Class of ROS-4 and ROS-5 vessels shall be integrated into their Maintenance Management Plans. All other RRF vessels shall remain under special periodic surveys for hull and machinery. It is the Maritime Administration's desire to have as many ROS vessels in continuous survey as possible, however, it is recognized that some Ship Manager's preventative maintenance programs and ship configurations are better suited to periodic surveys. This is an acceptable alternative to continuous survey.

2.1.10 Maintain currency of regulatory body due dates, comments and remarks, as appropriate, within the Maritime Administration MARAD Ready Reserve Force Management System (RMS).

2.2 Readiness

2.2.1 Maintain assigned ships in the designated readiness corresponding to the activation timeframe requirements in TE-4. Readiness is defined as the measure of material condition and preparedness of a vessel to activate within its assigned "R-Status" and sustain operations for 180 days.

2.2.2 Report via e-mail or phone to the assigned COTR the recommended material condition status of the vessel(s). Utilize the following condition status "C-ratings" in making the report (CDRL M-0004):

C-Status Title Definitions Description
C-1 No Mission Degrading Deficiencies Describes a ship having no known deficiencies which impact its mission or activation within assigned R-Status
C-2 Documented and Correctable Mission Degrading Deficiencies Describes a ship which has mission degrading deficiencies which can be corrected within the assigned R-Status
C-3 Mission Degrading Describes a ship, which can be activated within its prescribed R-Status, but has deficiencies, which cannot be corrected within the R-status, and limits the full mission capability of the ship.
C-4 Major Deficiencies prevent the ship from activating or performing its primary mission and cannot be corrected within the assigned R-StatusDescribes a ship that cannot be fully mission capable within the assigned R status, or a ship that has a COI that will expire within 15 days, or a COI that has expired. C4 Status applies to unscheduled or otherwise planned events that result in the vessel's downgrade in readiness.
C-5 Scheduled major repairs in progress; unable to meet assigned R-Status Describes a ship undergoing scheduled major repairs, which prevent it from meeting its assigned R-Status. C5 is only for planned availabilities.

2.2.3 Phase M and Phase O: Vessels shall be in one of the two phases, Phase M or Phase O, as defined below, while assigned to the Ship Manager.

2.2.3.1 Phase M - Maintenance: In this phase, the vessel is preserved, tested (including maintenance sea trials), repaired and maintained in its required state of readiness. Vessels may be in a partially crewed or reduced operating status (ROS-4 or ROS-5) or may be in deep lay-up (RRF-10). During this phase the vessel must be capable of activation within the assigned time frame and of operating continuously for 180 days.

2.2.3.1.1 RRF-10 Phase M: RRF-10 vessels are normally in National Defense Reserve Fleets in cold lay-up with no crews assigned. Offerors may propose as an alternative to the RRF-10 vessel being laid up in the Fleet, that is, lay up at a commercial outport facility with a retention team for each ship bid. The retention team will perform maintenance within their capability and keep the vessel in a high state of readiness. A retention crew is not an ROS crew, although they may be given the option of becoming a nucleus crewmember. They are not required to obtain the same level of training (Attachment J-13) as an ROS crew would have, nor do they

have the same benefits (permanent billets) as ROS crewmembers. If a RRF-10 crewmember desires training off of J-13 it will be approved by the COTR on a case by case basis and should be related to maintenance.. If joining the Phase O crew, they must meet standard FOS requirements (see Sections C.5.10 and C.5.4.1). They are not required to maintain internal vessel security.

The Ship Manager is not required to obtain a layberth for the RRF-10 vessels as part of its proposal, however, during the course of the contract, the Maritime Administration may request its assistance at obtaining layberth services as a Prime. RRF-10 vessels with outport locations are listed in TE-4.

2.2.3.2 Phase O - Operation: This Phase involves the operation of the vessel for a specific mission or exercise. The vessel is to be operated in accordance with standard commercial practice and the RRF Operations Management Manual (TE-1). In Phase O the ship is normally under Military Sealift Command's (MSC) operational control.

2.2.4 While in Phase M and Phase O, maintain the vessel in a C-1 or C-2 status.

2.2.5 The Maritime Administration recognizes that events will occur which will result in a C-3 or C-4 status.

2.2.5.1 Notify the COTR within 24 hours of discovery whenever an event occurs which would place the vessel in a C-3 or C-4 status.

2.2.5.2 Initiate planning and as directed by TO take necessary action to correct promptly a C-3 or C-4 deficiency and return the vessel to the required readiness level. Submit a change to the current year Business Plan to reflect corrective actions.

2.2.6 The Maritime Administration recognizes that the vessel will have to be scheduled for C-5 status periods due to regulatory inspections, upgrades, and major maintenance periods.

2.2.6.1 Identify these periods within the vessel's business plan. (CDRL M-0005) The Ship Manager may be expected to adjust its proposed C-5 periods per the direction of the COTR when fleet-wide readiness is evaluated.

2.2.6.2 While the C-5 period must be kept to a minimum, evaluate cost against premium time and work acceleration expenditures in returning the ship to its required C-rating status.

2.3 Preventative Maintenance Plan Development

2.3.1 Develop one (1) preventative maintenance plan for each vessel which addresses both Phase M and Phase O. The plan shall specifically identify where any maintenance action differs between Phase M and Phase O and, if necessary, separate maintenance actions shall be developed and scheduled to reflect what is to be accomplished for the respective phase. Compliance with this Plan, and any of its modifications, is considered a performance measurement under the QASP. The preventative maintenance plan shall take into consideration all facets of inspection, testing, and conditioning the vessel's machinery, equipment, outfitting, and spaces (including structure, habitability areas, cargo areas, etc). The preventative maintenance plan shall include all regulatory body inspections and tests, as required

2.3.1.1 The ship-specific Preventative Maintenance Plan, incorporates both regulatory and preventative maintenance actions, shall be developed when the vessel is inactive. It shall reflect the assigned ROS-4; ROS-5 or deep lay up status (RRF-10). This plan shall be developed so as to ensure the vessel can be activated within the designated activation period, and subsequently sustain operations continuously for 180 days. The Ship Manager will be provided the existing preventative maintenance plan from the Maintenance and Repair Tracking System (MARTS) Vessel Maintenance Action (VMA) database for ROS-4 and ROS-5 vessels and Phase IV procedures for RRF-10 vessels. Existing preventative maintenance plans shall be utilized upon notice to proceed. Revise the existing plan as deemed fit or develop a new Preventative Maintenance Plan. The Preventative Maintenance Plan shall be submitted to the COTR. (CDRL 006)

Scheduled maintenance activations and sea trials are reimbursable and shall be included in the Preventative Maintenance Plan. Provide a cost estimate for maintenance activation and/or sea trial. Acquire qualified Thermography Assessment and Vibration Analysis services to attend sea trials and provide written reports on the condition of vessel electrical installations and machinery per the direction of the COTR. Provide diesel engine analysis for diesel ships. Maintenance actions that can only be conducted or are most practically conducted during the maintenance activation, sea trial, or subsequent deactivation shall be identified in the Preventative Maintenance Plan and scheduled accordingly. Conduct sea trials and dock trials on each assigned vessel at the following intervals:

Intervals Requirement

ROS-4 One (1) Sea Trial Annually
ROS-5 One (1) Sea Trial every other year and one (1) dock trial every other year (alternate years) Sea and dock trials should be based upon the 5 year COI cycle with sea trials performed in the renewal year and the intermediate inspection year. Annual endorsement years get a dock trial.
RRF-10 One (1) Sea Trial every other year. Sea trials performed in the renewal year and intermediate inspection year only. No dock trials.

2.3.1.1.1 Ship Managers will be [or have been] provided an MS Excel spreadsheet by the Maritime Administration which shall be utilized as a template for identifying and scheduling all facets of the PM Plan. This spreadsheet will contain a listing of all equipment in the vessel's current configuration database. The Ship Manager shall enter data supporting the PM Plan such as frequency of maintenance or inspection, running hours, description of the action, etc. The ship manager shall expand the spreadsheet to include any additional equipment or spaces requiring maintenance. The Ship Manager may develop a separate MS Word document for those PM Plan descriptions which require a large text field. If the Ship Manager requires the larger text field(s), all additional PM actions will be consolidated to a single MS Word file. Each action depicted within the MS Word file shall be preceded by the "EQCODE" number for that specific equipment.

2.3.1.2 After initial submittal of the PM Plan spreadsheet and, if required, supplemental MS Word document, the Maritime Administration will upload the information into RMS. The Ship Manager will be responsible for maintaining the data within RMS after being uploaded to the system.

2.3.1.3 The Preventative Maintenance Plans shall be submitted to the COTR for initial review. After initial submittal and acceptance, the Preventative Maintenance Plan shall be included with the Ship's Business Plan. Any revisions to either plan after initial submittal shall be identified in writing to the COTR. (CDRL- RESERVED)

2.3.1.4 The Ship Manager shall utilize the Preventative Maintenance module in RMS to document the execution of the preventative maintenance plan. Any anomalies or findings of the equipment, system, or space through the execution of the PM Plan shall also be recorded.

2.3.1.5 Preventative Maintenance Plans for Vessels in NDRF sites
Ship Managers are responsible for the development of a preventative maintenance methodology.
For RRF-10 Vessels in the Fleet: Offerors have a choice:

a. If the NDRF Fleet personnel perform maintenance procedures they will use the generic preventative maintenance procedures in the VOA Tech Library - "RRF 10 Maintenance Procedures." If the Ship Manager requires any additional preventative maintenance, they must itemize this in the Preventative Maintenance Plan including an hourly estimate ($59/hr).

b. Or the offeror will take the generic maintenance procedures, explain any modification to these in the Maintenance Plan and complete all of the work with their own resources.

2.3.1.5.1 For outported RRF-10 vessels: Provide in the Preventative Maintenance Plan an hourly estimate of the time (in hours) and cost (per skill level) to accomplish this work. This estimate is part of the annual business plan (CDRL 007).

2.3.2 Utilize The Maritime Administration's Water Chemistry support contract for procurement of kits and chemicals for the testing and conditioning of boiler water and diesel engine cooling systems. Provide reports on equipment as required. (CDRL M-0010)

2.3.3 Participate in the Maritime Administration's Lube Oil Analysis program. The Lube Oil Analysis program requires samples be submitted to the Maritime Administration's support contractor for all identified machinery as depicted in the vessel-specific testing schedule.

2.3.4 Integrate water chemistry and lube oil analysis into the preventative maintenance plan as applicable.

2.4 Corrective Maintenance and Repairs

2.4.1 Subject to the limitations of funding provided by the Maritime Administration, accomplish all corrective maintenance and repairs to the vessel. Corrective maintenance and repairs include all tasks necessary from initial identification of an unsatisfactory condition through final acceptance of the corrected item. This includes, but is not limited to, overhauling, repairing, or replacing with

new machinery, equipment, installations, and spaces (including structure, habitability areas, cargo areas, etc.) to remedy an unsatisfactory condition.

2.4.2 Recommend and, as directed by COTR, accomplish modifications or upgrades determined to be beneficial to the vessel and its performance, extend the vessels life cycle, or enhance its cargo carrying capacity.

2.4.3 Identify deficiencies on the vessel which impact or may potentially impact the performance of the vessel, readiness, regulatory status, safety of the crew, and threaten the environment.

2.4.4 Enter all deficiencies into the Maritime Administration's RMS as an official record. (CDRL M-0011)
The deficiency shall be depicted within the Maritime Administration's RMS with a clear and concise statement of work that includes a cost estimate, planned completion date, duration to complete (number of days), contractor assistance required, and if the vessels readiness will be impacted during the repair period. Identify the impact of each work item on the readiness of the vessel and determine the applicable "C-status" for that item (reference Section C.2.2 or TE-1 Section 2 for definition of C-status).

2.4.5 Determine if deficiencies require immediate accomplishment or can be deferred to a later date or during the next activation (scheduled or unscheduled). Any deficiency that will place the vessel in a C-2 status shall be entered into the Maritime Administration's RMS within 48 hours of initial identification. Notify the COTR within 24 hours of identificcation for any maintenance or repair item or cumulative items that will place the vessel in a C-3 or C-4 status and enter the deficiency into the Maritime Administration's RMS at the next opportunity. All other repair items, upgrades, and enhancements shall be entered into rhe Maritime Administration's RMS at the discretion of the Ship Manager for funding consideration

2.4.5.1 In the event that a situation or condition develops that poses a threat to life, limb, property or the environment, take immediate action to protect or preserve the same.

2.4.6 Performance of Repair Work

All repair and/or up-grading work required in conjunction with the contract (including all surveys and correction of sea trial deficiencies, or any other deficiencies that may be noted up to time of delivery and acceptance previously noted or not) necessary to meet all requirements of this contract shall be accomplished in a U.S. ship repair facility, unless the work is for emergency, or mission essential repairs, or for pre-positioned ships which are deployed overseas, or for any vessel forward deployed outside of the United States.

2.5 Business Plan Development (Maintenance and Repair)

2.5.1 The Business Plans shall encompass all known facets of the budget, scheduling, maintenance, repair, manning, training, regulatory compliance, and operation (if planned) of the vessel. The Business Plans shall identify all estimated resources and scheduling for successful execution.

2.5.1.1 Submit initial detailed estimates of activation, operation, and deactivation costs for each vessel by item.

2.5.2 Submit with the Business Plans an estimate, by category (ship work breakdown structure), for emergent work which may arise during the year. Base these estimates on their experience as a ship operator and on historical data.

2.5.3 Identify the required work; estimate the cost and schedule for projected actions, i.e., preventative maintenance, corrective maintenance, and regulatory surveys and inspections; define the necessary resources; and schedule the execution of these actions to sustain the vessel in its required readiness. Documentation of these proposed actions and scheduling is part of the vessel's Business Plan. (CDRL M-0012)

2.6 Business Plan Execution (Maintenance and Repair)

Execute the Current Year Business Plan for each assigned vessel in accordance with the respective Plan's scope and schedule, subject to the obligation of funds. This shall be applicable regardless if vessel is in Phase O or M. Report status of individual tasks within the plan utilizing RMS. Maintain all data in RMS reflecting start and completion dates (planned and actual); work items (planned, in progress, and completed); method to complete; obligated and actual costs; and other supporting data elements as required by the system. (CDRL M-0013)

2.6.1 Maintain a historical database of work and repairs accomplished, to include associated costs accurately categorized by equipment, system or space. Use RMS database to refine and justify outyear business plans.

2.6.2 During the course of executing the business plan, the Maritime Administration recognizes that there may be events which will cause the Ship Manager to append or deviate from the plan as it was agreed upon, e.g., no-notice activations, the Maritime Administration imposed funding limitations, changes to readiness level, shipyard availability, unforeseen and unanticipated repairs, implement upgrades or changeouts, etc.

2.6.3 Notify the COTR within 24 hours for any unplanned situation or condition, which changes the readiness status of the vessel. In the event that a situation or condition develops that poses a threat to life, limb, property or the environment, take immediate action to protect or preserve the same.

2.6.4 Notify the COTR in the event a change is required in the Business Plan. Recommend an appropriate course of action and identify all impacts to the balance of the Business Plan (including outyears, if necessary). Make all necessary modifications to RMS to reflect the changes.

2.6.5 Revise business plans and maintenance methodology and ROS crew makeup, if required, by changes in layberth arrangement. Costs associated with the move will be reimbursable as listed in Attachment J-9 and approved by the PCO.

2.7 Turnover of RRF Vessels

2.7.1 Initial turnover. Within 14 days after NTP, a joint Maritime Administration/Ship Manager material condition survey shall be conducted as follows:

- The Maritime Administration will provide a print out of deficiencies per vessel. All known deficiencies and requirements will have been entered in the RMS. A Maritime Administration surveyor and the Ship Manager's representative shall verify these deficiencies and conduct a joint material condition survey of the vessel using an MA-58 (Ship Survey) as a checklist.

- New repair and maintenance requirements shall be entered into RMS by the Ship Manager.

- Recommendations to remove or modify existing requirements shall be provided to the Maritime Administration COTR as part of the business plan.

- A completed Ship Survey Form, MA-58, with narrative attachment shall be provided to the Maritime Administration COTR .

- Concurrent with this survey, other requirements of the contract may also be conducted, for example, C.4.3.4.2.1 baseline security assessment.

2.7.2 Within forty-five (45) days prior to the completion of this contract, a joint Maritime Administration/Ship Manager Material Condition Survey shall be conducted and documented on form MA-58 (SHIP SURVEY REPORT). If the contract is terminated for default or convenience, the Maritime Administration will arrange a mutual date to conduct the survey. This condition report shall be delivered to the Maritime Administration COTR within one week of the survey date. A copy shall be provided to the ACO.

2.8 Logistics

The Ship Manager shall:

2.8.1 [Formerly 3.1.1] Responsibility. Account for all Government Furnished Properties (GFP) in accordance with the contract. This includes, but is not limited to, all shipboard accountable property, technical manuals, drawings and spare parts. Preserve, manage and control all spare parts, accountable property, ship's drawings and technical manuals in a manner that prevents waste, theft and unnecessary procurement.

2.8.2 [Formerly 3.1.2] Property Control Systems. Maintain a Maritime Administration approved Property Control System in accordance with Federal Acquisition Regulations (FAR) 45.5, the RRF Logistics Management Manual, (TE-5), and the PC-SAL Users Manual. (NOTE: PC-SAL is a legacy Maritime Administration computer system. The functionality of PC-SAL will be incorporated in RMS. During the first year of the SMC, the Maritime Administration will replace or re-issue manuals as required to reflect RMS applications for logistics operations and spare parts management. The term "PC-SAL" has been replaced in contract documents, however other documents may still refer to this legacy system. Whenever such references are encountered, the term RMS is

substituted.) The Ship Manager is not responsible for translating foreign language documents, contained in the property control system, into English.

2.8.3 [Formerly 3.1.3 Records]. Maintain complete, current and auditable records of all GFP transactions in accordance with FAR 45.5 and TE-5. Records of spare parts, accountable property, technical manuals, and drawings shall be maintained in the vessel's RMS computer system in accordance with the RMS manual.

2.8.3.1 [Formerly 3.1.3.1] Maintain the following files onboard each vessel:

a) Documents used to ship any item of GFP off the vessel or receive any item of GFP onboard the vessel; and

b) Copies of Reports of Survey (DOT Form 4410.1) initiated by the Ship Manager for items lost, damaged or destroyed onboard the vessel.

2.8.4 [Formerly 3.1.4] Training. The Maritime Administration Logistics Management Officer (LMO) will schedule training and issue passwords for the MLSS before Ship Manager personnel use it.

2.8.5 [Formerly 3.1.5] Accountable Property - Acceptance Inventory. Conduct a joint (with Maritime Administration) and complete physical inventory of all of the vessel's accountable property. RMS will be adjusted to reflect the results of the inventory. At the conclusion of this reconciliation process the Ship Manger will acknowledge the receipt of the entire inventory of accountable property as well as the accountable property database contained in RMS. (CDRL L-0001)

2.8.6 [Formerly 3.1.6] Completion or Termination Inventory. At the completion or termination of the contract, conduct a joint (with the Maritime Administration) and complete physical inventory of the vessel's accountable property. The results of this inventory will then be reconciled with the accountable property database contained in RMS. Provide a written survey for each item found to be lost, damaged or destroyed. (CDRL L-0002)

2.8.7 [Formerly 3.1.7] Maintain a complete and 100% accurate inventory of all accountable property in RMS

2.8.8. [Formerly 3.1.8] Annual Inventory. Conduct and report the results of a complete physical inventory of accountable property in accordance with TE-5. (CDRL L-0003) This inventory is conduct on/about the anniversary date of contract award on a yearly basis, unless otherwise directed by the COTR. NOTE: Results of this inventory are due January 19, 2007 for FY 07 only. This is a one-time extension of the due date.

2.8.9. [Formerly 3.1.9] Post Phase O Inventory. Conduct and report the results of a complete physical inventory of accountable property in accordance with TE-5. This includes sea trials as well as Phase O. (CDRL L-0004)

2.8.10 [Formerly 3.1.10] Accountable Property. Submit a DOT Form 4410.1 for all lost, damaged or destroyed accountable property in accordance with TE-5. The COTR is responsible for determining whether or not to replace missing accountable property. A survey board will decide the issue of liability. If the Ship Manager is deemed liable for missing, lost or damaged property, the Contracting Officer (CO) will deduct the appropriate value of the item from monies due the Ship Manager.

2.8.11 [Formerly 3.1.11] Failure to Submit Required Survey Form (DOT Forms 4410.1) within five (5) working days after the Completion or Termination Inventory. The value of the items found lost, damaged or destroyed will be deducted from monies due the Ship Manager until the required documents have been both submitted by the Ship Manager and fully reviewed and processed by the Maritime Administration.

2.8.11.1 [Formerly 3.1.11.1] Recovery of Funds for failure to use agency assets. Except as provided for in TE-5, the Administrative Contracting Officer (ACO) will deduct from monies due the Ship Manager as recovery of funds for the cost of spare parts procured by the Ship Manager when the same item (or a valid serviceable alternate), was available in any of the three (3) Shore-based Spares (SBS) warehouses at the time the purchase order was placed unless it is determined by the Maritime Administration that special circumstances preclude such a deduction. A Ship Manager has ordered a part which the Maritime Administration deducts the cost of because it is available within the 3 SBSs, may return the same part for vendor credit. The SM will pay all associated costs of the return.

2.8.12 [Formerly 3.1.12] Spare Parts, Technical Manuals and Ship's Drawings

2.8.12.1 [Formerly 3.1.12.1] Acceptance Inventory of Spare Parts, Technical Manuals and Ship's Drawings. Jointly with the Maritime Administration, obtain and inventory a sample of the vessel's spare parts, technical manuals and ship's drawings in accordance with the statistical standards provided in TE-5. The results of this inventory will be jointly recorded. (CDRL L-0005) This sample will include spare parts stored in the following locations:

a) Loose spare parts;
b) Spare parts mounted on bulkheads; and
c) Spare parts contained boxes and cabinets, both sealed and unsealed.

2.8.13 [Formerly 3.1.13] Acquisition of Spare Parts: Unless otherwise directed by the COTR, be responsible for the acquisition of spare parts in accordance with the Shipboard Allowance List (SAL) and available funding.

When a requirement for any replacement or spare part is identified, review the most recent MLSS CD-ROM and confirm that no valid serviceable asset is available in the three (3) Maritime Administration SBS warehouses. Except as provided for in TE-5 and in accordance with 41 CFR101-26.107, if a valid serviceable spare part (or alternate) is available in any SBS warehouse, request the item. Ship Managers will be reimbursed for travel to warehouse to verify the serviceability of parts. Ship Managers who order parts may return them for vendor credit. All costs associated with the return of improperly order parts will be to the Ship Manager's account.

2.8.13.1 [Formerly 3.1.13.1] Termination or Completion Inventory of Spare Parts, Technical Manuals and Ship's Drawings. Jointly with the Maritime Administration, obtain and inventory a sample of the vessel's spare parts, technical manuals and ship's drawings in accordance with the statistical standards provided in TE-5 and (CDRL L-0006). The results of this inventory will be jointly recorded. This sample will include spare parts stored in the following locations:

a) Loose spare parts;
b) Spare parts mounted on bulkheads; and
c) Spare parts contained boxes and cabinets, both sealed and unsealed.

2.8.14 [Formerly 3.1.14] Standards for Repair Parts. In addition to the requirements set forth in FAR 45.5 and TE-5, maintain the following logistics management standards for repair parts managed in RMS:

a) Maintain a 95% (or greater) accurate inventory of spare parts NOT secured by a Maritime Administration applied seal; and

b) Accurately mark, record and stow repair parts in accordance with FAR 45.5 and TE-5 within ten (10) working days of receipt by the Ship Manager.

2.8.15 [Formerly 3.1.15] Replenishment of Spare Parts. Integrate into the annual Business Plan requirements for the acquisition of spare parts for the next fiscal year. Requirements must identify and estimate the cost of all Criticality Code 4 spare parts that are not on board the vessel and not available from the Maritime Administration SBS warehouses. Requirements will also identify any other spare parts the Ship Manager considers to be important for the safe and efficient operation of the vessel. (CDRL L-0007)

2.8.16 [Formerly 3.1.16]Ship Configuration Management. Preserve and maintain the vessel's configuration record in accordance with TE-5, and maintain the following configuration management standards:
a) Record all changes, removals, additions, upgrades and modifications to the installed equipment configuration of the vessel; and

b) Prepare and submit Allowance Change Requests in accordance with TE-5.

2.8.17 [Formerly 3.1.17] Offshore Petroleum Discharge Ships (OPDS), Offshore Utility Boats (OUB), and Improved Mooring System (IMS) outfitting and spare parts.

The OPDS vessels have specialized OPDS, OUB and IMS equipment, spare parts, and outfitting. A significant portion of this outfitting is regularly issued to Navy personal during OPDS evolutions and the Naval Sea Systems Command (NAVSEA's) Material Readiness Assessment (MRAs), and as such, requires special management attention by Ship Managers of OPDS vessels.

2.8.17.1 [Formerly 3.1.17.1] Configuration Management. Review, maintain, revise, and update the vessel's OPDS, OUB and IMS equipment configuration, technical manuals and drawings in RMS in accordance with the Maritime Administration approved NAVSEA technical specifications.

No NAVSEA initiated changes to OPDS, OUB or IMS outfitting, spare parts, equipment configuration, technical manuals or ship's drawings are to be made without the prior written (or email) approval of the COTR.

2.8.17.2 [Formerly 3.1.17.2] OPDS, OUB, and IMS Outfitting Management Procedures. Provide a set of detailed written procedures that implement NAVSEA PMS 325 letter 325R32/0668 dated 25 July 2000. This correspondence is provided as TE-5.
These procedures must comply with FAR 45.5 and TE-5 specifically addressing the following: (CDRL L-0009)

a) The management of OPDS, OUB and IMS allowances;

b) The issue of OPDS, OUB and IMS outfitting and spare parts to military personnel;

c) The collection or turn-in of OPDS, OUB and IMS outfitting and spare parts from military personnel during and after OPDS and MRA evolutions;

d) The preservation, marking and storage of OPDS, OUB and IMS outfitting and spare parts; and

e) The generation of OPDS, OUB and IMS Shortage Lists.

2.8.17.3 [Formerly 3.1.17.3] Generation of OPDS, OUB and IMS Shortage Listings. Within thirty (30) days of the conclusion of any OPDS exercise or NAVSEA MRA, generate and forward an OPDS Shortage List. (CDRL L-0010)

2.8.17.4 [Formerly 3.1.17.4] Procurement Standards for NAVSEA Baseline Shortages. Maintain "100% on hand or on order" for all OPDS, OUB and IMS outfitting and spare parts listed in the Maritime Administration approved NAVSEA Base Line (TE-5).

2.8.18 [Formerly 3.1.18] The Maritime Administration OPDS Shore Set. Depending on the availability of funding, the Maritime Administration may, at its discretion, maintain limited quantities of OPDS, OUB and IMS spare parts and outfitting at its three (3) SBS warehouses. This subset of Shore-based Spares is referred to as the "OPDS Shore Set." A sample list of possible OPDS Shore Set items that the Maritime Administration may stock is provided in TE-5. With the exception of unique Navy Stock Numbered (NSN) items that can not be purchased commercially, the Ship Manager must NOT rely on theMaritime Administration Shore Set to replenish OPDS, OUB or IMS outfitting and spare parts.

2.8.18.1 [Formerly 3.1.18.1] Maintain the independent capability to research, identify and commercially purchase any item of OPDS, OUB and IMS equipment, spare part or outfitting throughout the life of the contract.

3.1 and all sub-sections - RESERVED. Logistics has been removed from the second goal, and moved to the first goal and re-numbered. Former clause numbers are shown along with new numbers in case there is a problem cross referencing in other documents.

PERFORMANCE GOAL: SUPPORT CORE RRF FUNCTIONS: ACTIVATION, OPERATION, AND DEACTIVATION.

3.2 Activation. There are two (2) categories of activations: scheduled and unscheduled. The former is an integral part of the scheduled preventive maintenance requirements of the vessel and associated with its assigned R-Status. The latter is associated with a specific Department of Defense (DOD) initiated request or requirement or other national emergencies.. The five (5) specific types of activations within these two (2) categories, which the Ship Manager may be required or directed to perform, are defined in TE-1 - Section 2.

3.2.1 For Mission Activations:

3.2.1.1 Provide all resources and support equipment required to accomplish all the necessary work of activating the ship within the ship activation readiness period as defined in TE-4 to ensure that the vessel is capable of sustained operations for up to 180 days.

3.2.1.2 Direct the work of all subcontractors and provide periodic reports to COTR.

3.2.1.3 Activate, store, crew, and provision assigned ships, obtain USCG, ABS and other regulatory tests surveys, inspections or certifications within its assigned readiness period.

3.2.1.4 Bunker the vessel as directed by the COTR.

3.2.1.5 Receive and load cargo.

3.2.1.6 Operate the vessel for up to 180 consecutive days.

3.2.2 Simultaneous activations can be expected, and unless assigned vessel is in readiness category C-3, C-4, or C-5, which indicate it is not able to be activated within the prescribed timeframe, activation timelines are mandatory.

3.2.3 For Notice and No-Notice Activations: Perform all tasks of Section C 3.2.1 though C3.2.1.6. However, the COTR may reduce requirements (quantities of provisioning, stores, extend timelines, etc.) as required by the specific activation or planned operation scenario.

3.2.4 For Maintenance Activations: Conduct in accordance with the Ship Manager developed Preventative Maintenance Management Plan.

3.2.5 Activation Plan

3.2.5.1 Develop, implement, manage, and maintain the ship-specific Activation Plan. (CDRL L-0009)

3.2.5.1.1 Safety Observation Period. Discuss with COTR and implement into Activation Plan a period during activation for crew safety orientation required under your ISM. This is not a stand down. This observation period shall be accomplished after receive of activation orders and prior to Ready For Sea. It may be necessary to request additional time for this activity. A five day vessel which is not required to sea trial may conduct this period on the 5th day. It is important to retain the names of crewmember who attend this observation orientation for future litigation. See sections C.5.6.4.1 and C.5.6.4.2 for details. Note: it will be necessary to develop several scenarios within the activation plan to account for maintenance activation, notice and no-notice activations with time built in or requesting additional time. Conducting the safety observation and orientation requirements at anchor is one option.

3.2.5.2 Compliance with the Activation Plan, and any of its modifications, is considered a performance measurement under the QASP.

3.2.5.3 Absence of the Master. The activation plan shall develop a policy addressing who is in charge during:

- **The period before the Master's arrival on an activating ship.**

3.2.6 Cost Estimates. The Ship Manager shall provide, within forty-eight (48) hours of being notified of an activation, a cost estimate, inclusive of overtime costs, for the activation, operation and subsequent deactivation of the vessel. (CDRL A-0001)

3.2.7 Activation Reporting.

3.2.7.1 Develop, manage, and submit timely and accurate reports as defined below, entering data into RMS. COTR Reports include:

3.2.7.1.1 Status Reports - Daily. Provide daily status to the COTR on vessel activation progress. COTR will direct time and frequency of this report for each activation. (CDRL A-0002)

3.2.7.1.2 Status Reports - Special. Provide required special status reports when requested by COTR or by the Maritime Administration HQs Crisis Management Team. These reports usually involve security, Chemical, Biological, Radiological-Defense (CBR-D) outfitting, reporting crew shortages, or other issues unique to a military operation. (CDRL A-0003)

3.2.7.1.3 Vessel Movements (MOVEREPS)

3.2.7.1.3.1 Submit via e-mail or classified message as directed by the COTR vessel movement data including date, time, and location of vessel movement. (CDRL A-0004)

3.2.7.1.3.2 Scan into RMS a PDF copy of all ship delivery reports between the Maritime Administration/MSC. This is not the same as the noon or pre-arrival reports required by MSC.

3.2.7.1.4 Crew List(s)

Provide and maintain currency a crew list including military personnel onboard. This list is provided upon request by COTR. (CDRL A-0005)

3.2.7.1.5 Task Order Accounting

Enter into RMS activation cost information and data including current obligated fund totals, anticipated funding requirements.

3.2.7.1.6 Crew Questionnaire

Arrange for and assist in the collection of data associated with the crew survey forms. (CDRL A-0007)

3.2.7.1.7 Lessons Learned

3.2.7.1.7.1 Collect the following data for mission related activations.
The Maritime Administration Reports (submitted as part of the activation and ops) (CDRL A-0008)
- General condition of ship upon Activation
- Equipment problems encountered at Activation
- Administrative problems
- Voyage summaries
- Operating history, commencing at activation notification, and inclusive of:

· Activation notification received from the Maritime Administration
· Dock Trials
· Tender to MSC
· Shift to loading
· Commenced Loading
· Completed Loading
· Departure Sea Buoy
· Transit
· Funding
· Correspondence
· Personnel
· Sea Trials
· Deficiencies (Operating casualty history and repairs)
· CASREP/CASCOR and associated actions taken
· Vessel Reports
· Vessel Logs
· Thermography and Vibration Analysis Survey Reports
· Deliverables
And an (optional) submission of Photographs (digital, if possible,) for use by the Maritime Administration in briefings or public affairs articles.

3.2.7.2 Maintain throughout both Phases the onboard property, inventory and currency of MSC, USCG, and other nautical publications and instructions.

3.2.7.3 Report any discrepancies (inventory and/or currency) to the COTR (for items, which the Maritime Administration furnishes,) and undertake necessary efforts to replace or update the deficient items.

3.2.7.4 Ensure missing documents or publications are obtained prior to the completion of load-out or departure from CONUS, whichever occurs first. Items in the Standard Administrative Yellow Filing cabinet onboard each vessel are found in CDRL BUS-0004.

3.2.7.5 Embarkation of military personnel. Ship Managers and Masters may be required to support the embarkation of Government personnel including military as passengers, supercargo personnel, and/or observers as directed by the Maritime Administration. This includes military stationed as a temporary security force, for example Guardian Mariners.

3.2.7.5.1 The Ship Manager shall provide berthing, food, medical, laundry, and cleaning services comparable to the equivalent shipboard rating. These services shall be provided on a cost reimbursable basis. Entertainment for embarked military is not required and it is not a reimbursable nor an allowable expense. No additional exercise facilities beyond what is available for the crew shall be provided.

3.2.7.5.2 COMSC has instructions which address Master's responsibility and relationship with military personnel, allocation of space, shipboard safety, behavior and discipline, weapons security and other related subjects. (See MSC SOM Chapter 2 Section 7)

If issues arise regarding weapons/ammunition, advise **MAR-612 within twenty-four hours, by the fastest means possible.**

3.2.8 Chart Ordering and Nautical Publications. Ship Managers will gain access to nautical publications and charts (paper copies) ordering service by having a representative attend the MSC provided course (see J-13). Upon authorization which is provided in writing after completion of the course, Ship Managers shall obtain nautical publications and charts for vessels prior to operation and dispose of them during deactivation in accordance with direction from the COTR.

3.2.9 Slop Chest. Ship Managers will obtain all slop chest items at their own expense, operate the slop chest, and dispose of all materials in accordance with their own corporate procedures. The Maritime Administration will no longer reimburse slop chest materials.

3.3 Operations

3.3.1 General. Provide all resources and support equipment required to accomplish continuous ship operations for at least 180 consecutive days in accordance with good commercial practice and the laws and regulations of the United States. Ships are required to maintain operational sea speed listed in TE-7 or notify COTR immediately.

3.3.1 Ship Managers may provide comments or recommendations on TE-7 to the Chief, Division of Ship Maintenance and Repair. Such comments should occur before a vessel "fails to make speed."

3.3.2 Arrange for port services when in port including anchorages and alongside facilities. Ship Managers must expect and be ready for simultaneous operations of vessels. Although most RRF operations are point-to-point service, Ship Managers must remain flexible to changing operational requirements because there are a variety of worldwide missions for RRF ships. Generally, but not always, RRF ships are under the OPCON of MSC. RRF ships are owned by the Maritime Administration and the Ship Manager is contractually obligated to the Maritime Administration. Administrative control of the RRF remains with the Maritime Administration irrespective of mission or operation assigned. See TE-1, Section 2 for Naval operational terminology.

3.3.3 Maintain vessels such that they achieve the minimum operational speed designated in TE-7. Failure to routinely meet operational speed requirements will result in an investigation to determine root causes, such as, but not limited to, severe weather, improper loading, operational or mission considerations, or failure to perform preventative or routine maintenance.

3.3.3.1 If an RRF ship is unable to comply with naval sailing orders during Operations, because the Master determines compliance is not feasible or it jeopardizes the safety of the ship, the Master, as Ship Manager's representative, must advise the naval operational commander and the Maritime Administration (COTR, MAR 611 and MAR-612 and if activated, the Crisis Management Team) within one (1) hour by immediate precedence message, unless message traffic is restricted by the naval commander. The message must include intended actions and reasons for not accepting naval operational direction. Copy Area COTR.

3.3.3.2 Keep the naval operational command and the Maritime Administration (see Section C3.3.3.1) fully informed of the ship's status until it is capable of complying.

3.3.4 Operations Plan. Develop, implement, manage and maintain the Ship Manager developed ship-specific Operations Plan. Compliance with the Operations Plan, and any of its modifications, is considered a performance measurement under the QASP.

3.3.5 Bunkering

Provide general policy and ship specific plan for bunkering the ship in accordance with Federal, State, and local environmental regulations.

3.3.5.1 Ensure crew members are familiar with the ship's bunkering plan and conduct bunkering operations with the utmost care for environment in strict compliance with the bunkering plan.

3.3.5.2 Bunkering is normally performed after the vessel is reported RFS and accepted by MSC.

3.3.5.3 Bunkering instructions can either be provided in the MSC activation message or by the COTR.

3.3.5.4 Vessels under MSC OPCON must request bunkering instruction from the MSC area commander. The MSC area commander will instruct the vessel to use bunkers or procure bunkers commercially as a reimbursable. Bunkers are GFP or reimbursable (at the discretion of the Government). During operations, request information on availability of bunkers from the local MSC area commander before arriving in port.

3.3.5.4.1 Maintain list of crewmembers to have viewed bunkering video.

3.3.5.4.2 Inventory of oil spill response kit - semi-annually. Coordinate with COTR.

3.3.5.5 The Maritime Administration has provided a laminated Bunkering checklist (in the standard administrative filing cabinet) for use during bunkering; and an instructional video for the training of all crewmembers who are involved in bunkering. Maintain a list of crewmembers' names who have viewed this video and reviewed the bunkering checkoff list.

3.3.5.6 Maintain and utilize Government-furnished (GF) Oil Spill response kits onboard RRF ships.

3.3.5.6.1 Maintain, adjust, deploy, or remove GF containment booms as directed by the COTR.

3.3.5.7 Perform inventories of the oil spill response kits at least semi-annually and advise COTR of missing or expired parts. Maintain and utilize Oil Spill response kits onboard RRF ships, in accordance with regulatory body requirements.

3.3.6 Report on the status of bunkers as directed by MSC/Maritime Administration and request the source of bunkers from the MSC Area Commander.

3.3.7 Hydraulic and Lube Oil Analysis. Utilize the analytical services provided by the Maritime Administration under the RRF's Fleetwide Oil Analysis Program and currently provided by JOAP for hydraulic and lubricating oils. The costs for testing at this laboratory are paid by the Maritime Administration.

3.3.8 Special Mission Operations. Crew and operate each of the special mission vessels in a manner so that the vessel will be able to perform its designated mission as prescribed.

3.3.8.1 The following vessel types have been designated as special mission RRF vessels since they have been modified to conduct special operations that are not typical of normal cargo operations:

3.3.8.1.1 Aviation Support Vessels (T-AVB) - General cargo ships which have been modified to conduct maintenance and repair (M&R) of United States Marine Corps (USMC) fixed and rotary wing aircraft. When activated, vessels' cargo holds are loaded with container/CADS/Conex boxes which are utilized as repair shops for USMC operations. Vessels each embark up to 300 USMC personnel. Vessels conduct extensive helicopter operations during deployment. USMC personnel are self-sufficient for berthing and messing; however, Ship Manager may be responsible for procurement of victuals and stores on a reimbursable basis as well as conducting maintenance and repair to USMC hotel spaces. T-AVB Vessels are:

SS CURTISS
SS WRIGHT

3.3.8.1.2 Auxiliary Crane Ships (T-ACS) - General cargo ships which have been modified with two (2) or three (3) sets of twin heavy lift cranes to load and offload non-self-sustaining cargo vessels in either unimproved ports or while anchored offshore. Cranes are rated at 30 or 35.5 long tons each and can operate individually, in twin mode or conduct tandem lifts (four (4) cranes together). Military personnel rig cargo and operate the cranes under the authority of the vessel's Master during operations and exercises. The ship's crew shall be responsible for M&R of the cranes. Approximately five (5) military personnel may be embarked on each ship full time and will require berthing, victuals, messing and stores. T-ACS vessels are:
SS KEYSTONE STATE (T-ACS 1 Class)
SS GEM STATE (T-ACS 1 Class)
SS GRAND CANYON STATE (T-ACS 1 Class)
SS GOPHER STATE (T-ACS4 Class)
SS FLICKERTAIL STATE (T-ACS4 Class)
SS CORNHUSKER STATE (T-ACS4 Class)
SS DIAMOND STATE (T-ACS7 Class)

3.3.8.1.3 Modular Cargo Delivery System (MCDS) Vessels - The MCDS vessels have been modified to conduct underway replenishment of Navy combatant and auxiliary ships. Cargo operations are conducted via high line wires between the MCDS vessel and Navy ship or by helicopter cargo operations. MCDS vessels may carry ammunition as cargo. The MCDS vessel's crew shall be responsible for the operation of cargo handling equipment within the cargo holds. Other cargo handling operations will be conducted by Navy personnel embarked on the vessel under the authority of the vessel's Master. Applicable crewmembers shall require specialized training and certification for the conduct of MCDS operations and handling ammunition. Maintenance and repair of MCDS installations and outfitting will primarily be the responsibility of the Navy personnel, however, management of associated spare parts shall be the responsibility of the Ship Manager. Up to 45 Navy personnel may be deployed aboard the MCDS vessel and shall require berthing, victuals, messing and stores. MCDS vessels are:

SS CAPE GIBSON
SS CAPE GIRARDEAU
SS CAPE JACOB

3.3.8.1.4 OPDS Vessels: The Maritime Administration has two Offshore Petroleum Discharge Ships (OPDS). Guidance will be separately provided regarding any future deployments.
SS PETERSBURG
SS CHESAPEAKE

3.3.9 Operations Reporting

3.3.9.1 Develop, manage, and submit timely and accurate reports as defined in the Contract Data Requirements List (CDRL) (TE-3), RMS, and as required by the MSC's Standard Operating Manual (SOM) or provided as a special mission requirement from the Maritime Administration.

3.3.9.2 Obtain through MSC the latest version of the MSC SOM (CD-ROM format). MSC SOM requirements are not reported in the Maritime Administration CDRL.

3.3.9.3 When an RRF ship is under MSC OPCON, significant reporting is required under MSC SOM. This manual (in CD-ROM format) is constantly changing. MSC will provide the SM with a quarterly update by mail. If difficulties are encountered advise the MARD COTR immediately. SINCE THE MARITIME ADMINISTRATION IS THE VESSEL OWNER, THE COTR SHALL BE COPIED ON ALL REPORTS. For classified reports: Using the PC to PC Transfer System (PPTS) , the ship is able to send classified message traffic/reports to the appropriate the Maritime Administration divisions and Headquarters address.

3.3.9.4 Upon the issuance of weapons/ammunition, the following reports: 1. the Navy Small Arms Asset Verification List; (CDRL O-0001) and 2. The Ammunition Transaction Report shall be submitted to MAR-612. (CDRL O-0002)

3.3.9.5 Notify the COTR immediately, if any vessel in Phase O has not reported in at least once in any twenty-four (24) hour period. Copying the COTR on the Noon Report, usually required by MSC, is sufficient. (CDRL O-0003)

3.3.10 Ad Valorem Documentation: At the first U.S. port of entry after an overseas voyage the Ship Manager shall utilize U.S. Customs Form No. 226 (Attachment J-17) for reporting all repairs and parts procured from foreign sources. Send a copy of the US Custom's Form 226 with supporting documentation to MAR-611 and the COTR at the same time it is submitted to Customs. Inclusive of the submittal, identify any items on the Form 226 which may be subject to customs relief. Additionally, notify the Maritime Administration (MAR-611) of any difficulties with U.S. Customs. (CDRL O-0004)

The Ship Manager shall be responsible for monitoring the costs of repairs and parts procured overseas and the associated Ad Valorem duties which will be applied. These costs will be applied to the Phase O operations task order and the Ship Manager shall ensure adequate funding remains available to pay incurred Ad Valorem duties. The Ship Manager shall notify the COTR immediately if it is determined the Ad Valorem duties are projected to exceed the available Phase O funding levels.

3.3.11 During all Phases, report to the Maritime Administration (MAR-612) or, if established, the Maritime Administration HQ Operations Center, significant events, e.g. rescues at sea, medivacs, or political unrest which affects ship operations or in which the ship is involved.

3.3.12 The Casualty Reporting System includes: Casualty Reports (CASREPs); Casualty Situation Reports (SITCASREP); Casualty Corrected Reports (CASCORs) and Casualty Cancelled Reports (CASCANs). (CDRL O-0005)

3.3.12.1 CASREPs. Advise the COTR, MAR-612, the Maritime Administration HQ Operations Center, , MSC and the naval operational commander via the Navy's casualty reporting system when a vessel is experiencing a material casualty during Phase O. Provide decision tree rational for C3/C4 for CASREP in a separate report to the Maritime Administration Area Divisions/HQ Operations Center. Include COTR, MAR-612, and the Maritime Administration HQ Operations Center on ALL message traffic regarding the casualty.

3.3.12.2 CASCANs. Cancel outstanding CASREPs upon redelivery of an RRF vessel to the Maritime Administration by issuance of a CASCAN. Information contained in the cancelled CASREP shall be transferred to RMS.

3.4 Deactivation

3.4.1 General. Deactivation is part of Phase M that occurs after redelivery of the vessel to the Maritime Administration from Phase O.

3.4.2 Conduct the necessary planning and preparations to return the vessel to its assigned readiness status, capable of being re-activated and operated for 180 consecutive days, to include the following:

a) Accurately document all known equipment and system malfunctions and other material deficiencies.

b) Accomplish deactivation procedures, repairs, and regulatory requirements.

3.4.3 Deactivation Plan. Develop and maintain a vessel-specific Deactivation Plan. Compliance with the Deactivation Plan, and any of its modifications, is considered a performance measurement under the QASP.

3.4.3.1 In developing the Deactivation Plan, the Ship Manager may consult any of the Government's available procedures:

a) TE-1 Section 31 - Deactivation Procedures and Standard Lay-up Procedures for selected vessel's equipment and systems.

b) The Maritime Administration NDRF Fleet manual available from MAR-612, provides information for vessels laid up in the NDRF.
3.4.4 Execute the Deactivation Plan and associated specifications.

3.4.5 Ensure that both ROS and non-ROS vessels are deactivated and laid up in a manner that prevents deterioration of the vessel, or vessel's equipment and outfitting.

3.4.6 Provide all resources and support equipment required to accomplish all the necessary work of deactivating the vessel as authorized by Task Order.

3.4.7 Deactivation Work Items (For ALL vessels)

3.4.7.1 Provide a detailed deactivation cost estimate by ship work breakdown structure. (CDRL D-0001)

3.4.7.2 Accept vessel tender from the operational commander on behalf of the Maritime Administration, if directed by the COTR.

3.4.7.3 Supervise the discharge of final cargo and cleaning of vessel's spaces by military personnel. Attempt to obtain signatures when damage has been discovered or cleaning is unsatisfactory. Report damage and unsatisfactory cleaning to COTR. (CDRL D-0002)

3.4.7.4 Box, inventory, secure with a Maritime Administration seal all pilferable items. This includes items, which in aggregate have a high value: e.g., special tools, such as torque wrenches.

3.4.8 Box charts (or chart CDs) for storage or disposal in accordance with direction from COTR.

3.4.9 Return and verify all items in standard administrative yellow cabinet. Notify MAR-612 of missing materials.

3.4.9.1 As authorized by TO, arrange for and coordinate all lay-up services with appropriate vendor (shipyard, tugs, pilots) or regulatory agency.

3.4.9.2 As directed by TO, perform material condition surveys which may include: sea trials and, if directed by COTR diagnostic testing such as Thermography or vibration analysis. (CDRL D-0003)

3.4.9.3 As directed by TO, accomplish all voyage repairs and outstanding classification and certification items via ROS crews or with industrial assistance in accordance with the annual business plan.

3.4.9.4 RESERVED

3.4.9.5 Obtain guidance on the disposition of weapons and ammunition from the HQS (MAR-612) COTR for weapons and ammunition.

3.4.10 Deactivation Work Items (ROS vessels)

3.4.10.1 After 48 hours of redelivering the vessel to the Maritime Administration, the per diem rate will change from Phase O to Phase M.

3.4.10.2 Accomplish the following:

a) Inventory, box, and secure pilferable items except those required by crew.

b) Voyage repairs, and outstanding class items as directed by task order.

c) Arrange for vessel to be properly moored at the outport location and connected to the required hotel/shoreside hookups (i.e., power, water, telephone, etc.)

d) Arrange for all lay-up systems (dehumidification, intrusion, fire, and flood alarms and hull protection) to be in place and activated as required in light of ROS crew requirements.

3.4.11 Deactivation (RRF-10 day vessels)

3.4.11.1 Issue solicitation for deactivation in accordance with task order and award subcontract within thirty (30) days.

3.4.11.2 Identify in the business plan, the type by rating and number of personnel who will remain with the vessel for up to ten (10) days to conduct deactivation work. If authorized, the Maritime Administration will reimburse the cost of the designated crew wages.

3.4.12 Transfer vessel to location where voyage repairs, outstanding classification items, and/or lay-up work will be performed.

3.4.13 For RRF-10 day vessels (berthed in the NDRF)

3.4.13.1 Transfer vessel to the NDRF location.

3.4.13.2 Vessel mooring, hookups, and security will be accomplished by Government fleet personnel.

3.4.13.3 There will be limited power for dehumidification and cathodic protection, ensure alarms systems are operational (flooding, intrusion, and fire). Notify the COTR if alarms are not functioning.

3.4.14 For RRF-10 day vessels (outported)

3.4.14.1 Transfer the vessel to the outport site.

3.4.14.2 Arrange for vessel to be properly moored and connected to the required shoreside hookups (i.e., power, water, alarms, etc.)

3.4.15 Deactivation Reporting (all vessels)

3.4.15.1 Enter the Delivery/Re-delivery Report into RMS. (CDRL D-0004)

3.4.15.2 Ensure that fuel data is recorded before re-delivery and provided to Navy (NEURS) and COTR. (CDRL D-0005)

C.4 SAFETY, ENVIRONMENTAL AND SECURITY

4.1 Introduction

Although the RRF program's primary function is to serve as a source of strategic sealift during national emergencies, the Maritime Administration fosters other long-term goals during the execution of the Program. These include: improvements to the sustainability and livability of U.S. communities; reduction in the number of RRF shipboard injuries and deaths; and reduction of the adverse effects of the RRF on ecosystems and the environment. To accomplish these goals, the Maritime Administration will work in partnership with the Ship Manager to maximize safe performance for all personnel, and foster high security and environmental standards and achievements. Should a Ship Manager have any question at any time with respect to public vessel compliance and regulatory statutes, questions shall be directed to MAR-611 with copy to the COTR. Note: The Maritime Administration, as vessel owner, promulgates an Occupational Health and Safety Program (OHS Program TE-1 Section 18). This Program is not approved by a third party - for International Safety Management (ISM) certification. If upon reading the Maritime Administration safety actions in the OHS Program, the Ship Manager finds a conflict between its ISM certificate and the Maritime Administration safety actions, the Ship Manager shall advise the Maritime Administration HQ (MAR-612) OHS COTR immediately. The Maritime Administration 's OHS Program is not meant to replace or supersede the Ship Manager's ISM certificate. The Ship Manager's Safety Management Program which is the vessel's safety program takes precedence until the issue can be worked out. MAR-611 will take appropriate measures to arrange a waiver to individual requirements should one be needed.

The Ship Manager shall:

4.1.1 ISM Certificates

4.1.1.1 International Safety Management (ISM) Document of Compliance (DOC): Maintain a valid ISM DOC, for itself as a corporation, for the vessel types awarded for the performance period of the contract. The entity/offeror who will perform management of the ships must have a separate ISM DOC or interim DOC at NTP.

4.1.1.2 Vessel Safety Management Certificate (SMC): In accordance with appropriate USCG regulations and NVICs for public vessel voluntary ISM compliance, obtain and maintain for the performance period a valid ISM SMC or interim SMC for designated vessels in Sections C4.1.1.2.1 and C4.1.1.2.2. ABS fees in connection with this are reimbursable. (see Attachment J-9) Internal audits for DOC are not reimbursable; audits and other fees for the maintenance of the Ship Management Certificate are reimbursable.

4.1.1.2.1 For ROS vessels with a valid interim Ship Management Certificate review the assigned ships' Ship Management Certificate or renew, a valid interim Ship Management Certificate for the vessel within twelve (12) months.

4.1.1.2.2 For ROS vessels without an SMC or if a new Ship Manager has been assigned the vessel, Ship Managers will apply for and obtain a valid an interim SMC for their assigned ships within twelve (12) months.

4.1.1.3 ISM Safety Management System/Vessel Safety Plan: Update the ISM Safety Management System to incorporate characteristics of awarded vessels, and as conditions warrant. Copies of the safety management system shall be available to all crewmembers and to the Government. (CDRL SFTY-0001) The Ship Manger's ISM Safety Management System becomes the Vessel's Safety Plan for the performance period of the contract. The Maritime Administration will not review or approve as this document as it is part of the Ship Manager's ISM DOC. See also TE-1 Section 18 for the Maritime Administration requested procedures, such as a Vessel Pre-Fire plan, which if not already addressed by the Ship Manager during development of its ISM Safety Management System, should be incorporated..

4.1.1.4 The Maritime Administration will hold periodic meetings with the Ship Manager, the ISM designated person, ship's officers, the Maritime Administration COTR, and the Maritime Administration Safety COTR at a place of mutual agreement to discuss specified agenda items. The Maritime Administration Safety Officer will provide the agenda.

4.1.1.5 Notify the Maritime Administration COTR before internal audits are conducted. The Maritime Administration COTR may attend as an observer. See Section C 6.7.2.3.

4.1.2 Logs: Ship Managers shall maintain an deck log(s) at all times when a crew of any size is aboard. (CDRL SFTY-0002) Safety information shall be recorded, as applicable, in the deck log:

· Emergency, Steering Gear, Abandon Ship, Firefighting, and Boat drills/training
· Security Training/Drills
· Monthly Safety Meeting Findings Training
· Quarterly MSDS and warning label Training

· Quarterly Personal Protection Equipment (PPE) and CBR-D Training
· Duty officer notes - by exception and related to safety
· Results of side-by-side emergency drills (combining crews) for ships nested or located near to each other.

4.1.3 Conduct, via the ship's Safety Committee, pre-firefighting training, drills, and actual practice with ship's equipment in full gear. Further, ship supervisors in all departments must know the location of the ship's fire plan.

4.1.4 Post Station Bills: Ensure, via the senior deck officer, that all station bills are properly posted and emergency equipment (personal floatation devices, exposure suits) is functioning properly or replaced. Materials required for drills is either GF or reimbursable at the Government's direction - consult COTR.

4.1.5 Cooperation. The Ship Manager shall cooperate with the Maritime Administration to develop and implement to the maximum extent possible the policies, plans, and procedures of the Maritime Administration 's OSH Program and to offer recommendations for its improvement. Ship Manager personnel shall attend, as directed and funded by the COTR, OSH conferences organized by MAR-612. These are normally twice a year trips to Washington DC.

4.1.6 Cargo Handling: The Ship Manager shall promulgate, to shipboard personnel, procedures incorporating all federal, state, and local statutes and regulations, and equipment manufacturers' safety requirements for cargo handling in U.S., foreign ports, and in-the-stream for the safe handling of all types of cargo, including HAZMAT.

4.1.6.1 Ship's cargo gear includes, but is not limited to cranes, winches, davits, booms, Roll-on/Roll-off (RO/RO) ramps, SEABEE or Lighter Aboard Ship (LASH) barges, elevators and transporters, underway replenishment (UNREP) and vertical replenishment (VERTREP) cargo gear, and Material Handling Equipment (MHE) items such as, forklift trucks, pallet jacks, and hand trucks.

4.1.6.2 The Ship Manager via crew supervisors is responsible for ensuring that the crew utilizes proper protective clothing during work. Advise COTR if special sizing of PPE is required.

4.1.6.3 Operate cargo support equipment when required for any cargo operation and in accordance with the applicable manufacturer's operating manuals and instructions.

4.1.6.4 Master is responsible to ensure his ship is properly loaded, secured, discharged, and cleaned.

4.1.7 Workforce Planning: Reconcile the potential of military exercises which often are scheduled for twenty four (24) hour periods two 10 hour shifts with 4 hours for maintenance with the crewing requirements of Title 46, Subtitle 1 Part F, Chapter 81, section 8104 Watches.

4.1.8 Unsafe Operations: Instruct the Master that any unsafe practice, by military or military contracted stevedores, noted by a ship's officer during cargo operations, shall be reported to the senior military official present and a copy of the incident kept in the ship's files. If unsafe practices continue, the Master has the authority to cease cargo operations until the situation is corrected.

4.1.9 Cargo Operations/Plans: Recognizing that stow plans are fluid, ensure, via the Master, that a copy of the loading/stow plan (and master cargo stowage plan for firefighting and damage control) is obtained from DOD Surface Distribution and Deployment Command (SDDC, formerly MTMC) terminal supervisors and/or MSC representatives prior to sailing.

4.1.10 Personal Flotation Devices: All personnel working in an operating environment including ship ramps, or lighters, shall wear USCG-approved, buoyant, personal floatation devices equipped with a light and whistle. DOD personnel, unfamiliar with ocean environments frequently are unaware of this regulation. The Master shall enforce this safety procedure. The ship's crew shall set an example by wearing such equipment themselves when working in lifeboats, over the side, or on ramps.

4.1.11 Seaman's Injury Claims and Maintenance and Cure

4.1.11.1 Process Seaman's Injury Claims and Maintenance and Cure (M&C) in accordance with Attachment J-3 and provide administrative claims and litigation support in accordance with Attachment J-3 and Section G.7 of the contract.

4.1.11.2 Reports. Be responsible for documenting on a quarterly basis (CDRL SFTY-0003) all costs incurred in providing emergency services or other medical treatment, transportation, and all other costs incidental thereto.

4.1.11.3 Provide a report and maintain its currency at least quarterly for as long as a specific case is active. More frequent updates than quarterly are encouraged particularly during the initial stages of an injury or illness. This ensures funding is available and owner exposure is minimized. (CDRL SFTY-0004)

4.1.11.3.1 The report will initially be provided by email. It will be accessed and used by MAR-380, 580, 610, 611, 613, and 220 personnel during planning and litigation. If any part is password protected, provide password to MAR-611.

4.1.11.3.2 At the end of the contract performance period provide a full electronic report of outstanding litigation and all open M&C actions including required payments to MAR-220, 611, and COTR (CDRL SFTY-0005)

4.1.11.3.3 The Ship Manager shall obtain, report, and manage the information and data required by Attachment J-3 to the extent that it is not available in RMS.

4.1.12 Severe Weather Plan. Note the terms "hurricane plan," "emergency evacuation plan," or "Plan for Getting underway" are interchangeable with "severe weather plan."

4.1.12.1 Develop, and if required execute, a Severe Weather Plan (CDRL SFTY-0006) which accounts for both remaining alongside and getting underway. Obtain approval of the USCG COTP. At the Ship Manager's discretion this plan may be part of the overall activation plan, or a separate document. In either case it must be easily recognizable. Note: the Mooring plan below may be part of the severe weather plan or stand as an independent document. This is the Ship Manager's choice.

4.1.12.1.2 For vessels located on the West Coast the Severe Weather Plan shall address the plan of action in anticipation of Earthquakes.

4.1.13 Mooring Plan

4.1.13.1 Obtain from COTR a copy of the outport vessel's Mooring Plan. The Maritime Administration does not have Mooring plans for all vessels contained in TE-4. However, the Maritime Administration will provide a copy of those it has. See TE-4, Column K. Obtain copy for review after NTP from MAR-612. Review this plan, correct if required, and resubmit as the Ship Manager's Mooring Plan. If a mooring plan is unavailable, contact MAR-612 for directions. Ensure that the vessel is properly moored in accordance with its parameters at all times. Comments should be provided to the COTR. Take additional action if winds are anticipated to exceed 70 mph. Note: the Maritime Administration uses the Navy's (NFESC) guidance to moor ships that are going to remain in port in heavy weather to a standard referred to as "Mooring Service Type III". The wind speed varies by port and ranges from 70 mph to 113 mph. A copy of the table is in Attachment J-15. However, during the performance period of the contract, the most recent copy can be obtained from MAR-612. Attachment J-15 will not be updated. NDRF moored vessels may obtain copy of Fleet Mooring plans, however, fleet personnel are responsible for the vessel's safe mooring. (CDRL SFTY-0007)

4.1.14 NDRF Safety Requirements. All contract or subcontractor personnel working at the Maritime Administration's NDRF work sites and onboard the Maritime Administration's outported ships shall follow safe work practices and abide by the NDRF's safety and health rules, as applicable, in the performance of their duties.

4.1.15 Cargo Safety. The Ship Manager shall comply with the Occupational Safety and Health Act of 1970 (29 U.S.C. et) for safety in loading and discharging of cargo.

4.2 Environmental

4.2.1 Pollution Prevention: All RRF ships shall comply with all federal, state, local, and foreign hazardous material and hazardous waste regulations unless waived in foreign ports. Masters of RRF ships shall conform to USCG and Environmental Protection Agency (EPA) laws and regulations where foreign regulations are less stringent.

4.2.2 General: Provide personnel resources with adequate environmental training to accomplish the functional tasks anticipated. This includes Port Engineering staff, ship manager staff supervisory or staff personnel, or ship's crew. The Ship Manager shall take all prudent actions to prevent violations of law. Violations of law will be reported to the appropriate enforcement agency for civil or criminal prosecution.

4.2.3 Policy Directives: Develop, and execute programs, policies, and procedures to ensure proper execution of pollution prevention measures in accordance with applicable regulatory requirements.

4.2.3.1 Incorporate The Maritime Administration provided directives (Vessel Response Plan/Shipboard Oil Pollution Emergency Plan VRP/**NTVRP**/SOPEP) (CDRL E-0001) into Ship Manager programs, policies, and procedures and promulgate as necessary. Advise COTR and **MAR-612** of any conflicting guidance or deficiencies. Carry out the procedures contained therein with the VRP and **NTVRP**/SOPEP and, **when specified in the activation order**, COMSCINST 5090.1B CH-1 (All RRF Ships), COMSCINST 5090.5 CH-1 (Tankers) and COMSCINST 5090.6 CH-1 (Non-Tankers.) Copies of each of these documents are contained in the standard administrative yellow cabinet. Ship Managers desiring copies for corporate office retention must reproduce them at their expense. It is imperative that Ship Manager and Ship Manager employees be aware of the laws and programs for abating and controlling the release of harmful pollutants. For spills of any size, immediately notify the Maritime Administration COTR (or SOMO in the COTR's absence) and MAR-612 who maintains the Maritime Administration oil pollution insurance policy.

4.2.3.2 Oil Spill - The Maritime Administration maintains an oil pollution insurance contract for RRF vessels. For spills requiring the services of a response team, contact the following Maritime Administration personnel in order:

- **Your Area Division SOMO who is a QI with estimated clean-up cost (up to $250,000)**
- **Andy Jordan (COTR) 202-366-5071 (costs over $250,000)**
- **Gene Magee (ACOTR) 202-366-5073 (costs over $250,000 if Andy is not available).**

For spills requiring a response team, phone your Area Division COTR and send an e-mail message to Adrian.Jordan@dot.gov.

4.2.4 Environmentally Related Research: RRF vessels may occasionally be used for environmental research by other governmental organizations. Be responsive and flexible during research conducted by Maritime Administration-approved sources.

4.2.5 Hazardous Materials (HAZMAT): The term "hazardous material", as used in this section, is as defined for hazardous chemicals in 29 CFR 1910.1200, the U.S. (OSHA) Hazard Communication Standard, and the Emergency Planning and Community's Right-To-Know Act. No RRF ship shall transfer (donate) hazardous materials or hazardous waste to any private sector, state or local/city agency.

4.2.5.1 Hazardous Material -- Asbestos
The EPA has determined that asbestos is a hazardous air pollutant. All persons are cautioned that asbestos may be found on pipes, ducts, boilers, tanks, reactors, turbines, or structural members, engine exhausts, etc., or in the holds or compartments of the vessels to be managed.

4.2.5.2 HAZMAT Training: Provide personnel resources with adequate HAZMAT environmental training to accomplish the functional tasks anticipated.

4.2.5.2.1 Group Environmental Training: Provide ship and shoreside personnel as directed via task order to attend periodic booming demonstration(s) in connection with HAZWOPER refresher materials.

4.2.6 TE-1 Section 19: The Maritime Administration policy, procedures and directives involving environmental concerns are provided in TE-1 Section 19. Ship Managers shall incorporate Maritime Administration provided directives into Ship Manager programs, policies, and procedures and promulgate as necessary. Advise COTR of any conflicting guidance, or deficiencies.

4.2.7 Material Safety Data Sheets (MSDS): Develop and execute programs, policies and procedures for receiving, handling, inventorying and reporting, Material Safety Data Sheet (MSDS) labeling, maintaining MSDS labels in readable condition during loading/unloading, proper securing and stowage of hazardous materials to the ship(s) in all Phases including the maintenance and appropriate filing of associated records. (CDRL E-0002)

4.2.8 Minimum HAZMAT During Retention: Maintain minimal amounts of HAZMAT onboard RRF vessels during all phases and this HAZMAT will be properly labeled, and handled. Additional general guidance includes:
a) Retained HAZMAT shall have a shelf life of two (2) years or more.
b) All ships entering the NDRF will be inspected by NDRF representative.
c) Stowage locations for all HAZMAT, solvents, and chemicals will be directed by COTR.

4.2.9 Disposal of HAZMAT: Ship Managers shall develop, manage, and execute programs, policies, and procedures to ensure the lawful disposal of HAZMAT including the retention of associated records. (CDRL E-0003)

4.2.9.1 The U.S. Environmental Protection Agency (EPA) now requires all generators to use a new shipping document for transporting hazardous waste offsite, off ship, etc. The new shipping document known as a Uniform Hazardous Waste

Manifest became a requirement on September 5, 2006. The old forms can no longer be used by generators, transporters and treatment disposal facilities. To obtain the form or if you have questions, Ship Managers should consult either their Area Division environmental specialist, their COTRs, or the following web address: http://www.epa.gov/epaoswer/hazwaste/gener/manifest/index.htm Both training link and the form itself are available on-line. The alternative method to obtain the website is to go to www.epa.gov and go to the link for wastes and under that section you will see Highlights on the right side of the page. Go to New Hazardous Waste Manifest Effective Sept 5, 2006 and read.

4.2.10 Air Testing: Ship Managers with ROS crews shall develop, manage, and execute programs for their environmental training and safety including ambient air baseline testing; orientations; drills as first responders to various emergencies including, but not limited to fire, oil spills, health; and maintain all associated personnel records.

4.2.11 Waste Management and Control: In accordance with Annex V of MARPOL 73/78 and 33 CFR 151.51 through 151.77 and industry best practices, develop, manage, execute and monitor the Master's execution of both an individual shipboard solid waste management plan and a shipboard recycling plan, which minimizes the use of plastics during all Phases; and addresses the collection, processing, storing and disposal of garbage or medical waste during activation, operation, and deactivation. If applicable, address execution variation during Phase M and vessel activation.

4.2.12 Environmental Responsibilities During Ship Repair Availabilities: The Ship Manager shall develop programs, policy, and plans for the identification and disposal of any unused, or unidentified HAZMAT or HAZMAT with an expired shelf life, during repair availabilities. The Ship Manager shall address, as applicable, two (2) scenarios in the development of its shipwork solicitation:

1. the removal of waste generated during vessel operations.

Only upon written direction (no verbal permitted) from the COTR, the Ship Manager is responsible to obtain all appropriate EPA Identification Numbers and permits and/or state/local equivalent to track the removal of this waste. These numbers shall be provided to the repair facility. The repair facility shall price and accomplish the removal of this waste in accordance with all applicable laws and regulations.

2. the removal of waste generated during the repair, by the repair facility.
Ship Managers shall require that the repair facility:

a) complies with all applicable federal, state, and local environmental laws and regulations

b) addresses the use of properly licensed (permitted) transporters and storage, treatment, disposal facilities and provides as a deliverable prior to the commencement of work:

c) photostatic copies of all required EPA identification numbers permits and/or licenses and or state/local equivalent

d) a copy of its waste removal plans, and any other plans and programs related to the required work

The Ship Manager shall ensure that his subcontractor prices and is responsible as the generator of all hazardous and solid waste that results from the activities of the subcontractor under the subcontract.

The Ship Manager shall provide copies of all documentation of work performed to the COTR or his representative pertaining to sampling, analysis, storage, transportation and disposal of all hazardous, industrial, and special wastes generated from work resulting from a subcontract. (CDRL E-0004)

Ship Managers must be knowledgeable in the regulations that pertain to vessel operations and shipyard/repair activities and ensure that these regulations are complied with. Questions regarding this section shall be forwarded to MAR-611 who will coordinate with MAR-820 and provide guidance.

4.3 Security

4.3.1 General. Owners (The Maritime Administration) and operators (Ship Managers) have the primary responsibility for ensuring the physical security and safety of vessels. The Maritime Administration and Ship Managers shall work together to develop a comprehensive national program for response to a variety of security conditions based upon homeland security levels.

4.3.2 Internal Security: Provide resources, programs and procedures to provide routine internal security for ROS vessels 24/7. Routine internal security involves responding to vessel alarms; maintaining operational shipboard equipment; and the prevention of unauthorized personnel from vessel entry. The vessel must be manned 24/7 by someone who can properly respond to a fire, security breach, or equipment failure.

4.3.2.1 Internal Security Includes: the gangway/gate guards, guard shacks when these are not supplied by other agencies/entities. (For example, the CAPT T berths in Houston, the Port provides the Gate guards, but in Charleston the Ship Manager provides the gate/ramp guards at the piers. Specific direction may be obtained from the Maritime Administration COTR or MAR-612.

4.3.3 "Heightened security" will be as directed by the Maritime Administration via the COTR and is reimbursable. Heightened security is anticipated only during Homeland Security assessment codes of orange and red and may include armed guards from military, private, or non-Ship Manager contract sources.

4.3.4 The Maritime Administration, as a vessel owner, complies with the Maritime Security Act of 2002, the International Ship and Port Security (ISPS) Code, and subsequent USCG regulations and requires its Ship Managers to execute this policy.

4.3.4.1 Identification of Company/Vessel Security Officers. Provide in RMS the name and contact data for the Company Security Officer(s) (ISPS Code Part A 1.3 paragraph 11) and individual Vessel/Ship Security Officer - one (1) per ship (ISPS code Part A 1.3 paragraph 12). It is strongly suggested that the property custodian for weapons/ammunition and force protection ATO should also be the Ship Security Officer, although they may be separate people. (CDRL SEC-0001) Note: Services of Company security officer should be pro-rated among all ships managed by the Ship Manager and included in G and A. The Ship Security Officer shall be included in the fixed price.

4.3.4.2 Vessel and Layberth Security Risk Assessments: Conduct periodic security risk management assessments for both vessel (ISPS Code Part A 1.3 paragraph 8, ISPS Code Part B and USCG NVIC 10-02), and if applicable, the outport (wharf/pier and any area which the Vessel Security Officer determines may pose a security risk). Perform an annual security audit of the Vessel Security Plan for each vessel in accordance with ISPS and subsequent USCG regulations.

4.3.4.2.1 Baseline security assessment of vessel internal spaces. After NTP, the Maritime Administration COTR/Ship Manager representative shall conduct a joint baseline assessment of security consisting of a joint inspection of all storage areas to ensure that all storerooms, cages, spare part boxes, etc. are locked, sealed, or otherwise secured. A joint security statement indicating completion of the inspections and certifying the condition of the secured spaces shall be prepared by the Ship Manager representative and provided to the Maritime Administration. (see Section C.2.7.1)

4.3.4.3 International Ship and Port Security (ISPS) Security Plan: The Ship Manager will be provided a copy of the USCG approved ISPS Security Plan in accordance with ISPS (Part A Section 9.4 and Part B Section 9) and the Maritime Transportation Security Act of 2002. The Ship Manager will review and re-submit this plan to the USCG. {Note: if USCG establishes a shorter required timeframe for this deliverable, the Ship Manager will be advised by the COTR. At the time of publication, rules have not yet been established for the transfer of this document.} IMO requires that audits and inspections be conducted to formally assess the effectiveness of the ISPS Security Plan. (see also Section C.1.5) (CDRL SEC-0002).

4.3.5 Reports: Maintain, via the Company Security Officer, the Continuous Synopsis Record in accordance with ISPS, (Chapter XI-1 Regulation 5 and Chapter XI-2) and shall report security incidents in accordance with ISPS Part A paragraph 12.2.8. (CDRL SEC-0003) If required for public vessels, the Maritime Administration (MAR-612) will perform the initial application.

4.3.6 Exterior Security Drills: Conduct both shoreside and waterside security drills in accordance with ISPS (Part A paragraph 13.4) and the vessel security plan.

4.3.7 The Maritime Administration Security Directives: Incorporate the following the Maritime Administration security directives into security procedures against terrorism, hostage situations, demonstrations, stowaways, sabotage, piracy, and hostile acts at any time and especially in areas where incidents are likely to occur:

o Post visible sign(s) - "Government-owned vessel. Restricted area. No solicitation. No unauthorized visitors."

o RRF vessels do not carry spouses, dependents, friends or guests of either the crew or DOT/DOD personnel. In special circumstances, the Maritime Administration HQs MAR-610, may waive this requirement for specific events.

o Official visitors - See TE-1 Section 2.

o Non-official visitors must sign a Waiver of Responsibility for Injury, Accidents or Illness occurring while onboard the vessel and have the waiver approved by the Director, Office of Ship Operations prior to visiting the vessel. Non-official visitors are not authorized to remain overnight onboard any RRF vessel. The Director, Office of Ship Operations on the occasion of ceremonial events or other activities onboard RRF vessels may authorize exceptions.

o Since RRF vessels are public vessels, they shall not be used for commercial purposes or personal profit. Any such use or attempted use will result in disciplinary action.

o Ships lifeboats shall not be used for liberty, or recreation.

o Report any breach of security on any Government property (leased or owned) to COTR and Fleet superintendent (if applicable).

o Execute the Ship Manager's Physical Security Plan, and Bomb Threat Response Plan.

o Determine threat level and provide for gangway security, extra watch standers, roving patrols, or request outside (non-ship's force) assistance, upon direction of COTR.

o Positive security control of entrance into an RRF ship is required at all times in all phases. A visitor log shall be maintained entering the time of arrival/departure, name of person, and reason for visit. This includes vendors. The senior deck officer shall authorize the inspection of all persons and materials coming onboard and ensure there are procedures in place to summon additional assistance. Personnel not assigned to the vessel shall present identification.

o The senior deck officer shall ensure the Watch Standing Mate, when utilized, understands his/her responsibilities with respect to physical security of the vessel even when military personnel are present. Watch standing Mate must be familiar with standing orders, and be familiar with emergency procedures to summon assistance as well as to report threats to proper authorities.

o Take any action within his/her authority and capability to prevent or minimize loss or damage to ship/cargo from theft, espionage, sabotage, terrorism, and other criminal activities.

o Use the resources provided by Navy operational commanders, host nation or other sources to enhance the security of the ship.

o The senior deck officer shall maintain signature custody records on the Maritime Administration provided weapons by serial number at all times. (MAR-612 is POC for weapons and ammunition.)

o A locked stateroom door is not a secure place. The Master may, at his/her discretion, allow crewmembers to store personal items (cash, etc.,) in the vessel's safe. Masters are to ensure the crewmember understands that neither the Government nor the Ship Manager assumes liability for items stored in the vessel's safe.

o The ROS crew participates in external security. ROS crewmember orientation shall be accomplished within fourteen (14) days of reporting onboard. ROS crewmembers shall be provided Ship Manager-developed procedures for several "routine" security conditions, i.e., unauthorized personnel attempting to board vessel, person found onboard without authorization, personnel leaving with what appears to be ship's equipment as well as "terrorism" scenarios, such as bomb threats, unidentified person in water adjacent to vessel. Ship Managers shall advise the ROS crew what outside resources are available to them for maintaining security (including local police, fire, Naval Investigative Service (NIS), Federal Bureau of Investigation (FBI), MSC, port authorities etc., and vessel systems.

4.3.8 Training for Crewmembers: Comply with Attachment J-13 for security training of personnel. For ROS crewmembers see "Training section" under Human Resources. For Fully Operational Status (FOS) crewmembers that join the vessel, security training is to be provided as part of vessel orientation.

4.3.9 Notification to the Maritime Administration: Throughout the performance period of the contract, notify the COTR of any layberth deficiency that may affect the security of the vessel.

4.3.10 Review the Vessel Security Plan provided by the Maritime Administration and ensure a statement of the Master's Authority (see also Section C.5.11.1) is contained. The vessel's Master is responsible for shipboard security in accordance with maritime law.

4.3.11 At Sea Security: Ship Managers and Masters shall provide for physical security while ships are at-sea, at-anchor, and in-port. The latest edition of COMSCINST 5530.3, Subj: MSC Ship Physical Security provides guidance. Reasonable, not total compliance, with this directive is required.. For example, if the vessel does not have a wash down system, the Ship Manager is not required to install one.

4.3.12 Master Briefing: Discuss with vessel Masters' their Phase O physical security duties, responsibilities, and options. Masters can assign additional officer and crew personnel to security duties, hire outside guards or request additional assistance from MSC Area subarea Commanders. However, such actions shall be reported on the daily POSREP (See CDRL O-0006) so that the COTR may assure funding is available.

4.3.13 Force Protection/Information Security. Be flexible and cooperate with the Maritime Administration and other authorized U.S. Government officials in the development and management of force protection and security. This includes:

o Designating the FOS Chief Mate as the Force Protection Officer with commensurate collateral duties. (see Maritime Transportation Security Act) Note: this may be the 2nd Mate in ROS.

o Obtaining and maintaining a list of all shipboard clearances and associated personnel data at all times.

o Coordinating and tracking crew force protection and security training.

o Maintaining custody of and inventorying and managing small arms, weapons, ammunition, CBR-D Personnel Protection.

o Protect all classified documents and materials.

o If small arms are issued to the vessel by MSC, maintain custody of them, determine when it is appropriate to use small arms, and issue same to qualified personnel.

o Ensure all crewmembers are trained in physical security procedures. This may be incorporated into damage control drills. Ensure five (5) ROS crewmembers have small arms training (see Attachment J-13).

o Ensure the Maritime Administration-provided check-list is used for determining who is eligible for anti-terrorism property custody and training.

4.3.13.1 Force Protection Report, Provide to the Maritime Administration on a monthly basis updates to the MAR-612 force protection spreadsheet which was sent to all Ship Managers on/about October 25, 2006 by MAR-612. This spreadsheet contains information on force protection readiness of crews and vessels and is similar to the information required at activation. (CDRL Sec 006).

4.3.14 Facility Clearance and Classified Materials Manager: Ship Managers shall obtain a DOD facility clearance and maintain a classified materials manager throughout the performance period of the contract. The Ship Manager shall develop and promulgate directives for the handling, retention, safeguarding, and disposition of classified materials. During vessel deactivation no classified material shall be retained onboard ship which will not be needed within ninety (90) days. All classified material, when ready for destruction, must be destroyed in accordance with the DOD Security Manual for Industrial Facilities. (CDRL SEC-0004)

4.3.15 Security Clearances for Mission Operations: The Ship Manager shall provide personnel with security clearances up through SECRET for the Master, Chief Mate, classified materials custodian, or communications officer. If personnel are unable to attain security clearances during mission operations, the Ship Manager shall notify the COTR. If additional personnel may be required to obtain security clearances, the Maritime Administration will notify the Ship Manager. If the classified materials custodian and the communications officer are the same individual, then at a minimum 3 separate deck officers must have security clearances. If during the performance period, a Ship Manager has difficulty in providing these 3 minimum personnel, contact MAR-612 immediately. (CDRL 0005)

C.5 HUMAN RESOURCES

Performance Goal: Ability to adequately crew the ship with qualified marine personnel.

The Ship Manager shall:

5.1 Shoreside Staffing

5.1.1 General: To the extent that such materials and services are not specified as being provided by the Government, provide all administrative support to ensure that all requirements of this contract are accomplished in a timely and efficient manner. Administrative support includes: management personnel, technical and professional personnel irrespective of each an individual's discipline, all overhead and G&A employees, supplies, materials, and services necessary to maintain, activate, and operate assigned ships, and to fulfill all other requirements of this contract and those offered by the Ship Manager.

The omission of any particular person or item required for performance under this PWS does not make it Government furnished or reimbursable. Reimbursables are listed in Attachment J-9. All work is to be accomplished under competent supervision.

5.1.2 Changes of Personnel. Obtain prior approval by PCO for any changes in personnel that occur within the first sixty (60) days after NTP.

5.1.3 Verification of Personnel Data. Verify that the information for shorebased is valid, entered into RMS, and updated as necessary throughout the life of the contract. (CDRL HR-0001)

5.1.4 President/Owner Data. Provide the name, work and home phone number of the corporate President/Owner(s). Note: this information shall be password protected and the password to MAR-610 by separate cover for use by the Maritime Administrator. (CDRL HR-0002)

5.1.5 Emergency Contact: Provide emergency contact information to the COTR upon NTP and enter into RMS. This information shall provide The Maritime Administration the ability to contact the Ship Manager 24/7 during emergencies and no-notice activations. (CDRL HR-0003)

5.1.6 Port Engineering Requirements. Provide port engineering services to execute the requirements of this contract including corrective maintenance.

5.1.6.1 Physical location of PE for ROS ships: Provide on-site office facilities for the Port Engineers/Team who is supporting any ROS vessel or combination ROS/RRF vessel. On-site is defined as being anything within 2 hours response time to the vessel. The facility is defined as a trailer or commercial office space, or equivalent. Use of the ROS vessel is permissible, however, the Ship Manager must plan for re-location of the facility within the activation timeframe without interruption to activation activities.

5.1.6.2 Absence/temporary replacement: Perform any duties normally carried out by the permanent shoreside staff members during any periods of absence.

5.1.7 Overtime for Shoreside Staff: All shoreside staff hours, inclusive of Port Engineer(s), are included in the fixed price for purposes of this contract. No overtime for shoreside staff shall be reimbursable.

5.1.8 Ship Tours/Visits: The Ship Manager may be required to have the Senior Officer, or other suitable crew member(s), or Port Engineer conduct tours of the ships while in ROS and FOS. When ships are in ROS, requests are submitted to and approved by the The Maritime Administration COTR or Area Division Training officer. If messing is ROS is required, the Ship Manager can charge for individuals meals at the established Federal Travel Regulations (FTR) rate for the ship's location. While the vessel is in FOS, the Maritime Administration may direct the Ship Manager to berth, and/or mess additional supercargoes, security teams/force protection teams, and other visitors for which the Ship Manager should include and estimated costs in the estimated operating cost for the ship. Additionally, the Ship Manager should anticipate and include in their operating estimate for the cost for messing anticipated official visitors (up to ten per port call) to attend the vessel. The Ship Manager shall maintain and present to the Maritime Administration COTR a record containing the names, rank, and unit/agency of all personnel messing an/or berthing onboard the ships.

5.2 Shipboard Crewing

5.2.1 ARTICLES FOR NEGOTIATION: The Ship Manager shall provide the following for ALL RRF Ships through his negotiated employee agreements:

5.2.1.1 NO STRIKE Clause. Recognizing that critical sensitive services are required under this contract, it is essential that continuous operation of the ships be maintained. Therefore, there shall be no work stoppages of any type, including but not limited to strikes, sympathy strikes, boycotts, slowdowns, sickouts, primary picketing, secondary picketing, protests against unfair labor practices, contract violations, social or political protests and any other protests or interruption or interference with work onboard the vessel(s) for the full term of any voyage or any subsequent extension thereof.

5.2.1.2 RIGHT TO SELECT Clause. A right to approve or reject each licensed and unlicensed member.

5.2.1.3 RIGHT TO FIRE Clause. An agreement permitting the Ship Manager with the right to fire any licensed and unlicensed member.

5.2.1.4 RIGHT TO RESTRICT FUTURE EMPLOYMENT Clause. Any crewmember discharged by the Ship Manager for cause, shall not be eligible for future employment onboard an RRF vessel.

5.2.2 REQUIRED MEDICAL INOCULATIONS: The Ship Manager shall inform its labor sources for crewing the vessel and potential crewmembers that, as a condition of employment on a Ready Reserve Force vessel, all crewmembers are required to receive certain immunizations/inoculations (see Section 5.5.1).

5.2.3 The Maritime Administration, as the vessel owner, reserves the right to approve in advance or request the removal of any RRF vessel Master. The request for removal of a Master will only be made by the Director, Office of Ship Operations through the PCO. No other individual is authorized to do this. Please note: in the past 15 years, the Maritime Administration has exercised this option twice.

5.2.3.1 The Ship Manager is solely liable for any amounts agreed to in its collective bargaining agreements or employee labor agreements and any revisions thereto. Simply because the CBA is submitted as part of a Government contract proposal does not obligate the Government in any manner to the contents therein.

5.3 Labor Disruption

5.3.1 Critical, sensitive services are required under the terms of this contract, and it is essential that the continuous operation of the ship be maintained. The Ship Manager submitted with its proposal, and must maintain throughout the contract period, a contingency plan adequate to ensure that there is no interruption of contract service due to labor disruption or phase-in/out of crew. Such plan shall remain continuously in effect throughout the period of performance under this contract, including any options hereunder, and may consist of or include any or all of the following:

(1) CBAs with no-strike, no lock-out provisions.
(2) Employment agreement.
(3) Plans to demonstrate the continuous availability of adequate numbers of qualified personnel in a labor pool to perform services required under this contract.

5.4 The following requirements apply to any and ALL crewmembers.

5.4.1 General: For the safe, efficient and economical operation of the vessel, employ medically/dentally and psychologically fit Deck, Engine, and Radio (when assigned) Officers and unlicensed personnel who meet requirements of STWC-95 or its successor agreement(s); and possess current, valid USCG licenses, including all necessary endorsements, commensurate with the tonnage and classification of the ship. Unlicensed personnel shall have the necessary endorsements on their USCG Mariner's Document for the rating to which they are assigned. Fit for Duty documentation is available in Attachment J-3.

5.4.1.1. Professional Credentials. The Transportation Worker Identification Credentials (TWIC) - are not reimbursable to the Ship Manager. They are part of the mariners' professional certification. The Maritime Administration pays for ROS wages 365 days/yr. Before the implementation date of October 1, 2008, the Ship Manager shall allow no more than two of these paid days to permit the permanent ROS mariner (not temporaries or replacement ROS crewmember(s)) to obtain the card. Travel is not included as a reimbursable for this item. No associated costs (with the exception of 2 days pay) shall be reimbursed FOS mariners are expected to comply with the regulations by the implementation date of October 1, 2008.

5.4.2 Mariner Citizenship. All licensed crewmembers must be U.S. citizens. Comply with 46 U.S.C. 8103 (b)(1) which permits the employment of unlicensed seamen who are aliens lawfully admitted to the United States for permanent residence, provided not more

than 25% of the unlicensed seamen on a vessel are resident aliens. All crewmembers must hold USCG-issued mariner documents for the full length of their assignment.

5.4.3 Mariner Vetting. Provide to **MAR-612** each crewmember's vetting information anytime there is a new or relief crewmember. This includes temporary and permanent changes to ROS complement. Vetting information, password protected, includes (CDRL HR-0004):

· Name (Last, First, Middle I)
· Social Security Number
· Date of Birth
· Place of Birth
· Citizenship
· Passport number
· Security clearance

Advise mariners of vetting requirement. The Maritime Administration will abide by Privacy Act restrictions in handing this data.

5.4.3.1 Vetting of aliens: If the Ship Manager complies with USC 8103 (b) (1) B which permits up to 25% of the unlicensed crew to be lawfully admitted aliens, these personnel must also be vetted. Advise MAR-612 by the fast means possible of the change in crewing. Provide Name, Last, First Middle Initial, Date of Birth, Place of Birth, Citizenship, Passport number, and alien registration number.

5.4.3.2 Vetting is accomplished for all Phase M and Phase O shipboard personnel. It may occasionally be performed for personnel carried during a sea trial. MAR-612 will advise. Ship Managers should include in sub-contracts the requirement that Vendors and their employees are subject to vetting. Vetting is usually accomplished on vendors when vessel is layberthed within a military facility or at times of heightened security.

5.4.4 Complaints. The Master and Officers must execute their responsibilities as defined by law and exercise sound judgment at all times. In the event that the Maritime Administration has any reason to be dissatisfied with the qualifications, conduct, or performance of any person employed by the Ship Manager, the Maritime Administration will notify the Ship Manager and the Ship Manager shall investigate the matter and take appropriate corrective action as warranted.

5.4.4.1 Employment Disputes. Litigation involving an employee who is disciplined by a Ship Manager is at the Ship Manager's expense.

5.4.5 Mariner Status. All crewmembers (ROS and FOS) are direct employees of the Ship Manager. Their performance is the direct responsibility of the Ship Manager. The Ship Manager has the prerogative to institute management actions (e.g., reprimand, reassignment, additional training, additional supervision, dismissal) to achieve acceptable performance. The Government will not interfere with the employer-employee relationship unless there is a violation of Federal statutes or regulations.

5.4.6 Abide by all Federal, state, and local regulations regarding employment and maintain the appropriate records from pre-hire solicitations through dismissal.

5.4.7 Ship Managers who employ crewmembers through CBAs shall make it clear to the crewmembers and the holders of the CBA, that the crewmember's employment relationship is with the Ship Manager and not the U.S. Government, although they will work on Government-owned vessels. Dismissal for cause is a matter between Ship Manager and crewmember.

5.4.8 Probationary periods, right to transfer previously accrued benefits, accumulation of compensatory time or leave, and Convalescent Pay are totally up to the employer within the parameters of the Service Contract Act (SCA).

5.4.9 Crewing Shortages. If at any time during the contract, the Ship Manager is unable to meet the crewing requirements of the contract, the Government reserves the right to crew the ship using whatever means are necessary, including military, federal or state reservists, civil service, or any other civilian personnel including other competitively obtained contract personnel that meet regulatory and security requirements for the position(s).

5.5 Medical

5.5.1 Requirement for Immunizations: All licensed and unlicensed crewmembers employed to serve aboard RRF vessels shall, as a condition of employment, be required to receive all immunizations associated with commercial trade, and all immunizations/inoculations required by Commander, Military Sealift Command (COMSC) policies including, but not limited to, BUMEDINST 6230.15, as amended. Such immunizations/inoculations may be required at the time of their employment and/or at anytime during their employment. Such immunizations/inoculations may include, for example: Tuberculosis Testing (PPD), smallpox, anthrax, annual Flu shots, various other immunizations against diseases encountered during worldwide travel (such as yellow fever, typhoid). Furthermore, all crewmembers employed on RRF vessels must, as a condition of employment, agree to comply with any supplemental immunization programs later established for RRF vessels through written policies or directives. A seafarer unwilling or medically ineligible to receive all required immunizations or inoculations is ineligible for employment on RRF vessels. Decisions regarding crewmember who are medically unfit to receive inoculations/immunizations will be made on a case by case basis depending upon BUMED medical advisories. Ship Managers will not be penalized for not sufficiently screening mariners for medical ineligibility to receive inoculations/immunizations beyond those normally required for commercial service.

5.5.1.1 ROS Crew - The Ship Manager shall ensure that all ROS crewmembers have received or are medically eligible to receive all required immunizations/inoculations prior to hiring the crewmember and assigning them to a vessel in Phase M status.

5.5.1.2 FOS Crew - The Ship Manager shall ensure that all FOS crewmembers have received or are medically eligible to receive all required immunizations/inoculations before the vessel leaves United States territorial waters. **For FOS mariners medically ineligible to receive an inoculation/immunization, Ship Managers will coordinate with the Military Sealift Command medical department regarding any data they must maintain for the length of the voyage. Masters will be instructed whether or not the ineligible crewmember will be allowed ashore or will be allowed to continue the voyage. See C.5.5.1.3.2. (b).**

5.5.1.3 Reimbursable Costs (Attachment J-9)

5.5.1.3.1 **RESERVED.**

5.5.1.3.2 The Government will reimburse the Ship Manager for the cost of repatriation and up to one month's wages, or as required by articles if foreign articles were signed, as well as the cost of obtaining replacement personnel, for any ROS or FOS crewmember who:

(a) Reserved.

(b) is willing to comply with a new supplemental immunization directive that became effective after the crewmember was employed by the Ship Manager but who is ineligible to receive the newly required inoculation because of a medical condition, **but who requires the new inoculation or immunization in order to perform his/her duties.**

5.5.2 In accordance with USCG regulations, include all crewmembers in the Ship Manager's drug testing programs.

5.5.3 Medical Claims. Comply with Attachment J-3 with respect to medical claims.

5.5.4 Medical Screening/Consultative Service: Provide the services of a third party medical invoice screening company to assist with the review and validation of invoices. Provide the ACO a copy of the agreement.

5.5.5 Medical On-call Service: In Phase O, provide shorebased services of a licensed physician on a 24/7 basis to provide comprehensive on-call health care services via ship's communications equipment. Provide to the ACO a cost comparison of this service for twelve (12) months vs. the cost of an individual activation. Follow ACO direction with regard to purchase. This is a reimbursable service.

5.5.6 Medical Person In Charge: In accordance with best commercial practice, provide a qualified Medical Person In Charge (MPIC), responsible directly to the Master, to provide routine and emergency health care to the crew and all embarked personnel. The MPIC shall conduct and comply with all occupational and health inspections and maintain control of controlled substances.

5.5.7 Notification to USCG. Advise the USCG, as part of its activation plan, that it is the designated operator for a specific RRF vessel(s) and that during the RRF operation USCG medical emergency services may be required.

5.5.8 Screening. Screen all crewmembers to ensure that they are fit for duty per Attachment J-3, and do not have a history of alleged shipboard injuries or inability to perform duties. Complete "The Seafarer's Data Sheet (MA-1001A)" and "Seafarer's Statement of Physical Condition (MA-1001B)". (CDRL TE-3 J-0001 and J-3 appendix) (CDRL HR-0005)

5.5.9 Compliance with Statute Regarding Substance Abuse: THE MARITIME ADMINISTRATION, DOT, as vessel owner, enforces a zero-tolerance of substance abuse in the work place. THE SHIP MANAGER AND ITS PERSONNEL, INCLUDING ALL CREW MEMBERS, SHALL ABIDE BY ALL STATUTES OF THE UNITED STATES CODE GOVERNING ALCOHOL, CONTROLLED SUBSTANCES, SMUGGLING, DANGEROUS WEAPONS, AND GAMBLING ONBOARD U.S. FLAG GOVERNMENT OWNED VESSELS.

5.5.10 CBR-D medicinals. The Ship Manager shall provide the following controlled substance on mission activations:

- **60 Diazepam Injectors (former Federal Supply System NSN 6505-01-274-0951)**

And non-controlled substances as follows:

- **1) M291 Skin Decon. Kit (QTY 4 BX*) - NSN 6850-01-276-1905**
- **2) Atropine Injector (QTY 165 EA) - NSN 6505-00-926-9083**
- **3) Oxime (2 pam) Inj. (QTY 165 EA)-NSN 6505-01-125-3248**
- **4) Ciprofloxacin Tablets (QTY 11 BT*) - NSN 6505-01-333-4154**
- **5) Pyridostig. Bromide (QTY 6 PG**)-NSN 6505-01-178-7903**
  - ***Each Box (BX) contains 20 EA**
  - ****Each Bottle (BT) contains 500 Tablets**
  - *****Each Package (PG) contains 210 Tablets**

5.6 Training

5.6.1 General. Training for all crewmembers shall be non-discriminatory, job related, skill building, effective, and innovative, yielding effective results oriented employees who are high performers.

5.6.1.1 Approve and coordinate attendance with on-going maintenance and operations.

5.6.1.2 Maintain list of Government-provided training courses per employee. (CDRL HR-0014)

5.6.2 Military Training. When directed by COTR, provide qualified ROS or FOS crew members to support the training of military personnel on a reimbursable basis.

5.6.2.1 For weekend cargo handling training: Duties usually include checking the ship's power source, checking the equipment before and after training to ensure its condition, and being on site two (2) days per weekend.

If additional personnel are required, they shall be added at current wage rate. The Ship Manager's employee(s) may be required to be on-site a day before training commences in order to check out equipment. The COTR will advise the Ship Manager in advance when these personnel are required and issue a task order to cover overtime or reimburse new crewmembers brought on specifically for this service.

5.6.2.1.1 Document damage caused by the cargo handling trainees, so that the Maritime Administration may advise the DOD sponsor; and record and correct deficiencies in accordance with standard maintenance procedures. Deficiency correction is a reimbursable item.

5.6.2.2 For a Sealift Emergency Deployment Readiness Exercise (SEDRE): An FOS crew may be required. Cargo is loaded under normal deployment conditions and may be transported to another port for discharge.

5.6.2.2.1 Receive Activation and Operation reimbursables as appropriate.

5.6.3 Cadet Training. The Maritime Administration fosters cadet training. Coordinate with USMMA and State Academies to offer available training billets for cadets in both ROS and FOS. This is a reimbursable. **Billet priority will be given to all cadets from USMMA, followed by cadets in the SIP program in the State Maritime Academies, follow by other cadets. Personnel in a DOL-approved apprentice program for unlicensed may be used in place of a cadet if cadets are not carried. Cadet wages, benefits, subsistence, M&C (see Attachment J-3), and transportation costs when reporting aboard & upon discharge are reimbursable (J-9#12.a) Personnel from other schools, offering marine engineering, may be carried with the prior written permission of MAR-610.**

5.6.3.1 Provide Cadet subsistence, quarters, and training as required by the cognizant school.

5.6.3.2 Provide Cadet wages not exceed 46 CFR 310.

5.6.3.3 Cadet transportation is reimbursable in accordance with Joint Travel Regulations (JTR).

5.6.3.4 Advise MAR-**612** any time a cadet is scheduled to be onboard an RRF vessel. Advance notification to MAR-612 is required.

5.6.4 Merchant Marine Preparedness/Specialized Training

5.6.4.1 Vessel Orientation. In accordance with ISM, ensure that all crewmembers are provided ship orientation BEFORE commencing work, as applicable to their departments. Orientation shall include:

· Review of standing orders
· Night orders
· Emergency procedures for fire, flooding, CO2, and the loss of major equipment
· Tag-out procedures
· Navigation, mooring, cargo and ship operations (Deck only)
· Security
· Emergency isolation valves and shutdowns.

5.6.4.1.1 Utilize procedures and practices in your Safety Management System, particularly non-conformities. Focus on:
a. Problem trends relating to material condition and maintenance procedures for shipboard operating equipment.
b. Personnel training for individual ship's equipment operators, including:
1. Muster stations for specific emergencies
2. Crew assignments regarding Oil Spill Locker location, its required content and use of the equipment contained therein.
3. Crew awareness regarding the location of Force Protection and CBRD equipment.
4. Engine Room Fire procedures, including use and operation of SCBAs and fire-fighting equipment, including fixed and semi-portable.
c. Engineering casualty control drills
d. Crew capable inspections and checks of installed fire detection/fire-fighting equipment and systems.
e. Crew execution of individual ship safety practices, procedures and requirements for the gamut of emergency response scenarios such as fire, collision, grounding, DIW, piracy, elevated MARSEC, or HSAC levels, CBRD, and Force Protection.

5.6.4.2 Required Training. Provide for and coordinate the rotation of ROS crewmembers to permit currency in STCW-95 or successor requirements, as listed at Attachment J-13. The Chief Engineer and 1st AE may not both be absent at the same time for training or for any other reason unless specifically directed or approved by the COTR.

5.6.4.2.1 Optional Training: COTRs may approve additional training for ROS crewmembers, which in the Government's opinion is beneficial to the program. Travel, subsistence and lodging, cost of course and materials, when Government directed, are reimbursable. New STCW training requirements and STCW refresher courses and upgrades are reimbursable. (see Attachments J-9 and J-13)

5.6.4.2.1.1 RESERVED

5.6.4.3 For the courses listed in Attachment J-13, plus any other course directed by the Government and approved by the COTR see Attachment J-9 "Govt directed training". For non-Government directed training which includes training for STCW-95 and its successor agreements as well as license up-grades, see Attachment J-9 "Non-Govt directed training."

5.7 Reduced Operational Status (ROS)

5.7.1 General: In accordance with TE-4, each vessel designated as ROS will be crewed with an ROS maintenance crew. At a minimum, each ROS crew must consist of ten (10) ROS maintenance personnel including:

· One (1) Chief Mate
· One (1) Boatswain
· One (1) Chief Engineer
· One (1) First Assistant Engineer (1st AE)

Each of who meets the general crewing qualifications cited in Section C.5.4.1.

5.7.2 Provide as necessary and within its fixed price, any ROS crewing, over and above that required by the Maritime Administration, for the:

· Performance of the routine schedule preventative maintenance as identified in the Ship Manager's vessel specific ship maintenance management plan including quarterly light-offs, equipment cycling/rotation, etc.
· A quantifiable amount of time for the accomplishment of emergent repairs that may be accomplished during normal working hours.
· Maintaining vessel security, fire and flooding protection
· Performance of all required regulatory body drills
· Maintaining inventory and custody of GFE including spare parts
· Documents, charts, etc.
· All other PWS and TE requirements.

5.7.3 The maximum number of the ROS crew per vessel will be determined by the Ship Manager based upon its assessment of the PWS as provided in its proposal. If selected for the contract, the Ship Manager will have fifteen (15) days from NTP to employ all ROS maintenance crewmembers at the fixed price rate. For co-located vessels (ROS-outported/RRF), the ROS maintenance crewmembers may be interchanged for work between vessels.

5.7.3.1 The ROS crew complement identified and offered by the Ship Manager in its final proposal will be incorporated into the Ship Manager Contract and will become the required ROS crew compliment for the performance period of the contract.

5.7.4 The Ship Manager will not be reimbursed by the Maritime Administration for any additional personnel "temporarily hired/subcontracted-for" for the performance of any of the items of the PWS/specification that are considered routine ROS duties and responsibilities. However, the Ship Manager will be reimbursed for additional temporary or sub-contracted personnel for requirements which exceed those defined in this PWS/specification, for example, OPDS exercise preparations frequently require a Master to be brought onboard the ROS ships before the ship is activated.

5.8 General ROS Duties and Responsibilities. ROS Crew Duties and Responsibilities.
This section addresses ROS crew duties and responsibilities. Additional ROS outport requirements are in Sections 35 of TE-1.

5.8.1 The ROS crew's primary duties and responsibilities are to:

- Become completely familiar with shipboard equipment and systems.
- Perform Maintenance Actions.
- Perform general shipboard duties.
- Operate and maintain shipboard equipment and systems during idle status.
- Perform minor repairs and assist in supervising vendor and industrial repairs.
- Maintain the ship's inventory; and
- Activate (transition) and operate the ship, when directed, and train new crew members. An ROS crew may be assigned temporarily to an inactive RRF ship in Phase M or during Phase O to maintain the ship in standby but not fully manned status.
- Become thoroughly familiar with the Activation Plan.
- Maintain unique equipment maintenance requirements and procedures.
- Maintain equipment repair history and status of regulatory inspections and surveys.
- All ROS crewmembers as appropriate to their rating shall:
- Assist in ship activations and sail as a member of the full crew.
- Assist new crew members to become familiar with the proper and safe operation and maintenance of shipboard equipment and systems including all compartments, major systems, as well as fire fighting and damage control equipment and systems.
- Assist the Port Engineer in establishing a good working relationship with local regulatory body representatives and overseeing performance of regulatory inspections and surveys.
- Maintain inventory in accordance with the Maritime Administration supply directive/manuals, which are referenced in TE-5, including an inventory of any hazardous materials on board.
- Classified material, if retained onboard, must be in the custody of personnel with security clearance.
- Accommodate visits by the Maritime Administration and other government or government-invited personnel during visits.

5.8.2 Work Rules: Uniqueness of ROS Positions:
Ship Managers shall advise ROS crewmembers that many of their duties and responsibilities do not fall under standard seafaring conditions. No officer, such as the Chief Engineer, has a totally administrative function. Officers have an abundance of administrative duties, but they are expected to accomplish other tasks that are primarily "hands on."

5.8.2.1 Due to the size and composition of ROS maintenance personnel, it is understood that ROS maintenance crews shall be expected to work as a team with no regard to departmental boundaries when work is related to maintaining the safety, security and

habitability of the vessel. The type of work that all ROS maintenance crewmembers would be expected to do as a team includes, but is not limited to the following:
- Secure Ship for Prevailing Weather Conditions
- Adjust/Double up/stow mooring lines
- Adjust Gangway
- Take on and stow ship's stores/spare parts
- Operate cargo equipment for storing/testing
- Assist with vessel habitability requirements
- Housekeeping.

5.8.3 Provisions of ROS Employment: ROS crewmembers are subject to the following terms and conditions:

a) They must agree to participate as part of the sailing crew (i.e., during Phase O).

b) They may be required to assist in the transitioning of a vessel whether it is their specifically assigned vessel or not. The Maritime Administration considers this training. It is the Maritime Administration's option to temporarily assign other ROS crewmembers during maintenance activation. Either the Chief Engineer OR the First Assistant Engineer (not both) from a co-located vessel may sail with the transiting vessel as an observer or as a crewmember.

c) If performance was satisfactory, transfer from maintenance (ROS) crewmember to sailing (FOS) crewmember shall not break any continuous employment, and the crewmember shall revert to his/her original maintenance status at lay-up.

d) In the event of extended operations all crewmembers assigned to the vessel shall be provided reliefs as per the appropriate employee agreement. The Government retains the right to phase reliefs in order to provide continuity.

5.8.4 ROS Work Week: The standard ROS workweek shall consist of eight (8) continuous hours per day (excluding lunch break and hours to fulfill off-hour security duties), five (5) days per week, Monday-Friday. The majority of ROS crewmembers are expected to work during the core hours of 0900-1500. Ship Managers may authorize exceptions.

5.8.5 ROS Overtime:

5.8.5.1 Phase M with ROS crew is a fixed-price CLIN and all work required under that CLIN shall be performed at no additional cost to the Government. Therefore, except for emergencies, (see below) overtime for ROS crew will not be reimbursed unless it is scheduled and approved in advance in writing by the COTR. The Ship Manager shall provide a memorandum to the COTR outlining:
· The cause for the overtime/compensatory time
· Demonstrated cost savings
· The estimated amount of overtime/compensatory time to be earned
· The ROS crew rating which shall be assigned.

The COTR will consider overtime and advise whether or not it is approved. Copy of this authorization will be provided to the ACO. A follow up email report shall be provided to the COTR with copy to the ACO the following day stating what was actually incurred. Overtime shall not be included in the normal performance of M&R in the ship's Preventive Maintenance Plan.

5.8.5.1.1 Overtime is based upon exceeding the standard forty (40) hour workweek as defined above. The Ship Manager is obligated to pay employees at the required overtime rate for any overtime actually worked regardless of whether ROS crew overtime is approved or reimbursed by the Government.

5.8.5.2 Overtime required because of an emergency, i.e. the preservation of life, limb or property, will be reimbursed. The Ship Manager shall report all emergencies requiring ROS crew overtime to the Maritime Administration via electronic mail within 48 hours after its occurrence. The notification must include an explanation why the overtime was incurred. Copy ACO on these actions.

5.8.6 Period of Performance: Advise ROS crewmembers that they do not have a commitment of guaranteed employment during the performance period of the contract. For purposes of "expectation of employment" a maintenance crewmember shall consider a six (6) month renewable cycle to be the norm assuming no failure of performance upon the part of the employee.

5.8.7 ROS Roster: Maintain and keep current, the ROS crew employment lists. Include: Name (Last, First, Middle Initial), rating and phone for recall. (CDRL HR-007)

5.8.8 Billets: ROS billets shall be crewed each day of the year (e.g. 365) days and billets may not be gapped. Since "gapped" is defined as permanently leaving the vessel, the Ship Manager shall replace the employee. The Ship Manager shall deduct the period of the gapped billet (from the time of departure of the crewmember until the replacement crewmember is onboard, from the appropriate monthly invoice(s)). The Ship Manager shall retain payroll records to substantiate the invoice and provide them to the ACO upon request. See definitions in TE-1 Section 2 for "gapped" and "crewed."

Leave: Temporary absences (sick leave or vacation) are between the Ship Manager and its ROS personnel. The billet remains crewed. Ship Managers are responsible for the continuation of duties and responsibilities with no drop in performance during temporary absences of personnel.

Unpaid Leave for ROS: Unpaid leave changes to a Gapped Billet after 15 consecutive days of absence unless the Ship Manager specifically requests the Maritime Administration extend the "crewing" of the position. The Maritime Administration approving official for the Ship Manager request is the PCO. If the Maritime Administration requires a replacement, the cost is to the SM. Time before the crewmember is replaced will be deducted from the Ship Manager's monthly invoice. Whether the SM allows the original member to return or keeps the replacement is the Ship Manager's choice, but the cost of transportation is also the Ship Manager's. Replacements during temporary absence of ROS crewmember: This is a Government option. Upon the direction of the COTR, the Ship Manager will obtain a temporary replacement. Upon request of the COTR, the Ship Manager shall provide an estimate of replacement costs including transportation and fully burdened wages.

5.8.8.1 With respect to reserve or jury duty, an ROS crewmember may resume a former billet upon return. Payment of ROS wages during reserve or jury duty are between the Ship Manager and its employee.

5.8.8.2 Utilization of leave is between the mariner and his/her employer the Ship Manager.

5.8.8.3 Assumption of ROS Sick Leave or ROS Vacation Leave from previous Ship Manager Contracts. No ROS sick leave or ROS vacation leave will be permitted to transfer to the 2005 Ship Manager contracts.

5.8.8.4 Leave Accrual: Sick leave shall be accrued at the rate of one day for every thirty (30) calendar days worked as an ROS maintenance crewmember (maximum of 12 sick days per year), to be payable when the crewmember is unable to perform his/her normal maintenance duties due to illness. Termination of employment shall result in the loss of any accrued sick leave.

5.8.8.4.1 ROS vacation shall be accrued at the rate of 1.5 days for every thirty (30) calendar days worked as an ROS maintenance crewmember (maximum of 18 vacation days per year).

5.8.8.4.2 Unless the Government declares its intention to exercise an option under this contract, the Ship Manager shall advise ROS crews to use or lose sick and vacation leave during the fourth year of the contract. The Maritime Administration does not intend to "buy out" any ROS leave remaining on the books and will not carry it over into the next SMC.

5.8.9 Paid Federal Holidays: The following are ten (10) Federally-observed holidays:

New Year's Day	Labor Day
Martin Luther King Day	Columbus Day
Presidents Day	Veteran's Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

ROS crews shall follow the U.S. Government calendar for exact day of leave if holiday falls on a Saturday or Sunday.

5.8.10 Reserved.

5.8.11 ROS Per Diem. The Ship Manager provides an ROS crew including any and all relief personnel to the Maritime Administration under a fixed price CLIN.

5.8.12 Transportation: Transportation shall not be reimbursed if an ROS crewmember elects to terminate his/her employment.

5.8.13 Subsistence and Lodging: The Ship Manager has a choice on whether to provide subsistence and lodging to ROS crewmembers. The Government will not provide reimbursement for subsistence of ROS crewmembers.

5.8.13.1 If the Ship Manager elects to provide this subsistence, provisioning for the subsistence and preparation of food, will be part of the Ship Manager's fixed price per diem.

5.8.13.2 The Maritime Administration permits, but does not require, ROS crewmembers to live onboard ship. All costs associated with lodging onboard the vessel in ROS, such as laundry, exchange of linen, etc., are to be included in the Ship Manager's fixed price per diem. If the Ship Manager elects to provide lodging onboard and the vessel becomes uninhabitable, the Government will reimburse the Ship Manager for lodging and subsistence.

5.9 Voluntary Program Support

The Maritime Administration, as the Governmental advocate for the maritime industry, occasionally tests program concepts under actual field conditions. This may include the voluntary involvement of ROS crewmembers. For example, the new Ship Owner's Cooperative Program (SOCP) mariner identification card may be one of the tests conducted using ROS crewmembers. No additional compensation is provided for this type of voluntary program support.

5.10 FOS Crew Composition: Provide when ship are activated to Phase O, an FOS crew each of whom meets the general crewing qualifications cited in Section C.5.4.1. The cost of FOS crewing is a reimbursable.

5.10.1 General: Provide within the "Operations Phase Project" of Attachment J-21 the aggregate FOS fully burdened wages. Modify, as necessary, to suit changes to FOS manning levels to reflect any unique mission requirements per the direction of the COTR. Update throughout the performance period as necessary.

5.10.2 Provide to MAR-610.5 and the COTR by email any recommended changes to the FOS manning level (position and quantity) which deviate from the original contract proposal. Indicate if changes were driven by specific mission operational requirements, unavailability of mariners with specific ratings, etc.

5.10.3 Fleeting of ROS personnel during FOS: Notify COTR during activation of any intention to "fleet up" the ROS Chief Mate to Master during operations.

5.10.4 In addition to those requirements which apply to ALL crewmembers, the following sections specifically apply to FOS crewmembers.

5.10.4.1 All personnel hired for the FOS crew shall meet the minimum requirements of Section 5.2.1 above.

5.10.4.2 GMDSS Operation: Ensure that a minimum of two (2) licensed deck officers possess a current "STCW GMDSS endorsement". Provide a dedicated communications officer as part of Section 5.10.2. The volume of communications generated by the military, including responses expected from the ship, far exceeds the volume of communications generated by normal commercial vessel operations. The dedicated communications officer may be a licensed deck officer, radio officer or radio electronics officer. See Attachment J-13 for training requirements.

5.10.4.3 Crew Shortages: Report crew shortages in accordance with 46 U.S.C. 8103 and USCG Navigation Circulars (USCG NVIC#1-86 Part G.) Provide COTR, MAR-612 and MAR-620 with copies of USCG Form CG729 (report on Crew Shortage). (CDRL HR-0009)

5.10.4.4 Articles. Implement of foreign articles for Phase O crew in accordance with 46 CFR Part 14, and USCG NVIC No 1-86. Foreign articles are not required for most Turbo activation, maintenance activations, and coastwise voyages. (CDRL HR-0010)

5.10.4.5 ROS Telephone Service: is part of the Ship Manager's fixed price. The Government provides three (3) phones as part of berth service and will reimburse for connections/disconnections during activation/deactivation. ROS telephones are to be used for official business only.

5.10.5 Orientation: In addition to Section C5.6.4.1, provide orientation to the joining members of the FOS crew with respect to safety videos and equipment, shipboard physical security, equal opportunity, and the prevention of sexual harassment and prevention of HIV/Acquired Immune Deficiency Syndrome (HIV-AIDS.) This orientation should be performed during duty hours.

5.10.5.1 Advise the crew of any RRF vessel, that since these are public vessels of the U.S. Government, any attempt to use them for commercial or private profit by the Ship Manager or its employees, shall result in disciplinary action by the USCG and the Maritime Administration. This includes transportation of personal items such as cars, etc., with the intent to resell.

Note: Section C 5.6.4.1 must be performed before any work is performed. The remainder of the orientation may be performed within the first fourteen (14) days of employment and is not required prior to RFS.

5.10.5.2 Code of Conduct for Central Command Area of Responsibility. Ship Managers shall provide a copy of United States Central Command General Order Number 1B (GO-1B) dated Mar 13, 2006 to personnel on vessels scheduled for USCENTCOM's area of responsibility. This definitely includes OIF missions, but may apply to any vessel movement through the mid-east. See J-22.

5.10.6 Plans and Procedures for FOS Crewing

In accordance with Section C 5.10.5, develop policy, plans and procedures for FOS crewmembers that contain the following, as applicable:

It is the Government intention that mariners complete foreign articles during a Phase O voyage, however, Ship Managers are required to phase FOS crews on an extended voyage (180 days or more of unbroken service). The Maritime Administration requires crew rotation to be phased when it occurs. Crew rotation may start as early as the 120th day or earlier if conditions warrant, if the Ship Manager's projections require this with the following restrictions in order to provide maximum continuity and safety of RRF vessel operations:

- There shall be at least 30 days between the rotation of the Master and Chief Mate;
- There shall be at least 30 days between the rotation of the Chief Engineer and 1st Assistant Engineer; and
- Not more than half of the officers or crew shall rotate at one time within the deck, engine or stewards departments

However, for mission operations, if a crewmember requests to remain in service, and both the Ship Manager and the union have no objection, this is permissible to the Maritime Administration. Additionally, on a case by case basis, the Ship Manager shall advise the Maritime Administration (MAR-612) whether it recommends an overlap of any crewmember prior to relief. It is the Government's option to approve/disapprove overlaps.

· Communications: In FOS, all personal calls must be at the Master's discretion. Payment may be made in accordance with the Ship Manager procedures that may include, but not be limited to, credit card, calling card, and prepaid phone cards. Private communications are not subject to reimbursement. Crewmembers operating ship to satellite personal communications devices (cell phones) must check with Master to determine if communications are restricted due to vessel's location or mission.

· When docked at a military facility: crewmembers are subject to base regulations including detainment/arrest for violations.

· Contrary to some commercial operations, FOS crewmembers may not have unauthorized personnel visit/sail onboard without MAR-610's consent. This includes family members, relatives, and friends.

· All personnel must have evidence of having had a physical examination within six (6) months preceding the date of assignment.

· Unlicensed personnel must also have a medical envelope or clinic card when reporting onboard. The medical envelope or clinic card will be retained by the Master and should be easily accessible. It shall be returned to the unlicensed crewmember upon discharge, if requested by the employee.

· Crewmembers shall bring an adequate supply of personal prescription medicines for intended voyage plus reserve with copy of medical prescription.

· Crewmembers shall bring customized personal safety devices such as glasses/shoes.

· When a vessel is in port, crew liberty shall be granted when allowed by local civilian/military authorities and in accordance with the vessel's in-port operating requirements. The local MSC on-site representative can provide the Master with information regarding upcoming vessel operating requirements in order that the sailing board can be posted.

· If the crew is to be restricted to the ship, the Master shall post notice of this in a public location. This notice shall state the reason for restriction and the authority of government agency, which required it. Masters shall make an entry in the vessel's log. If a vessel is not

restricted, but no launch service is available, the Master shall post this notice and obtain from local authorities (or at the minimum the local agent) a letter stating that the ship was not restricted but that launch service was not available. Ship's lifeboats or rescue boat shall not be used for liberty or recreation.

· For any Voluntary Resignation of a Crewmember, pertinent statements from the Master/Department Heads shall be obtained and retained. The Master shall execute a Mutual Consent Release Form (CG-713A) with letter from crewmember attached.

5.10.7 Second Seaman's/War Risk Insurance: Ship Managers shall provide Second Seaman's War Risk Insurance for all members of the crew 365 days a year whether the vessel is in Phase M or Phase O. Second Seaman's War Risk Insurance covers loss of life, disability (including dismemberment and loss of function) and loss of or damage to personal effects of the insured, when directly and proximately caused by risks of war and warlike operations. The terms and benefits shall be as set forth in the Second Seaman's War Risk Policy (1952) except that coverage shall be provided 365 days a year not only for the length of the voyage. Second Seaman's War Risk coverage providing a loss of life benefit of $200,000 is a fixed price item. Premiums for coverage in excess of the death benefit authorized will not be reimbursed by the Government and are the Ship Manager's responsibility. Additional premiums for entering an exclusion zone are reimbursable. (CDRL HR-0011)

5.10.7.1 Exclusion zone premiums - If additional premiums (a.p.) are required for coverage in an exclusion zone, the costs will be reimbursed, provided the Ship Manager notified the ACO (with copies to the PCO, the Maritime Administration Ship Ops Ctr, MAR-611, and MAR-782) of the amount of the additional premiums, along with any additional terms and conditions, not more than seven (7) days before they become effective and receives written authorization from the ACO to pay the additional premium. Such notice is required because the Maritime Administration reserves the right to provide such additional insurance via a Second Seaman's War Risk Insurance policy issued under 46 U.S.C. §1205. (CDRL HR-0012)

5.10.8 Imminent Danger Pay and War Risk Bonuses: the Maritime Administration will reimburse Imminent Danger Pay and War Risk Bonuses once the DOD has issued the applicable geographic region, authorized and provided such payments to the Maritime Administration.

When this occurs:

a) Advise FOS crews that such determinations usually take considerable time, however if authorized, payment will be forthcoming.

b) Maintain records of all personnel eligible for payment. War Risk Bonuses and Imminent Danger Pay are not paid concurrently.

5.11 Requirement Unique to Designated Shipboard Positions

5.11.1 Master's Authority

Although the Ship Manager is responsible for all phases, the ship's Master executes special responsibilities on behalf of the Ship Manager when a vessel is operating.
Maintain signed copies of instructions to the Master which shall include the following:

· The Master shall have and exercise full control, responsibility, and authority with respect to the crew, embarked personnel including the ship's force protection teams, navigation, and management of the vessel during Operations. Nothing shall relieve Masters from their responsibility for safe navigation and ship handling, except Panama Canal Pilotage.

· The Master shall determine if there is evidence of alcohol or controlled substance involvement by persons directly involved in reportable marine casualties. Ultimate responsibility to determine whether an individual used alcohol or drugs most appropriately rests with the agency authorized to impose sanctions or penalties for such conduct (i.e., a Coast Guard administrative law judge, Coast Guard civil penalty hearing officer, or judge or Federal district court official). However, documentation of such "evidence" is the responsibility of the ship's Master and shall be provided by FORM CG-2692 and through entries in an official log book. Methods of obtaining such evidence are at the Master's option but may include personal observation and/or chemical testing.

· The Master may conduct or order conducted searches for contraband. The completion of a search and results of it shall be entered into the official log. U.S. crews abide by Custom's duty regulations. Masters shall take every reasonable precaution onboard ship including, but not limited to, the following:

o Prohibiting merchants from conducting sales of any nature onboard ship.

o Inspecting packages brought onboard in foreign ports.

o Posting appropriate regulations in conspicuous locations.

o Conducting periodic surprise searches throughout the ship, especially after leaving a foreign port. Upon discovery or suspicion of narcotics abuse or marijuana use onboard ship, a message shall be sent to the COTR. All unauthorized narcotics, controlled substances, marijuana, and drug paraphernalia discovered onboard shall be confiscated, marked for proper identification by witnesses, and secured until turn over to proper authorities.

5.11.1.1 Overtime. As the Ship Manager's representative, the Master will personally manage and authorize overtime during operations. The Maritime Administration will provide to the Ship Manager guidance and funding on discretionary and non-discretionary overtime via a TO prior to the vessel's sailing. The Ship Manager shall forward instructions on the implementation of this overtime to the Master. The Ship Manager is responsible for providing accounting of Phase O overtime via invoices. (CDRL HR-0013)

5.11.1.2 Safety for Non-ship's crew. Vessel Masters shall enforce protective equipment on all stevedores including military personnel. Additionally, any personnel on the ship or lighters made fast to the ship are subject to the ship's safety requirements. If objections arise from military personnel, contact the senior military officer and COTR.

5.12 Force Protection/Security Teams in Phase O. Masters will record the names, rank, and unit of force protection personnel per voyage and Ship Managers will retain this information for potential litigation support.

5.13 Security Clearances for ROS crew: Ship Managers shall ensure a minimum of two, (preferably three because of rotations) ROS crewmembers have classified security up through SECRET to be able to practice and download message traffic on a quarterly basis.

C.6 BUSINESS MANAGEMENT

Performance Goal: Comply with government and company business policies, procedures and practices.

The Ship Manager shall:

6.1 Availability Requirements. Establish procedures to maximize retention and continuity of experienced and high performing shoreside staff and ROS crew.

6.2 Establish procedures to ensure reliable and timely communications between Ship Manager points-of-contact and the Maritime Administration program office on a 24/7 basis. The Ship Manager points-of-contact shall have the inherent authority to commit the company if circumstances deem it necessary.

6.3 Compliance Documents. Comply with applicable performance standards of the documents reflected below (in Sections C.6.3.1.1 through C.6.3.1.3) in successfully performing ship manager services. Standards include:

- Voluntary Consensus Standards (Definition TE-1, Section 2)
- Non-consensus Standards (Definition TE-1, Section 2)
- U.S. Government Standards (Definition TE-1, Section 2)

6.3.1 Standards include:

6.3.1.1 Voluntary consensus standards include:

· ISM standards

· Generally Accepted Accounting Principles (GAAP) U.S., as established by the Finance Accounting Standards Board

· IMO and other conventions which the U.S. is a signator to SOLAS

· ABS Rules for Steel Vessels

· ACP

· PMCM

· Code of International Ship Management

· STCW-95 or current agreement

· Current ITU Radio Regulations

· Bridge to Bridge Radio Telephone Act

· International Maritime Satellite (INMARSAT) and MF/HF, UHF, and VHF

· Procedures for communication

· The International Regulations for Preventing Collisions at Sea

· U.S. Inland Rules of the Road

· ISO 9002

· ISO 9000 (series) - refers to all those features of a product (or service) which are required by the customer. "Quality management" means what the organization does to ensure that its products conform to the customer's requirements

· ISO 14000 (series) to minimize harmful effects on the environment caused by its activities

· ISO 18000 Occupational Health and Safety Management Systems (series)

· Trim and Stability Booklet

· Manufacturer's Directions for Safety Handling of Equipment

· Cargo Loading Plan

6.3.1.2 Non-consensus standards include:

· Ship Manager Quality Assurance Plan

· Manufacturer's Equipment Operating Manuals (per ship)

· Ship Manager developed Commercial Procurement Procedures

· Ship Manager developed Preventive Maintenance Plan Phase M

· Ship Manager developed Preventive Maintenance Plan Phase O

· Ship Manager developed Activation Plan

· Ship Manager developed Operational Plan

· Ship Manager developed Deactivation Plan

6.3.1.3 Government specific Standards include:

· U.S. CFRs (mandated by law)

· FAR Part 44, Subcontracting Policies and Procedures

· The Maritime Administration Operational Management Manual (TE-1)

· The Maritime Administration Logistics Management Manual (TE-5) and the following:

· Logistics Management Standards

· General Performance Standards for All GFP. Preserve, manage and control all spare parts, accountable property, ship's drawings and technical manuals in a manner that prevents waste, theft and unnecessary procurement.

· Special Performance Standards for the Management of accountable property

· Maintain a complete and 100% accurate inventory of all accountable property in RMS

· Engineering Operating Manuals (per ship)

· Deck Operating Manuals (per ship)

· The contract itself

· NDRF Severe Weather Plan

· Mooring Plan for Outported vessels

· MSC SOP (electronic version - provided at activation)

· Navy, MSC, and Area Command SOPs (electronic versions provided as needed)

· Rules and regulations of the Federal Communications Commission (FCC)

· COMSC Communications Policies and Procedures Manual

· U.S. Public Health Service Regulations - to maximum extent possible

· Carriage of HAZARDOUS or Explosive CARGOES: USCG regulations, Occupational Safety and Health Act of 1970 (29 USC 655, et. seq.); regulations prescribed by the Department of Labor (DOL) for longshoremen; and COMSC instruction 9023.1 Subj: Safety regulations Governing Handling and Transportation of Ammunition and Other Hazardous Cargoes.

· U.S. Department of State (Passports)

· Admiralty Law

· USCG (Licensing, Documentation, Safety)

· U.S. DOL (Wage Determination)

· Occupational Safety and Health Act

· Internal Revenue Service (Taxation)

· State Policies and Regulations (Taxation, Unemployment, Workers Compensation, Safety)

· Industrial Security Manual

· Other (public health, FCC, etc.)

· Exceptions (waivers, public vessel exemptions)

· Claims Package (Attachment J-3)

6.4 The Business Plans shall encompass all known facets of the maintenance, repair, manning, training, regulatory compliance, and operations (if planned) of the vessel. The Business Plans shall identify all estimated resources and scheduling for successful execution. Each vessel shall have three (3) Business Plans associated with it: Current Year Business Plan; Budget Year Business Plan; Five Year Business Plan. Business Plans shall be updated quarterly at a minimum. Attachment J-16 provides the Maritime Administration best concept for RMS development and is provided for information only. As with any planning document is SUBJECT TO CHANGE.

6.4.1 Current Year Business Plan - The COTR approved work plan the ship manager executes during the current fiscal year.

6.4.2 Budget Year Business Plan - Estimates, schedules, and projects work the ship manager will execute in the following fiscal year. The Budget Year Business Plan becomes the Current Year Business Plan in the following fiscal year.

6.4.3 Five Year Business Plan - Estimates, schedules, and projects work the ship manager will execute during the five (5) fiscal years subsequent to the Budget Year Business Plan.

6.4.4 A NTP Business Plan. Within 14 days after NTP, the Maritime Administration COTR will provide to the SM a rough outlined Business Plan for the current year (being executed) and following year (Budget year) - to the extent that these materials are available. SM will have 60 days from NTP or until July 1, whichever date comes first, to review and modify these plans as applicable Thereafter, M.6.4.1 through M.6.4.3 apply. Ship Managers shall utilize the templates and incorporate the polices and procedures of **Attachment** J-21 into the development of their business plans. Ship Managers shall continue to utilize J-21 during the execution of the Maritime Administration approved business plan. The Maritime Administration provided orientation to J-21 during April 2006 at various RMS meetings. **Questions on use of Attachment J-21 should be directed to your ACO/COTR.**

6.5 Business Plan Development and Update

6.5.1 Current Year Business Plan

6.5.1.1 Establish from the prior fiscal year's Budget Year Business Plan, as approved by the Maritime Administration.

6.5.1.2 Effective on October 1 of each contract year

6.5.1.3 Identify the required work; estimate the cost and schedule for projected actions, i.e., preventative maintenance, corrective maintenance, and regulatory surveys and inspections; define the necessary resources; and schedule the execution of these actions to sustain the vessel in its required readiness.

6.5.1.4 Update to reflect actual work performed, costs and dates as work is accomplished and invoices are received.

6.5.1.5 Adjust to include changes as required for unknown work changes to schedules, and the Maritime Administration mandated adjustments.

6.5.1.6 Upon completion of the fiscal year, the Current Year Business will become historical data.

6.5.2 Budget Year Business Plan

6.5.2.1 Establish from the first year of the prior fiscal year Five Year Business Plan.

6.5.2.2 Identify all known and required work; estimate the cost and schedule for projected actions, i.e., preventative maintenance, corrective maintenance, and regulatory surveys and inspections; define the necessary resources; and schedule the execution of these actions to sustain the vessel in its required readiness.

6.5.2.3 Provide cost estimates by equipment, system or space for possible unknown repairs and corrective maintenance actions based on historical data.

6.5.2.4 Continuously update as requirements are identified and refined utilizing RMS.

6.5.2.5 Submit to the Maritime Administration by no later than July 1 of each year.

6.5.2.6 Report requirements identified after July 1 and required in the following fiscal year to the COTR for inclusion in the plan.

6.5.3 Five Year Business Plan

6.5.3.1 On October 1 of each contract year, amend to include new fifth year of the plan.

6.5.3.2 Identify all known and required work; estimate the cost and schedule for projected actions, i.e., preventative maintenance, corrective maintenance, and regulatory surveys and inspections; define the necessary resources; and schedule the execution of these actions to sustain the vessel in its required readiness.

6.5.3.3 Provide cost estimates by equipment, system or space for possible unknown repairs and corrective maintenance actions based on historical data.

6.5.3.3.1 Provide **estimated** costs by **equipment, system, or space for repairs and corrective maintenance actions in RMS.**

6.5.3.4 Recommend to COTR any upgrades, recapitalization projects, or life cycle extension programs.

6.5.3.5 Include any the Maritime Administration directed modification or upgrade of the vessel as directed by the Maritime Administration.

6.5.3.6 Continuously update in "near real time" as requirements are identified utilizing RMS.

6.6 Business Plan Execution

6.6.1 Through a Maritime Administration issued TO, accomplish all facets of the Current Year Business Plan as approved by the Maritime Administration.

6.6.2 Accomplish corrective actions and repairs not specifically identified in the Current Year Business Plan but projected as an estimate for a system or space (see Section 6.4.2.3).

6.6.3 Provide updates to RMS to reflect actual start and completion dates, actual costs, and changes to scope of work.

6.6.4 Notify the COTR of any events or required actions which will warrant a change to the business plan.

6.6.4.1 Accomplish changes to the business plan as directed by the COTR. Changes will be administered through a Contract Modification, new TO, or TO Modification.

6.6.5 The Maritime Administration ADP Interface: Provide ISP for vessels while in ROS. DSL is not required for RMS. Ensure Ship Manager ADP is compliance with the Maritime Administration ADP system. The Maritime Administration ADP system is provided in the Tech Library under MISC.The Maritime Administration will provide the following software programs and appropriate training:

CARGOMAX
RMS

6.6.6 ABS Nautical Systems v. 5 (NS5) will be provided as the Ready Reserve Management System (RMS). The Maritime Administration will transfer at its expense all legacy systems and provide training in the use of NS5. Enter accurate and timely data into RMS as required. The Maritime Administration 's license comes with the following mandatory modules which the SM will use:

- Maintenance
- Inventory*
- Reports
- Replication

*The inventory module is accompanied by a purchasing module. Ship Manager must use the purchasing module to enter cost data and vendor data. Further use of the purchasing module, is at the optional discretion of the Ship Manager.

The Maritime Administration 's license comes with the follow module which it is optional for the SM to use:

Purchasing module except for the items noted above.

Although NS5 may have other modules, the Maritime Administration 's license does not include these.

6.6.6.1 Ship Manager Responsibilities towards RMS:

6.6.6.1.1 The vessels' existing Preventative Maintenance Plans will be entered into RMS as individual work items. The current frequency will also be entered into RMS with an associated equipment and system. The ship manager shall review and modify the procedure and frequency, as necessary. The ship manager should also assign any sub-equipments (this is managed via pull-down menus where sub-components are already linked to the parent equipment). Ship Managers will have to activate the work item within the system (mouse click on the screen). Based on the frequency of the work item, a schedule will be auto-generated. The ship manager shall record accomplishment of all preventative maintenance actions within RMS as well as any additional maintenance or repairs required.

6.6.6.1.2 The ship manager is required to review all outstanding repair and procurement Work Orders). These items should have associated scheduled completion dates and cost estimates as well as associated equipments and systems. Ship Manager shall validate each within the system.

6.6.6.1.3 The ship manager shall use the system to identify new work and procurements required through the utilization of the system's "Work Order". Each item shall include: Title; Priority (4 level); Category (General, Hull, Mechanical, or Electrical) Associated equipment(s), System, or Space(s) (entered via a drop-down menu); clear and concise Statement of Work; Estimated Materials and Labor; Estimated, Committed, and Actual Costs; Vendor; Parts Required if procured or used from onboard or warehouse spares (from existing spare parts database).

6.6.6.1.4 Where applicable, the ship manager shall develop "Events". Events are a group of "Work Orders" that occur during a common time period or shipyard availability (i.e. a drydocking).

6.6.6.1.5 The ship manager shall attach electronic files, as appropriate, within the system. This can occur at various points for work orders or for specific parts. The files may be drawings or contractor reports. Any file format is accepted.

6.6.6.1.6 All spare parts data will be entered into RMS. The ship manager shall record usage and management in accordance with the Logistics Management Manual.

6.6.6.1.7 Establish, apply and maintain appropriate resources to input, maintain and integrate data, information and processes for all contract requirements.

6.6.6.2 Attend the Maritime Administration RMS-related user training as directed.

6.6.6.3 Computer requirement. Ship Managers will provide computers for shorebased use, and for use of their port engineering team(s) as follows:

Hard drive:	40 GB
Processor:	1 GHz
RAM:	512mb or higher
Display:	Super VGA (1024 x 768)
Peripherals:	CD-ROM and DVD, Keyboard, MS Mouse
OS	Windows 2000 Pro or Windows XP Pro

Ship Managers shall provide Microsoft Office 2003 Professional Edition, and capability to attach, transmit, and receive email.

The Maritime Administration will provide computers for RRF vessels which meet these minimum requirements.

6.6.7 Reporting and Analysis Support

Provide ADP support to ensure successful generation of all reports required under Reporting Requirements.

6.7 Subcontractor Management

6.7.1 Subcontracting Policies and Procedures - See Attachment J-2.

6.7.1.1 Provide acquisition services compliant with FAR Part 44.

6.7.1.2 Provide timely and accurate data concerning subcontract awards as required by FAR 19.7. (CDRL BUS-0001)

6.7.1.3 Submit subcontract specifications/solicitations for review, obtain consent to subcontract, and provide advance notification in accordance with FAR 44.2 and the subcontracts clause of this contract. In addition, the CO may require review/consent of any individual action or invoke lower thresholds as deemed necessary irrespective of the above review requirements.

6.7.1.4 Submit written commercial purchasing procedures for commercial purchasing system review (CPSR) and notify the CO (PCO and ACO) of any changes thereafter.

6.7.2 Quality Assurance

6.7.2.1 Develop and execute a Ship Manager Quality Assurance Plan (QA). Notify the Maritime Administration of any changes to the Ship Manager developed QA which was submitted as part of the proposal. (CDRL BUS-0002)

6.7.2.2 Ensure the Maritime Administration receives copies of all third party audits of any Ship Manager policies, procedures, processes or system, in particular those relating to ISM certification and quality assurance. (CDRL BUS-0003)

6.7.2.3 Permit the Maritime Administration employees (ACO or COTR) to accompany third party auditors during their inspections.

6.8 Phone Lines on ROS Vessels: Three (3) phone lines are available for ROS vessels. These are part of the utilities provided under layberth contracts. Additional phone lines are to be included in the Ship Manager's fixed price or may be installed at the Ship Manager's cost during the performance period. Ship Managers are responsible for all costs associated with the use of phone lines. Telephone jacks may be disconnected during activations. Disconnection/re-connection of three (3) telephone lines are reimbursable.

6.9 Provide those items normally associated with Ship Manager staff performance, including, but not limited to: laptop computers, cell phones, personnel assistant devices, dedicated phone, fax and ISP, and required technological up-dates as such items become common to administrative performance.

C.7 FINANCIAL MANAGEMENT

Performance Goal: Effectively manage and control costs.

7.1 Cost Management, Control and Efficiency

7.1.1 Monitor the approved business plan, authorized funding, contract obligations, and actual expenditures to ensure the overall business plan is executed effectively and efficiently.

7.1.2 Provide notification to the Maritime Administration on changes in funding requirements and ensure the government receives the best value of contracted goods and services.

7.1.3 Support government reprogramming actions and timely closeout of TOs.

7.2 Expenditure/Obligation Management

7.2.1 Establish procedures, processes and systems to ensure accurate and timely management of expenditures and obligations.

7.2.2 Ensure submission of invoices in government provided electronic invoicing system and encourage prompt submission of all invoices from subcontractors and vendors.

7.3 Government Audit Support
Cooperate with and provide adequate ship manager support to on-site government auditors as reasonably required for them to accomplish their duties.

7.4 Insurance/Claims Support

Provide adequate staff support to process all claims and settlements. Develop and execute policies to effectively mitigate the Government's liability.

7.5 Records Retention Support
Maintain and make available specific documentation for designated time periods in accordance with FAR 52.215-2 "Audit and Records -- Negotiation" and FAR Subpart 4.7 to satisfy contract negotiation, administration, and audit requirements of the contracting agencies and Comptroller General.

C.8 GOVERNMENT FURNISHED ITEMS

Directions for public access to the Maritime Administration's Virtual office of Acquisition which contains copies of Ship Manager contracts and contract modifications are available at http://www.voa.marad.dot.gov. See Ship Manager Award page.

The Government will provide:

· Ships and all appurtenances and ancillary equipment

· Shipboard computer hardware/software for CARGOMAX and RMS

· Shipboard computers

· Licensing for ABS NS5

· Outfitting Lists by Department (Deck, Engine, Steward)

· Berth - either a Non-NDRF layberth also known as the Outport Berth. This is a berth at a location which is not part of the NDRF

Or NDRF berth. This is a berth within one of the three (3) NDRFs. No phone lines are connected. DH and cathodic protection are provided.

8.1 Maintenance Documentation

· Existing VMAs/P4Ps per ship

· Water Chemistry Program (services)

· Manuals and training to utilize the Maritime Administration's Water Chemistry Program

· Lube Oil Analysis Program (services)

· Manuals and training to utilize the Maritime Administration's Oil Analysis Program

· VMAs/P4Ps of each ship as they currently exist

· List of Outstanding Deficiencies per ship - at turnover meeting

· Current status of regulatory body documentation (certifications/inspections) at turnover meeting

. RSTARS (web access password)

· SAFENET Access (at turnover meeting)

8.2 Logistics, Activation, Operations, and Deactivation

· RMS software

· Accountable property, spare parts, technical manual and ship's drawing databases

· MLSS CD-ROM (every 3 to 6 months)

8.2.1 Standard Yellow Administrative Filing Cabinet (onboard ships)

This list may be modified by the Maritime Administration at any time during the performance period of the contract. MAR-612 maintains the official list with number and content and will periodically update and re-issue the list.

1. Index of Administrative Documents

2. Blue Book of Ship Regulatory Certificates

3. Vessel Response Plan (VRP) for Tankers **and OPDS vessels**

3a. Shipboard Oil Pollution Emergency Plan (SOPEP) - rest of RRF

4. Ship's Trim and Stability Booklet

5. Military Sealift Command's Communications Policies and Procedures **Manual (CD ROMS)**

6. Military Sealift Command's Standard Operating **Manual (CD ROMs)**

7. , MSC Environmental Instructions (CD ROMs)

8. RRF Operations Management Manual (aka TE-1) Available electronically on VOA. Directions at top of C8.

9. RRF Logistics Management Manual (aka TE-5) Available electronically on VOA. Directions at top of C8.

10. RESERVED. Heavy Weather Plan (outported ships only)

11. Ship Manager Activation Plan (placed onboard by Ship Manager company)

12. Ship Manager Operations Directives (placed onboard by Ship Manager company)

12 a. Ship Manager Deactivation/Lay-up Plan (placed onboard by Ship Manager Company)

13. RESERVED

14. RMS NS-5 Instructions - (CD-ROM) Latest version only.
15. CBRD Reference Materials

RRF Videos and CDs:

a) SOPEP and VRP Videos

b) The Maritime Administration Safety Awareness Videos (7 in series); Medical Emergency Videos (8)
Back Injury, Slips, Trips and Fall Prevention
Heat Stress, Sigh, Hearing and Respiratory Protection
Electrical Safety Overview
Safety Awareness Overview
Shipboard Drug and Alcohol Testing Program
Shipboard Safety Inspection Program

Back Care for the Maritime Industry (two videos)

a) Part One: Lift It Safely (To be viewed by all employees)
b) Part Two: Minimize the Risk: The Role of Management (Viewed by Officers)
c) Master's Orientation Video (7 in series)

d) Prevention of Sexual Harassment Video
e) Blood borne Pathogens

Marine Fire Prevention, Fire-fighting, and Fire Safety (book)

The Ship's Medicine Chest and Medical Aid at Sea (book)

ISM Safety Management Plan (placed onboard by Ship Manager company)

Bunkering Video (1) and Bunkering Checklist Sheet

8.3 Safety, Environmental, and Security

· Personal protective equipment listed in TE-1 Section 18

· Safety posters (at various times throughout contract performance period)

· SOPEP/VRP as required per ship

· USCG approved ISPS Security Plan (one per ship)

8.4 Business Management

NTP Business Plan: The Current year's (currently being executed) Business Plan (BP), the budget year BP and any known material for the five year BP per vessel.

· Software for computer (for RMS)

8.5 Financial Management

· Not applicable

[END OF SECTION C]

SECTION F -- DELIVERIES OR PERFORMANCE

F.1 52.252-02 CLAUSES INCORPORATED BY REFERENCE FEB 1998

SECTION F -- DELIVERIES OR PERFORMANCE

F.1 52.252-02 CLAUSES INCORPORATED BY REFERENCE FEB 1998

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://www.acqnet.gov/far/current/html/FARMTOC.html

Clause	Title	Date
52.242-15	Stop-Work Order	August 1989

F.2 52.211-08 TIME OF DELIVERY JUNE 1997

(a) The Government requires delivery to be made in according with Section B of this solicitation.

The Government will evaluate equally, as regards time of delivery, offers that propose delivery of each quantity within the applicable delivery period specified above. Offers that propose delivery that will not clearly fall within the applicable required delivery period specified above, will be considered nonresponsive and rejected. The Government reserves the right to award under either the required delivery schedule or the proposed delivery schedule, when an offeror offers an earlier delivery schedule than required above. If the offeror proposes no other delivery schedule, the required delivery schedule above will apply.

[OFFEROR'S PROPOSED DELIVERY SCHEDULE]

(b) Attention is directed to the Contract Award provision of the solicitation that provides that a written award or acceptance of offer mailed, or otherwise furnished to the successful offeror, results in a binding contract. The Government will mail or otherwise furnish to the offeror an award or notice of award not later than the day award is dated. Therefore, the offeror should compute the time available for performance beginning with the actual date of award, rather than the date the written notice of award is received from the Contracting Officer through the ordinary mails. However, the Government will evaluate an offer that proposes delivery based on the Contractor's date of receipt of the contract or notice of award by adding (1) five calendar days for delivery of the award through the ordinary mails, or (2) one working day if the solicitation states that the contract or notice of award will be transmitted electronically. (The term "working day" excludes weekends and U.S. Federal holidays.) If, as so computed, the offered delivery date is later than the required delivery date, the offer will be considered non-responsive and rejected.

F.3 NOTICE TO PROCEED

The Notice to Proceed (NTP), by the PCO, shall identify the date for the commencement of performance. Performance under this contract before that date shall be at the contractor's risk and shall not be reimbursed.

F.4 NOTIFICATION OF PHASE STATUS

a. The Government shall provide the Ship Manager with a NTP which shall state the phase status and applicable Contract Line Item Number (CLIN) of the ship, i.e., Phase M or O. Payment shall be made in accordance with the appropriate per diem rate for the CLIN, as specified in Section B, for the full 24 hour period.

b. Subsequent changes in phase status shall be accomplished via modification, as executed by the assigned ACO.

F.5 EFFECTIVE DATE OF AWARD AND PERFORMANCE PERIOD

a. The effective date of award for the contract is the date the contract is signed by the PCO. Year 1 of the contract is deemed to be from date of award for a period of twelve (12) months.

b. Performance shall commence on the date specified in the NTP. The period of performance of this contract shall be from the contract award date until the date specified at the time of award, subject to the availability of funds. However:

(1) Any voyage in progress at the end of the contract performance period shall be completed by the Ship Manager unless otherwise directed by the Maritime Administration.

(2) The performance of Phase-In/Phase Out services may be required beyond the scheduled termination date, in accordance with the clause entitled "Continuity of Services" (FAR 52.237-3) incorporated herein in Section I.

(3) During Phase In/Phase Out, the applicable per diem rate for Phase M for that vessel shall be in effect for the period beyond the expiration date.

F.6 PERFORMANCE PERIOD BY SHIP GROUP

a. The period of performance for ship group 6 (CAPE JACOB) is one (1) year with two 1-year options.

b. The period of performance for ship group 11 (PETERSBURG, and CHESAPEAKE) is two (2) year base, with eight 1-year options, with a cancellation ceiling in accordance with the provision of FAR 52.217-2, Cancellation Under Multi-Year Contracts, as incorporated in Section I of this contract. (see Section G.2)

c. All other Ship Groups are multi-year contracts with a base performance period of four (4) years, with annual cancellation ceiling through contract year 3, in accordance with the provision of FAR 52.217-2, Cancellation Under Multi-Year Contracts, as incorporated in Section I of this contract. (see Section G.2)

F.7 CHANGES IN ASSIGNED VESSELS DURING CONTRACT PERFORMANCE PERIOD

a. The Government reserves the right to change the composition of a Ship Group by adding or substituting ships between or within groups or by removing vessels from active RRF status subject to equitable adjustment. The contractor retains the right to accept or reject the addition of ships to the contract.

b. Additional or Substitute Vessels. If the contractor chooses to accept the additional or substitute vessels, the CO may request, and the contractor shall furnish, a cost proposal detailing the cost and schedule impacts (if any) of the changes and a request for equitable adjustment, should costs increase or decrease. A supplemental agreement to this contract shall be executed to incorporate any changes to the number and names of vessels managed by the Ship Manager, and to incorporate any resultant changes to the contract price. Acceptance of additional or substitute vessels by the contractor shall confirm the contractor's acceptance that all terms and conditions of this contract apply to the added vessel(s).

c. If the contractor elects to not accept substitute vessels, the Government reserves the right to terminate the contract.

F.8 PLACE OF DELIVERY BY THE GOVERNMENT

The Government will deliver custody of the ship(s) and all GFP to the Ship Manager at the locations specified in TE-4.

F.9 PLACE AND METHOD OF DELIVERY OF CONTRACT LINE ITEMS BY THE SHIP MANAGER

a. Delivery of services and supplies shall be made F.O.B. Destination as defined in FAR 52.247-34.

b. All documentation and data required by OPCON during Phase O shall be delivered to the COMSC and a copy shall be sent to the cognizant COTR. If Phase O is under Maritime Administration OPCON, not MSC, send reports to the appropriate COTR only.

c. Except where otherwise directed in the contract, all documentation and data, (other than (b) above), shall be delivered to the ACO, who shall be designated in Section G of the contract upon award.

d. Deliverables, are the services and data required by this contract, and are listed separately in Attachment J-4.

e. The following mailing addresses shall be used as the delivery locations for the items required in the contract.

ACO = Administrative Contracting Officer as named in the contract award.

COTR = Contracting Officer's Technical Representative as named in the contract award.

PCO = Procuring Contracting Officer as indicated in block #27 of the SF33 (Contract Award)

Maritime Administration
Chief, Division of Accounting Operations, MAR-330
W28-201 MD#5
1200 New Jersey Ave, SE
Washington, DC 20590-0001

Maritime Administration
Office of Acquisition
Team Leader, Ship Manager Team, MAR-380
W28-201 MD#5
1200 New Jersey Ave, SE
Washington, DC 20590-0001

Maritime Administration
Chief, Division of Marine Insurance, MAR-780
W23-453, MD#2
1200 New Jersey Ave, SE
Washington, DC 20590-0001

Maritime Administration
Director, Office of Financial and Rate Approvals
W23-453 MD#2
1200 New Jersey Ave, SE
Washington, DC 20590-0001

Maritime Administration
Division of Litigation and General Law (MAR-221)
MD#4
1200 New Jersey Av, SE
Washington DC 20590-0001

Maritime Administration
Director, Office of Ship Operations
MAR-610, MAR-610.1, 610.3
W25-209/212 MD#1
1200 New Jersey Av, SE
Washington, DC 20590-00001

Maritime Administration
Division of Ship Maintenance and Repair, MAR-611,
W25-209/212 MD#1
1200 New Jersey Av, SE
Washington, DC 20590-00001

Maritime Administration
Division of Sealift Operations, MAR-612
W25-209/212 MD#1

1200 New Jersey Av, SE
Washington, DC 20590-00001

Maritime Administration
Division of Logistics Support
MAR-614,
W25-209/212 MD#1
1200 New Jersey Av, SE
Washington, DC 20590-00001

Maritime Administration
Division of Atlantic Operations, MAR-615
7737 Hampton Boulevard
BLDG. 4D, Rm. 211
Norfolk, Virginia 23505
TEL: 757-441-6393
FAX: 757-441-0812

Maritime Administration
Division of Gulf Operations, MAR-616
Hale Boggs Federal Building
501 Magazine Street, Suite 1223
New Orleans, LA 70130-3394
TEL: 504-589-6565
FAX: 504-589-6593

Maritime Administration
Division of Pacific Operations, MAR-617
201 Mission Street, Room 200
San Francisco, CA 94105-1905
TEL: 415-744-2562
FAX: 415-744-2591

MSC Commander, Military Sealift Command
Code PM5 **(all ships except CAPE JACOB who uses PM3)**
Washington, DC 20390-5100

F.10 CONDITION OF SHIPS AT TIME OF CONTRACT AWARD

The ships shall be, insofar as due diligence can make them so, seaworthy, tight, staunch and in every way suitable and adequately fitted, with all gear approved by regulatory bodies, and in all respects ready to receive and transport lawful cargo. Prior to contract award, the ship shall be in class according to ABS and USCG Standards. Upon delivery of the ship(s) to the Ship Manager, the ship(s) shall be surveyed and inventory validated by the Ship Manager in accordance with TE-5 and witnessed by the Government to determine their condition and the type and amount of GFP onboard.

The ship(s) may have some outstanding ABS or USCG requirements and known deficiencies at the time of NTP. The COTR (via the ACO) will provide the Ship Manager with a list of such deficiencies. Correction of such deficiencies will be reimbursable at the Maritime Administration's direction.

F.11 REDELIVERY OF SHIPS

a. The ships shall be redelivered to the Government in the same good order and condition, including any enhancements or improvements, as when delivered hereunder except for ordinary wear and tear, other documented legitimate usage and ordinary depreciation, at a port designated by the Government.

b. In accordance with Section C, the ships shall be surveyed and inventoried by the Ship Manager and verified by the Government to determine their condition and the type of GFP on board, at no additional cost to the Government. Unless an exception is authorized by the ACO in writing, the Ship Manager shall be required to return all the Government furnished outfitting, tackle, apparel, supplies, stores, equipment and furnishing or shall be required to replace or reimburse the Government for such items in kind, reasonable wear and tear excepted in accordance with the clause in Section I, Government Property, FAR 52.245-2.

c. A ship shall be deemed redelivered for the purpose of the contract (i) at such time when the Government accepts physical custody of the ship from the Ship Manager; or (ii) if lost, at noon of the day when last heard from; or (iii) from the time and when the ship is declared a Constructive Total Loss by the ACO.

d. In the event the contract period expires or the Government provides notice of its intent to cancel or terminate this contract in whole or in part as provided in any provision of this contract, the Ship Manager shall continue to perform and shall exercise due diligence to preserve the ship and all equipment until redelivery to the Government, and shall cooperate fully in the transfer of functions, possessions, and control of the ship to either the Government or the subsequent ship operator.

e. The Ship Manager shall cooperate in the transfer of all records, logs or other materials pertaining to the navigation and operation of the ship either to the Government or the subsequent ship operator. The spare parts, outfitting, technical information, maintenance manuals, drawings and other supplies and materials in the Ship Manager's possession which have been produced or acquired for the performance of this contract shall be provided to the Government or the subsequent ship operator.

F.12 REPAIR PERIODS DURING OPERATIONS

a. During Phase O, the Ship Manager may, at the Government's option, be placed in a repair period to undergo reimbursable repairs or alterations.

b. During such repair periods, the Government shall determine the number of crew members to be retained onboard for the repair period.

c. The Ship Manager shall arrange for changes in wages, to correspond to ROS status, if directed by the Maritime Administration, and for crew transportation. (In Phase O crew wages and transportation are reimbursable-see Attachment J-9.)

F.13 SUPERVISION

The Ship Manager shall provide at all times, the quantity and quality of supervision necessary for the effective and efficient management of the operation. All supervisors shall have an intimate knowledge of the various tasks, equipment and materials required, to be able to properly train and direct the workers in their individual tasks and to maintain and control an effective operation. If multiple awards are made to one Ship Manager, supervision shall be adequate to fulfill this requirement on each contract.

F.14 ENGLISH LANGUAGE REQUIREMENT OF ON-SITE SUPERINTENDENT

The Ship Manager's on-site personnel must be able to speak, read and write English for ease of communication with Government personnel.

F.15 STANDARDS OF EMPLOYEE CONDUCT

The Ship Manager shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking necessary disciplinary action with respect to its employees.

F.16 EMPLOYEE REMOVAL

If the government has any reason to be dissatisfied with the performance and conduct of any person employed by the Ship Manager, the Ship Manager shall, upon receiving particulars of the complaints, investigate the matter and take immediate corrective action, to include removal from all Maritime Administration activities, when directed by the ACO. The Ship Manager shall immediately notify the ACO of any corrective actions taken.

[END OF SECTION F]

SECTION G -- CONTRACT ADMINISTRATION DATA

G.1 GOVERNMENT FORMS

SECTION G -- CONTRACT ADMINISTRATION DATA

G.1 GOVERNMENT FORMS

Government forms may be obtained from the following:
http://www.gsa.gov/Portal/gsa/ep/formslibrary.do

G.2 TYPE OF CONTRACT

a. This is a Firm-Fixed-Price (FFP) service contract with cost reimbursable items and priced options subject to Economic Price Adjustment (EPA), Service Contract Act (SCA), and Fair Labor Standard Act (FLSA).

b. All items listed in Section B shall be Firm-Fixed-Priced except for those items identified as reimbursable items and identified options. (see also Attachment J-9, Reimbursables)

c. This is a multi-year contract except for group 6 (CAPE JACOB).

(1) It is anticipated that the services to be performed hereunder will be incrementally funded for each performance period. Performance periods beyond year 1 will be subject to availability of funds.

(2) Awards resulting in a multiyear contract are subject to FAR 17.106-1 which requires the establishment of cancellation ceilings in the second and subsequent base program years, where a reduction in funds or program requirements may mandate cancellation of all or some part of this contract, before the completion date in effect at contract award. These cancellation ceilings will be determined by the PCO based upon an analysis of the nonrecurring costs identified by offerors in their proposals and will be incorporated in Section B, upon contract award.

(i) Base Contract - If the base multi-year contract for a Ship Group is cancelled under FAR 52.217-2, Cancellation Under Multiyear Contracts, the cancellation ceiling set forth for that Ship Group in Section B for the program year cancelled shall apply. The ceiling applies to cancellation of an entire group.

(ii) Incentive Award Term Option - Consistent with FAR 17.107, the "cancellation ceiling" for each program year of a multi-year Incentive Award Term Option shall be zero ($0.00). Consequently, if an Incentive Award Term Option is cancelled, the contractor shall not be entitled to any cancellation charges under FAR 52.217-2.

d. Reimbursable items are defined in Attachment J-9. They are compensated at cost; no overhead, materials handling costs, G&A, or profit may be added to these items, regardless of their cumulative effect.

e. Adjustments to Per Diem Rates

1. Base Years. There shall be no adjustments for per diem in Phase M in Section B for the four (4) base years of the performance period, as all escalations are to be included in the firm fixed price. Offerors shall include wages and fringe benefits which cannot be less than the predecessor contractors' CBA/MOUs as identified in DOL issued wage determinations.

2. Award Term Incentive Options

i) The Base Year 4 fixed price Per Diem rates for "ROS (with crew)" CLINs will be escalated as follows:

(1) Price adjustments to the "Crew Costs" element (which included ROS crew wages and bona-fide fringe benefits) will be made in accordance with FAR Clause 52.222-43 Fair Labor Standards Act and Service Contract-Price Adjustment (Multiple Year and Option Contracts); and
(2) The element "other fixed price" costs will be escalated utilizing the Consumer Price Index as stipulated below.

ii) The Base Year 4 fixed price Per Diem rates for CLINs without crew will be escalated utilizing the Consumer Price Index as stipulated below.

3. Incentive Options for Additional Vessels. Since the contract prices for the additional Vessel Option are based on the Base Year 4 prices, if an additional vessel is awarded, the per diem rate will be adjusted as above based on the year in which the option is exercised.

4. Consumer Price Index (CPI) for Escalation During Contract Performance.
In order to calculate inflation for contract option years, Ship Manager will utilize the CPI Inflation calculator at http://www.bls.gov/cpi/#tables.

The CPI inflation calculator uses the average CPI for a given calendar year. This data represents changes in prices of all goods and services purchased for consumption by urban households.

Ship Managers shall use the fixed price per diem rate from the previous contract year, minus crew wages, and utilizing the CPI Inflation Calculator, shall compute the adjustment for the next contract year. The contractor shall submit its CPI adjustment request in writing to the contracting officer within thirty (30) days of the start of the new option year.

G.3 DIRECTIONS BY GOVERNMENT PERSONNEL

a. Except as specified in paragraph b. below, no order, statement, or conduct of government personnel who visit the Ship Manager's facilities or in any other manner communicate with Ship Manager personnel during the performance of this contact shall constitute a change under the
"changes" clause of this contract.

b. The Ship Manager shall not comply with any order, direction or request of Government personnel that it considers to be outside the scope of the contract, unless issued in writing and signed by the PCO or ACO, or as otherwise directed by this contract.

G.4 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

a. The PCO/ACO may designate Government personnel to act as the COTR to perform functions under the contract, such as review and/or inspection and acceptance of supplies, services, including construction, and other functions of a technical nature. The CO will provide a written notice of such designation to the Contractor after contract award and before NTP. The designation letter shall set forth the authorities and limitations of the COTR under the contract.

The PCO will designate the Chief, Division of Ship Maintenance and Repair as a HQ COTR on all contracts. Ship Managers shall attempt to reach rhe Maritime Administration COTR/ACOTRs BEFORE contacting MAR-611.

b. The PCO/ACO cannot authorize the COTR, or any other representative, to sign documents (i.e. contracts, contract modifications, etc.) that require the signature of a CO.

c. The COTR may request the appointment of Assistant Contracting Officer Technical Representatives (ACOTRs) by the ACO. Such written requests shall be made to the respective ACOs, or in the case of headquarters personnel, to the PCO. ACOTRs shall be appointed in writing by the PCO/ACO, and a copy of this appointment letter provided to each affected Ship Manager. The appointment letter shall specify the name, inclusive dates, and specific limits to the authority of that person appointed.

G.5 DUTIES OF THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

a. The COTR is responsible for monitoring the assigned technical aspects of the contract and acts as the technical liaison with the Ship Manager. The COTR is also responsible for the final inspection and acceptance of all reports, and such other responsibilities as specified in their assignment letter. In the event of emergency situations, which threaten the safety of life, limb or property, the Ship Manager shall immediately take all necessary actions, to include expenditure of such funds as may be necessary to preclude such

dangers. The Ship Manager shall notify the Maritime Administration ACO and COTR of any such emergency expenditure as soon as possible. A proper TO will be issued at the earliest opportunity practicable.

b. Except as stated elsewhere, the COTR is not authorized to make any commitments or otherwise obligate the Government for any changes, which affect the contract price, terms or conditions. Any contractor request for changes shall be referred to the ACO directly or through the respective Maritime Administration COTR. No such changes shall be made without the prior authorization of the PCO.

c. The COTR may be changed by the Government at any time, and notification of the change shall be provided in writing to the contractor by the ACO or PCO for headquarters personnel.

G.6 DESIGNATION OF GOVERNMENT PERSONNEL

a. The PCO for this contract is:

Frank K. Bajowski, Jr.
MAR-380
Phone: 202-366-1744
FAX: 202-366-3237
e-mail: frank.bajowski@dot.gov

b. Maritime Administration personnel responsible for informing Ship Managers of alert notifications and providing activation authorization are:

MARAD HEADQUARTERS
Mr. William Cahill
MAR-610
Phone: 202-366- 1875
FAX for HQ: 202-366-3954

Mr. Kevin Tokarski
MAR-610.1
Phone: 202-366-2629
Cell Phone: 202-366-8187

Mr. Paul Gilmour
MAR-611
Phone: 202-366-8974

Mr. Eugene Magee
MAR-612
Phone: 202-366-5073
Cell phone: 202-309-0392

Mr. Mike Franklin
MAR-612
Phone: 202-366-2628

DIVISION OF ATLANTIC OPERATIONS
Mr. Jeffrey McMahon
Phone: 757-441-6393
FAX: 757-441-0812

Mr. William Ingram
MAR-615.31
Phone: 757-441-6393/3715
Cell: 757-848-8400

Mr. Vince Canepa
MAR-615.32
Phone: 757-441-6393/3258
Cell: 757-287-0581

Division of Gulf Operations
Mr. Deepak Varshney
Phone: 504-589-2000 x 227
Cell: 202-379-6968

Mr. Robert Babin
Phone: 504-589-2000 x 226
Cell: 504-218-6501

Mr. Billy Greer
Phone: 409-833-9696
Cell: 409-284-1427

DIVISION OF PACIFIC OPERATIONS
Mr. Hank Ryan
Mr. Charles "Chuck" Johnston
Mr. Simon Tao
Phone: 415-744-2562
FAX: 415-744-2576

c. Authorities

(1) Director/Deputy Director of Acquisition (MAR-380) appoints the PCO.

(2) The PCO retains the authority to solicit, award and modify the basic terms and conditions of the contract. The PCO shall delegate, in writing, specific authorities to the ACO.

(3) Chief of Contracting Office (COCO) is delegated the authority to appoint qualified ACOs and may perform all the duties of ACO.

(4) ACO has the authority to appoint COTRs and ACOTRs.

G.7 CLAIMS AND LITIGATION

G.7.1 THIRD PARTY TORT ACTIONS IN ADMIRALTY

G.7.1.1 The Ship Manager is considered the agent of the United States within the meaning of the Suits in Admiralty Act (SIAA), the Public Vessels Act, and the Admiralty Extension Act for all third party tort actions in admiralty cognizable under the Jones Act, General Maritime Law, or the Clarification Act, inclusive of claims for maintenance and cure. Such actions include, but are not limited to, claims for death or injury to crew members or invitees, claims for maintenance and cure, claims for illness to crew members, and claims for property damage to third parties.

G.7.1.1.1 The Ship Manager is not an agent of the United States under the Contract Disputes Act and nothing contained herein shall be deemed to extend to the Ship Manager the status of "agent of the United States" under any laws relating to contracts. (see Section G.7.2) Neither is the Ship Manager an agent of the United States for non-admiralty actions, particularly employer/employee disputes. (see Section G.7.3)

G.7.1.2 Actions covered by G.7.1.1 must be brought exclusively against the United States. See the Suits in Admiralty Act (SIAA), 46 U.S.C. §741, et seq., which makes the United States the exclusive defendant for all admiralty cases relating to the activities of its agents.

G.7.1.3 The United States will defend the Ship Manager in actions covered by Section G.7.1.1. Such defense will usually be provided through the United States Department of Justice. By entering into this contract, the Ship Manager hereby agrees to accept the

representation of the United States in such legal proceedings. The United States will have the sole discretion to determine whether to settle such suits and the United States will control the conduct of the litigation.

G.7.1.3.1 The Ship Manager may, at its own expense, retain legal counsel to work with the United States in defending any claim or suit.

G.7.1.4 Except as set forth in Section G.7.4, Indemnification, the United States bears the sole financial risk for all actions covered by Section G.7.1.1, for which the RRF vessel, the United States, or the Ship Manager is liable provided the liability arose out of the Ship Manager's performance of this contract and the Ship Manager was acting within the scope of this contract.

G.7.2 SUBCONTRACTOR CONTRACT CLAIMS AND DISPUTES

When the Ship Manager acquires products or services as a prime contractor from a subcontractor under the procedures set forth in Attachment J-2, the Ship Manager is not an agent of the United States. Under the Contract Disputes Act the subcontractor has no direct right to sue the United States or the Maritime Administration for claims and disputes arising under its contract with the Ship Manager since there is no privity of contract between such subcontractor and the Maritime Administration. Therefore, any contract disputes, claims or litigation between the Ship Manager and its subcontractor(s) shall be the responsibility of the Ship Manager consistent with Attachment J-2.

G.7.2.1 The Ship Manager shall comply with the provisions in Attachment J-2 to ensure subcontractor and their agents and employees are properly notified that the vessel is a public vessel NOT subject to maritime liens. (Attachment J-20)

G.7.3 THIRD PARTY ACTIONS NOT IN ADMIRALTY

G.7.3.1 All liability for third party actions which do not lie in admiralty shall be the sole responsibility of the Ship Manager, not the United States, its agents, servants, and employees, nor the vessels owned by the United States. Such liability includes, but is not limited to, all costs of legal representation. Examples of third party actions which do not lie in admiralty include, but are not limited to:

(a) All employer/employee claims or suits brought by the seamen employed by the Ship Manager or by their union, either via arbitration or in court, i.e.:

i) allegations of discrimination, including sexual harassment. Discrimination claims include, but are not limited to, those claims arising under Title VII of the Civil Rights Act, as amended (42 U.S.C. sections 2000e et seq.), the Age Discrimination in Employment Act, as amended (29 U.S.C. sections 621 et seq.), and the Americans with Disabilities Act, as amended, (42 U.S.C. sections 12117 et seq.); or

ii) employment disputes like disciplinary action undertaken by the Ship Manager against its employee; or

iii) enforcement of the terms of the CBAs between the Ship Manager and its unions.

(b) Lawsuits or administrative proceedings brought by federal, state or local authorities alleging the Ship Manager violated federal, state or local laws or regulations; i.e., OSHA or environmental laws and regulations.

G.7.4 INDEMNIFICATION

G.7.4.1 Notwithstanding anything in this contract to the contrary, particularly Section G.7, the Ship Manager agrees to indemnify and hold the United States, the Maritime Administration, and its employees and agents harmless from any damages, loss, or injury resulting either directly or indirectly from:

(a) acts of Gross Negligence, Willful Misconduct or Violations of Law or Regulations of the Senior Management of the Ship Manager; or

(b) acts of Gross Negligence, Willful Misconduct or Violations of Law or Regulations performed by employees, servants, contractors, subcontractors, suppliers or agents of the Ship Manager and which occurred with the Privity or Knowledge of Senior Management of the Ship Manager; or

(c) all third party actions covered by Section G.7.3; or

(d) all maritime liens by third parties where the Ship Manager or its subcontractors or agents failed to notify a third party as required in Attachment J-2, that the vessel was a public vessel not subject to lien under the Maritime Lien Act; or

(e) damage caused by a subcontractor or its agents or employees during the performance of their work which is reimbursable by insurance, an indemnification clause or other similar provision required by Attachment J-2.

G.7.4.2 Such indemnification shall be provided upon the Maritime Administration's request or, if necessary, the United States may bring a legal action, either directly or in a third party action, against the Ship Manager and/or individuals working for the Ship Manager, for damages, loss, or injury to the United States.

G.7.4.3 Definitions (for purposes of this section):

(a) Senior Management means those individuals responsible for senior management of the Ship Manager's organization with respect to major components of any of its operations relating to the NDRF or RRF vessels. Senior Management will include the chief executive officer, president, vice president(s), and head(s) of vessel operations for the Ship Manager.

(b) Privity or Knowledge means that the relevant individuals had either personal cognizance of the circumstances, which either caused or contributed to the claim or the means to obtain that knowledge of which such person should have availed itself.

(c) Gross Negligence means harm that is willfully inflicted or caused by a wanton disregard of a duty of care.

(d) Third Party means all persons who are not parties to this contract.

(e) Violation of Law or Regulation means instances where civil or criminal liability results from a violation of a law or regulation that falls on the vessel, the United States and/or the Ship Manager. A Violation of Law or Regulation will not be deemed to occur for purposes of this definition when liability occurs without fault on the part of Ship Manager.

(f) Willful Misconduct means conduct that is either intentional or committed under circumstances exhibiting a reckless disregard for the safety of others, such as a failure after knowledge of impending danger to exercise ordinary care or a failure to discover the dangers through recklessness or carelessness.

G.7.5 DUTY OF COOPERATION

G.7.5.1 The Ship Manager has a duty to fully cooperate in the defense of any claim or action (whether or not such claim or action is in admiralty) for which the United States bears a financial risk or a responsibility to defend.

G.7.5.1.1 As soon as practicable after the occurrence of any claim or suit, or any loss or damage for which the Ship Manager believes the United States is at risk under this contract; the Ship Manager shall immediately furnish the assigned ACO, with a copy to the assigned COTR, detailed written notice of such claim, suit, loss, and/or damage as well as a copy of every demand, notice, summons, complaint, or other process received by the Ship Manager or its employees or representatives.

G.7.5.1.2 The Ship Manager will cooperate with the Government and, upon request, will assist in effecting settlements, securing and giving evidence, technical advice, and obtaining the attendance of witnesses for consultation, depositions, and trials. Such information, advice, evidence and documentation will be given by the Ship Manager to the United States in the manner and form the United States requires.

G.8 CLAIMS AND REPORTS

G.8.1 Claims by crew members shall be processed in accordance with the provisions listed in Attachment J-3, Supplement A, Seafarer's Personal Injury/Illness Claims.

G.8.2 Claims submitted by ROS crew members are subject to the same processing of Attachment J-3. However, since ROS seamen do not sign articles, they are not entitled to unearned wages.

G.8.3 Report of Injuries/Illness. The Ship Manager shall submit quarterly (Oct, Jan, Apr, Jun) reports of injuries/illness via email in addition to the information required in Attachment J-3, Supplement A, Section 5. Submissions for multiple ships or contracts may be combined, and shall be provided to the ACO, COTR, MAR-782(J. Myers) and MAR-610.5 (J. Barile).

G.8.4 On an annual basis (prior to the close of the fiscal year) the Ship Manager shall reconcile TO closeouts and notify the ACO/COTR of any excess funding deobligation on any TO which was issued in connection with Maintenance and Cure. The Ship Manager shall provide a revised estimate of anticipated obligations for the upcoming fiscal year. The Government will provide new funding with the next fiscal year allotments.

G.8.5 Upon reporting that a case is closed, Ship Managers shall advise the ACO so that TOs with any remaining reserve funding may be liquidated.

G.9 MEDICAL INVOICE REVIEW SERVICES

Medical Invoice Review services shall be obtained by the Ship Manager from competent commercial sources. Ship Managers shall obtain the use of a third party to assist with reviewing and validating costs submitted on medical invoices. A copy of the service agreement shall be provided to the ACO within sixty (60) days of contract award. Ship Managers shall obtain a medical invoice review service, which operates on a percentage of savings basis. If it is impossible to obtain a percentage payment service, then the cost of this service is reimburable.

G.10 MINIMUM WORKING CAPITAL REQUIREMENTS

G.10.1 Irrevocable Line of Credit. The Ship Manager shall maintain an irrevocable line of credit of at least $250,000 per ship with a federally insured bank or financial institution. The form and substance of this line of credit shall:

a. be dedicated solely for the purpose of vessel activations under the Ship Manager contract;

b. remain in effect throughout the life of this contract, without change or alteration, without prior approval of the Maritime Administration's ACO;

c. as part of the provisions of this irrevocable line of credit, the bank or financial institution providing same shall notify the MARAD Office of Financial Approvals of any changes in the outstanding amount, form or substance of the line of credit. This may be accomplished by the bank providing copies of any statementss, which are provided to the Ship Manager;

d. the bank or financial institution must be federally insured; and

e. the terms of all proposed irrevocable lines of credit should first be determined acceptable by the Maritime Administration's Office of Financial Approvals. The Ship Manager shall notify the ACO if there is any change in the status of their $250,000 line of credit per ship.

G.10.2 Alternative. Where a firm has sufficient financial resources to meet the $250,000 per ship financial requirements, and wishes to rely on those resources instead of obtaining a line of credit, the Maritime Administration will consider this alternative financing. To receive the Maritime Administration's approval for this alternative, a firm must submit, with their proposal, a current audited financial statement of the firm or the parent, as appropriate, for the Maritime Administration's approval. In addition, firms receiving awards shall submit to the PCO, for Maritime Administration's approval, an annual audited financial statement each year of the contract.

G.11 TASK ORDERS - REIMBURSABLE

G.11.1 General

(1) Any reimbursable supplies and services to be furnished by the Ship Manager under this contract shall be authorized by issuance of TOs.

(2) All TOs are subject to the terms and conditions of this contract. In the event of conflict between a TO and this contract, the contract shall have precedence.

G.11.2 Issuance

(1) The scope of TOs may vary greatly. The Ship Manager shall not commence work until they receive a TO executed by an authorized Maritime Administration CO.

(2) Prior to issuance of a TO, the Ship Manager shall submit a written specification, cost estimate and time estimate, for completion of the required work. The specification will be reviewed, approved or modified by the Maritime Administration prior to issuance of a TO. At a minimum, the cost estimate shall include the labor and material costs for each work item. (See PWS in Section C)

(3) A TO is considered issued when posted electronically and notification is sent to the Ship Manager.

G.11.3 Acceptance of the Task Order

(1) Implied Acceptance. Acceptance of the TO by the Ship Manager shall be implied if, after three (3) working days of receipt, the Ship Manager has not notified the ACO, either orally or in writing, of problems and/or disagreements with the TO.

(2) After the commencement of performance under the TO, the Ship Manager shall notify the COTR in writing of the need for required revisions, or to request additional funds.

G.11.4 Expedition of Task Order(s) for Activation(s)

(1) MAR-380 will reserve a block of Task Order Numbers in IDEAS-PD. Each ship will be assigned a specific Task Order number which can be used for activation only.

(2) These vessel specific task order numbers will be provided to the Ship Managers so that they may use them as part of the business plan.

(3) Upon activation notice, the Contracting Officer will provide verbal direction to the Ship Manager, within the parameters set by FAR; that is, the CO will provide a "Not To Exceed" amount; a definitization schedule; and a estimated period of performance and a short description of the activation task.

(4) The Ship Manager may then use the activation Task Order number to issue purchase orders, and invoice the Maritime Administration.

(5) The executed Task Order will be issued within three working days of the receipt of funding.

G.12 EXPENDITURE AND TRACKING OF REIMBURSABLE FUNDS

G.12.1 Upon receipt of the executed TO, the Ship Manager may proceed in accordance with procedures in Attachment J-2.

G.12.2 It is the Ship Manager's responsibility to track all funds expended under reimbursable TOs. The SM shall develop a system, which tracks funds obligated and funds available on each TO. Funds shall be further tracked to show the status of purchase order(s) (PO) issued, funds obligated and expended, and PO closed out. The system shall further track the PO to the deficiency(ies) covered by the TO. At times, a PO may cover several deficiency(ies). Alternatively, a deficiency(ies) DSN may require the use of several POs. The tracking system must be able to accommodate such possibilities. The Maritime Administration may request a copy of the tracking document on an "as needed" basis, or as often as monthly.

G.13 PURCHASING RESTRICTIONS

a. Interested or Related Company. Agreements or arrangements with any interested company to render any reimbursable service or to furnish any reimbursable stores, supplies, equipment, materials, repairs or facilities hereunder, shall be submitted to the ACO for approval. Unless and until such agreements or arrangements have been approved, compensation paid to any interested or related company shall be subject to review and readjustment by the ACO, who may deny payments, in whole or in part, if such compensation is deemed to be inappropriate or unreasonable.

b. The term "interested company" shall mean any person, firm, or corporation in whom the Ship Manager or related company of the Ship Manager, may own any substantial financial interest therein, either directly or indirectly.

An "interested company" shall also exist when any substantial financial interest in the company (either directly or indirectly) rests with:

1) immediate family members of the Ship Manager

2) any employee of the Ship Manager who is charged with executive or supervisory duties or
3) any member of the immediate family of any such officer, director, employee or
4) any officer or director of any related company of the Ship Manager or
5) any member of the immediate family of any officer or director of any related company of the Ship Manager.

c. The term "related Company" as used to indicate a relationship with the Ship Manager for the purpose of this Article only, shall include any person or concern that directly or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with the Ship Manager. The term "control" (including the term "controlled by" or "under common control with") as used herein, means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of the Ship Manager (or related company) whether through ownership or control of voting securities, by contract or otherwise.

G.14 TYPES OF INVOICES

a. All invoices shall be submitted for one of the following two (2) categories:
(1) Fixed Price CLIN.
(2) Reimbursable CLIN.

b. General. The Ship Manager shall submit invoices in accordance with Office of Management and Budget (OMB) Circular A-125, Prompt Payment, and FAR 52.232-25, Prompt Payment (Oct 2003), as described herein. All invoices shall be submitted electronically via the Maritime Administration DOT Electronic Invoice Systems (EIS), at https://www.marad.dot.gov/EIS/.

c. Ship Manager shall submit invoices in accordance with instructions contained on the EIS website.

G.15 TRAVEL REQUIREMENTS

G.15.1 Reimbursable travel performed by the Ship Manager, subcontractors and crew, in direct performance of this contract will be reimbursed on an actual, and allowable basis. Travel costs for subsistence and lodging shall not exceed the Federal Travel Regulations (FTR) at http://www.gsa.gov/, except as stated in FAR 31.205-46.

(1) Vouchers are required when submitting travel claims.

(2) Crew members may submit claims without itemized receipts for subsistence and lodging at the current rate set in labor agreements, if less than the FTR rate.

(3) The Contractor shall use only coach or economy airfares while performing travel under this contract, unless otherwise authorized by the ACO. For travel performed on a cost reimbursable basis all cost documentation must accompany invoices for reimbursement except as identified above.

G.15.2 The Federal Travel directory will be used to verify current maximum allowable subsistence and lodging rates.

G.15.3 Requests for travel reimbursement shall be clearly identified and submitted on a SF 1012, Travel Voucher (Attachment J-18) or other form acceptable to the ACO. Requests for reimbursement of travel expenses, including supporting documentation thereof, shall not include commingled reimbursable and fixed price travel cost data.

G.16 METHOD OF PAYMENTS

(1) The Ship Manager shall forward the information required below, to the Department of Transportation, Maritime Administration, MAR-333, Room 7325, 400 7th street, S.W. Washington, DC 20590, not later than fourteen (14) days after receipt of the notice of award. It is the Ship Manager's responsibility to furnish changes promptly to avoid payments to erroneous addresses or bank accounts.

(2) Electronic Funds Transfer Payment Methods
Payments under this contract will be made by the Government either by check or electronic funds transfer (EFT) (through the Automated Clearing House (ACH)), at the option of the Government. Submit a completed SF 3881 (Attachment J-11) to the address above in (a). The SF 3881 designates a financial institution for receipt of EFT payments. See the clause in Section I, FAR 52.232-33, Payment by Electronic Funds Transfer - Central Contractor Registration (Oct 2003).

G.17 CONTRACTORS PURCHASING SYSTEM REVIEW REQUIREMENTS

The Maritime Administration requires all contractors to submit procedures for approval of their purchasing system within ninety (90) days of NTP. Attachment J-2 contains the policies and procedures for meeting Maritime Administration's requirements.

G.18 POST AWARD CONFERENCE

A post-award conference may be held within the first sixty (60) days after award. Attendees will include the Maritime Administration CO/ACO, the COTR or ACOTR, and other personnel deemed necessary to represent the Government. The Ship Manager (Contractor) may be represented by the Ship Manager's employees as deemed appropriate. This conference will be scheduled for a time mutually agreeable to the Ship Manager and to the Government. The purpose of this conference is to review the terms and conditions of the contract, to discuss technical matters pertaining to contract performance, and to address any questions brought forth by either the Ship Manager or the Government.

[END OF SECTION G]

SECTION H -- SPECIAL CONTRACT REQUIREMENTS

H.1 PERIOD OF PERFORMANCE

SECTION H -- SPECIAL CONTRACT REQUIREMENTS

H.1 PERIOD OF PERFORMANCE

The contract base period of performance of four (4) years, with the exception of Ship Groups 6 and 11, may be extended by exercising option(s), up to an additional six (6) years, two 3-year award term periods on the overall contract performance. The total maximum period of performance under this contract, if the Government exercises all award term incentive options is (10) ten years inclusive of the base period. These additional award term incentive option periods will be awarded by the Government based on overall contractor performance as evaluated in accordance with the contract's approved Award Term Incentive Option Plan (ATIOP).

H.2 AWARD TERM INCENTIVE OPTION PLAN

The Award Term Incentive Option Plan (ATIOP), Attachment J-12, provides for the evaluation of both technical and price performance, and serves as the basis for any award term and additional vessels option decision. The ATIOP may be unilaterally revised by the Government and re-issued to the Contractor no later than fifteen (15) days prior to the commencement of the next evaluation period. Any changes to the ATIOP will be made in writing and incorporated into the contract through a unilateral modification citing this clause. The Government will consult with the Contractor(s) prior to the issuance of a revised ATIOP, but is not required to obtain the Contractor(s) consent to the revisions. A Term Determining Official (TDO) shall be appointed by the Government and is responsible for the overall award term evaluation and award term/additional vessels decisions. The TDO will unilaterally decide whether or not the contractor has earned an award term incentive option extension. The TDO will designate an Award Term Review Board (ATRB).

H3 GOVERNMENT'S RIGHT TO EXERCISE THE AWARD TERM INCENTIVE OPTION

The Government has the unilateral right not to exercise the Award Term Incentive Option of the contract if:

(1) the contractor has failed to earn an award term by end of the third year of contract performance, or
(2) if after earning is first award term the contractor fails to earn an award term in any succeeding year of contract performance, or
(3) services are no longer needed, or
(4) option exercise would be inconsistent with FAR Subpart 17.2

If the CO does not exercise the options, the contract period of performance ends at the current contract period of performance. Failure to exercise an award term option that has not yet commenced for any of the reasons set forth in this clause shall not be considered either a termination of convenience or a termination for default, and shall not entitle the contractor to any termination settlement or any other compensation.

H.4 ORGANIZATIONAL CONFLICT OF INTEREST

a. The Ship Manager warrants that, to the best of its knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, and that all such relevant information has been disclosed.

b. The Ship Manager agrees that if an actual or potential organizational conflict of interest is discovered after award, the Ship Manager will make a full disclosure in writing to the ACO. This disclosure shall include a description of actions the Ship Manager has taken or proposes to take, after consultation with the ACO, to avoid, mitigate, or neutralize the actual or potential conflict.

c. The Ship Manager is required to ensure adherence to this clause in its capacity as a manager of public vessels. Ship Managers, their parent companies or subsidiaries are prohibited from bidding on work for which they wrote the specifications unless specifically authorized by the Maritime Administration.

d. The Ship Manager further agrees to insert provisions, which shall conform substantially to the language of this clause, including this paragraph (d), in any subcontract or consultant agreement hereunder.

H.5 REFUNDS, REBATES, AND CREDITS

As described in FAR 52.216-7 Allowable Cost and Payment, the Ship Manager shall pay to the Government any funds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Ship Manager or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Ship Manager has been reimbursed by the Government. Contract closeout procedures shall include a signed statement by the Ship Manager that this was completed or is not applicable.

H.6 EMPLOYMENT OF GOVERNMENT PERSONNEL

In performing this contract, the Ship Manager shall not use as a consultant or employ (on either a full or part-time basis) any active duty military personnel or Government civilian employees without the prior written approval of the ACO. Such approval may be given only in circumstances where it is clear that no laws or DOT, DOD or Service instructions, regulations, or policies might possibly be contravened and no appearance of a conflict of interest will result.

H.7 UNUSUAL EMERGENCY, NATURAL DISASTER, CONTINGENCY MOBILIZATION AND/OR WAR

a. The Ship Manager and its employees agree to obey the lawful directives issued by the Maritime Administrator, Secretary of Defense and/or President of the United States in all cases relating to unusual emergency, natural disaster, contingency, mobilization and/or war.

b. The Government shall reimburse the Ship Manager for its actual out-of-pocket expenses, including all taxes, for (1) any war risk bonuses, extra wages based on the areas to be traversed during, or the ports of call of, any voyage hereunder; (2) any required payments to the officers or crew of the ship necessarily incurred by reason of orders or direction of the Government which require the Ship Manager to breach existing Articles of the crew or contracts with the officers, provided such Articles and contracts comply with the instructions of the Government and are over and above the terms and condition of this contract. However, any war risk bonuses and/or extra wages granted by the Government, and based on the areas to be traversed or the ports of call of any voyage hereunder shall not exceed what would be payable, under applicable laws and regulations, to civilian mariners, in the employ of the Maritime Administration's Ship Manager, for service on the ship if the ship were privately owned on the same voyage.

c. War risk bonuses and/or extra wages paid for traversing combat areas or war-hazard zones shall be allowable costs under this contract only if those areas have been so designated by the Secretary of Defense or others, as may be delegated by the Secretary of Defense.

H.8 STATUS OF VESSELS

The ships to be operated under this contract are public vessels of the United States. Material conditions, personnel appearance, discipline, customs and usage should be maintained at a high professional standard such that the operation of these ships will not bring criticism or discredit upon the U. S. Government.

H.9 SALVAGE

Settlements for salvage services rendered to other vessels, including those owned or controlled by the United States, shall be handled by, and are under the control of the Government. All salvage monies earned, including recovery of fuel consumed and hire during the salvage operation, by any ship hereunder shall issue to and be for the account of the Government after deducting Master's and Crew's share. It is mutually understood and agreed that the Ship Manager shall not be entitled to nor participate in any salvage or salvage awards hereunder. The Ship Manager shall promptly furnish the Government with full reports and information on all salvage services rendered or received.

H.10 SHIP'S STORES AND MATERIALS

Pursuant to authority of the Defense Production Act of 1950, as amended, and provisions of the Business and Defense Service Administration Regulation No. 1, when instructed by the ACO, the priority rating DO-A3 shall be used to obtain ratable ships' stores and controlled ships' materials required under this contract.

H.11 UNITED STATES CITIZENSHIP

Given the essential defense function of a contract award under this solicitation, each contractor must satisfy the following criteria throughout the performance of this contract.

a. Meet citizenship requirements as defined in 46 CFR 315 and 46 U.S.C.802(a) and 802 (b).

b. As part of this process, Contractor must annually submit to the PCO evidence of continuing U.S. citizenship status, including a current Affidavit of United States Citizenship and any changes to other documents previously submitted in connection with establishing the U.S. citizenship of the Contractor. This annual submission should be filed within thirty (30) days after the annual meeting of the stockholders or annually, within thirty (30) days after the original affidavit if there has been no meeting of the stockholders prior to that time. See Section K.7, Affidavit of United States Citizenship.

c. Contractor shall submit promptly to the PCO any changes in the information set forth in its current Affidavit of U. S. Citizenship and other documents submitted in connection with establishing the U. S. Citizenship of the Contractor.

H.12 PORT CHARGES AND EXPENSES

a. Except as otherwise provided herein the Government will pay expenses of loading and unloading cargo, canal tolls, dues, taxes and similar port charges imposed by public authority including consular charges (all of the foregoing except as pertaining to non-official expenses of the Master, officers and crew), incurred by the ships in ports visited pursuant to the Government's direction. The Government shall pay sales taxes, and similar taxes, and foreign taxes to the extent accepted by the Government as port expenses hereunder, provided the Ship Manager shall have used due diligence to secure immunity from such taxes. Any tax or duty from which the U. S. Government is exempt by agreement with any foreign government, or from which the Ship Manager or any subcontractor is exempt under the laws of any country, shall not constitute an allowable port expense under this contract, unless the Ship Manager has used diligence to obtain exemption and has paid under protest.

The Government shall also pay all expenses incurred by the ships in aforesaid ports, which although not imposed in the instant case by public authority, are usually imposed by public authority, such as wharfage or dockage.

The Government further agrees to pay all expenses necessary incurred by the ships entering or leaving the aforesaid ports (including agent and custom broker fees).

b. The Government shall also pay for (1) pilotage of the ships where such pilotage is customary, or where the ships are required by the Government to enter or transit a hazardous or restricted area or body of water; and (2) pilotage or towage in connection with the bunkering or ballasting of the ships, or in shifting the ships in accordance with the orders of the Government. Nothing herein shall be construed as requiring the Government to pay expenses incurred by the Ship Manager for services rendered for the convenience of the Ship Manager, the ship or her Master, officer or crew, or in connection with the Ship Manager's business such as fees of underwriters, or expenses in moving the ship about the port to obtain stores or provisions. All of the charges and expenses which are incurred for the Government's account as aforesaid will be paid by the Ship Manager, who shall be reimbursed by the Government upon presentation of properly certified vouchers and supporting receipts.

c. All fees of agents as defined in Section C, PWS, appointed by and used by the Ship Manager to husband the ships, including the fees of the agents appointed for canal transits and at bunkering ports, shall be reimbursable pursuant to the instructions of the Government provided that such fees shall not exceed those customarily charged commercial vessels for similar services.

H.13 OPERATING LIMITS

Operating limits shall be worldwide.

H.14 CERTIFICATION OF SEPARATE BUSINESS ENTITY

Requirement to be and remain a separate business entity and annual recertification to remain separate throughout the life of the contract.

H.15 PENSION PLAN WITHDRAWAL LIABILITY

The Maritime Administration's payment to the Ship Manager for crew salaries and benefits includes the contribution which the Ship Manager makes to any multi-employer union pension plan for: (a) pension contributions during the time of employment onboard NDRF or RRF vessels, (b) medical insurance plans, or (c) any other contribution required by the contract between the Ship Manager and the union representing the Master and members of the crew.

The Maritime Administration's payment to the Ship Manager for crew salaries is not to be construed as creating any responsibility or liability for payment of amounts which may be assessed by the trustees of a multi-employer pension plan against a Ship Manager for the complete or partial withdrawal by the Ship Manager from a multi-employer pension plan.

H.16 SUBCONTRACTING OF SHIP MANAGER DUTIES

The Ship Manager shall comply with FAR 52.244-2, Subcontracts, contained in Section I of this contract, and obtain the PCO's written consent before placing any subcontract exceeding the stated thresholds for performance of Ship Manager duties throughout the life of this contract as described herein. The Ship Manager shall also obtain the PCO's written consent prior to altering its RRF organizational structure.

H.17 ACTIVATION/OPERATION PER DIEM

a. For No-Notice Activations: Ship Manager per diem and ROS crew wages change to Operations per diem/FOS reimbursable respectively, upon telephonic notification to the Ship Manager by any of the personnel authorized for "activation notification" in Section G.6.

b. Notice Activation. The Ship Manager shall remain in Phase M per diem. Upon the arrival of the first non-ROS crewmember, all crewmembers wages will transition to reimbursable FOS wages. Ship Manager per diem becomes Phase O corresponding to the readiness and deliver date. For example, if the vessel is ROS-5, Phase O starts for the Ship Manager when the vessel would normally have received an activation message of five (5) days before required date.

c. Maintenance Activation: is scheduled in the Business Plan including phase O wages for the crew. Upon the arrival of the first non-ROS crewmember, crew wages transition from ROS to FOS for the entire crew. The Ship Manager per diem remains in Phase M throughout the maintenance activation. See CLIN for SM without ROS crew.

H.18 THE MARITIME ADMINISTRATION'S NATIONAL DEFENSE RESERVE FLEET SAFETY RULES FOR CONTRACT PERSONNEL

Contractor personnel shall abide by the General Safety Rules found in the NDRF Fleet manual (see technical library.) Each fleet may supplement these general guidelines with its own rules. Contractors shall obtain a copy of the rules from the Fleet Superintendent before commencing any work.

H.19 NONDISCLOSURE OF DATA AND INFORMATION

1. The Contractor, and any of its subcontractors in the performance of this contract, may have need for access to and use of various types of data and information in the possession of the Government which the Government obtained under conditions which restrict the Government's right to use and disclose the data and information, or which may be of such a nature that its dissemination or use other than in the performance of this contract, would be adverse to the interests of the Government or other parties. Therefore, the Contractor and its subcontractors agree to abide by any restrictive use conditions on such data and not to:

(a) Knowingly disclose such data and information to others without written authorization from the CO, unless the Government has made the data and information available to the public; and

(b) Use for any purpose other than the performance of the contract that data which bears a restrictive marking or legend.

2. Except as the CO specifically authorizes in writing, upon completion of all work under this contract, the Contractor shall return all such data and information, including all copies, modifications, adaptations, or combinations thereof, to the CO. The Contractor shall further certify in writing to the CO that all copies, modifications, adaptations or combinations of such data or information which cannot reasonably be returned to the CO, have been deleted from the Contractor's (and any subcontractor's) records.

3. These restrictions do not limit the Contractor's or subcontractor's right to use and disclose any data and information obtained from another source without restriction. As used herein, the term "data" has the meaning set forth in Department of Transportation Procurement Regulations, 48 CFR 1252.227-71, "Rights in Data - General", and includes, but is not limited to, computer software, as also defined in 48 CFR 1252.227-71.

H.20 NOTICE OF PARTIAL RESERVE FOR SMALL BUSINESSES (FAR DEVIATION)

(a) Definitions. The definitions in FAR Part 19 and 13 C.F.R. Part 121 apply to this clause.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General.

Rather than setting aside specific vessels or Ship Groups, the Maritime Administration will reserve for award to small businesses fifteen percent (15%) of the vessels, as identified elsewhere in this solicitation.

H.21 TOWING

It is strongly recommended that all towing subcontracts be awarded to towing companies whose towing vessels have a safety management certification from an industry-recognized program*. Where international tows are concerned, towing contracts shall be awarded to towing companies that comply with the ISM Code. Where towing services are required as part of an RRF "no-notice" ship movement, or other similar emergency ship movement (e.g., hurricane evacuation), attempted compliance with this requirement shall not be an acceptable cause for delay.

* Such as the ISM Code, the American Waterways Operators (AWO) Responsible Carrier Program, or any other safety management system recognized by the USCG.

H.22 PHYSICAL LOSS OR DAMAGE TO THE VESSEL OR OTHER GOVERNMENT PROPERTY DURING DRY DOCKING OR SHIPYARD AVAILABILITY (Oct 2007)

(a) Except as set forth in this clause or any guarantee or warranty provision in the contract, the Maritime Administration, part of the United States Department of Transportation, in its capacity as Owner of the vessel (hereinafter "Owner" or "MARAD"), assumes the risk of physical loss or damage to any part of the vessel, its machinery, equipment, stores, and other property, including cargo, if owned by the Government, during a dry docking or shipyard availability except to the extent that such loss or damage is caused by the negligence, fault, error, act or omission of the shipyard, its servants, agents, or employees ("Subcontractor"), or the Subcontractor's lower-tier Subcontractors, or the servants, agents, or employees of the lower-tier Subcontractors, all of which risks are assumed by the Subcontractor. The burden of proving freedom from responsibility under the foregoing sentence shall be borne by the Subcontractor.

(b) Limit of Liability - Except as set forth below, Subcontractor's liability under this clause shall not exceed $5,000,000 per incident per vessel.

(c) The Ship Manager and Owner do not assume any risk with respect to loss or damage compensated for by insurance or otherwise or resulting from risks with respect to which the Subcontractor has failed to maintain insurance as required by this contract.

(d) The Ship Manager and Owner do not assume the risk of and will not pay for any costs of the following:

(1) Inspection, repair, replacement, or renewal of any defects in the vessel or material and equipment due to-

(i) Defective workmanship performed by the Subcontractor or any lower-tier Subcontractor;

(ii) Defective materials or equipment furnished by the Subcontractor or any lower-tier Subcontractor; or

(iii) Workmanship, materials, or equipment that does not conform to the requirements of the contract, whether or not the defect is latent or whether or not the nonconformance is the result of negligence.

(2) Loss, damage, liability, or expense caused by, resulting from, or incurred as a consequence of gross negligence or willful misconduct of the Subcontractor.

(e) No party other than the Ship Manager shall have any right to proceed directly against the Owner or join the Owner as a codefendant in any action.

(f) In the event of loss of or damage to the vessel, material, or equipment which exceeds the limit of liability set forth in paragraph (2) above, the Subcontractor shall promptly notify the Ship Manager, both verbally and in writing, of the loss or damage and await direction from the Ship Manager.

[END OF SECTION H]

SECTION J -- LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

J.1 J-2

ATTACHMENT J-2

SHIP MANAGER (SM) SUBCONTRACT PURCHASING POLICIES
The purpose of this instruction is to establish policies and procedures for

1.0 review and approval of the commercial purchasing system (CPS);
2.0 consent to subcontract and review/advance notification of subcontracts; and
3.0 MARAD specific subcontract requirements,

in conjunction with Federal Acquisition Regulation (FAR) Part 44, Subcontracting Policies and Procedures.
1.0 COMMERCIAL PURCHASING SYSTEM (CPS)
1.1 SM DELIVERABLE
The SM is required to provide its CPS procedures to the **Procuring Contracting Officer (**PCO**)** within 90 days of NTP. However, the SM is encouraged to provide the deliverable early to enable the review process to be completed in a timely manner.
1.1.1 The CPS will be reviewed in accordance with FAR 44.303. In addition, special attention shall be given to:

1.1.1.1 "Best value" practices. In a "best value" practice, all aspects of ship's requirements and subcontractor's capabilities must be considered. In so doing, such enhanced performance factors as increased readiness, shortened repair period or prompt response may outweigh low price alone. The SM procedures shall be well defined and consistently applied and shall follow purchasing practices appropriate for the requirement and the dollar value of the purchase.

1.1.1.2 Methodology for the acquisition of quality products and services at fair and reasonable prices.

1.1.1.3 Minimization of acquisition lead-time and administrative costs of purchasing.

1.1.1.4 Use of self-assessment to support continuous improvements in purchasing.

1.1.1.5 Ability to segregate and track costs (Section 3.2).

1.1.1.6 Maintenance of complete subcontract documentation (Section 3.4).

1.1.1.7 Use of electronic commerce to the maximum extent practicable, for transmission, processing, invoicing and storing data associated with the SM contract.

1.1.1.8 Procedures to identify capable and reliable contractors who have successful past performance records and who can demonstrate a current ability to perform.

1.1.1.9 Procedures for inclusion of appropriate, current flow-down clauses, terms and conditions (Section 3.7).

SMs with CPSs previously approved by other Government agencies shall submit a copy of the documentation of the approval to the PCO in addition to a copy of its procedures for review.
1.2 MARAD REVIEW OF CPS
Review of the CPS may take upwards of 90 days. To ensure consistency in the CPS review and approval process, MARAD has retained the services of the Defense Contract Audit Agency (DCAA) to perform a review of the CPS deliverable. DCAA's review will consist of a combined audit of procurement and accounting procedures and may include an on-site audit at the SM's facility.

If deficiencies are found, the PCO will advise the SM of the deficiencies and recommend the necessary steps the SM must take to gain approval. In accordance with FAR 44.305-2, the SM shall be expected to reply within 15 days with a position regarding the recommendations.

Upon receipt of a favorable review, the PCO will issue notification of approval. Until such time as SM's CPS has been approved by MARAD under the current SM contract, subcontracts are subject to the approvals outlined in Section 2.2.1.2. MARAD CPS approval issued under a prior contract does not apply to the current SM contract.

1.3 MAINTENANCE OF CPS

The SM shall advise the PCO and **Administrative Contracting Officer (**ACO**)** of any change to its commercial procedures 14 calendar days prior to implementation throughout the performance period of the SMC.

The ACO will monitor the SM purchasing program in accordance with FAR 44.304. ACO review(s) may require on-site attendance at the SM's facility. The SM shall assist the ACO by providing space, administrative support, and access to records/reference documents during these inspections.

In accordance with FAR 44.302, once initial approval has been given, at least every 3 years, the ACO will determine whether a purchasing system review is necessary. The ACO will provide CPS re-certifications. MARAD will conduct annual cost incurred financial audits on SM records utilizing the services of DCAA. If warranted, interim cost-incurred audits will be ordered.

1.4 WITHDRAWAL OF CPS APPROVAL

During the performance period of the SMC, the ACO may lower the advance notification/consent thresholds, if there has been deterioration of the SM CPS or to protect the Government's interests. The ACO will issue a deficiency report to the SM, with a copy to the COCO and PCO. The SM shall immediately conform to the ACO's lower thresholds, and respond to the deficiency report within 15 days. Upon review of the response, the ACO may determine that the lower thresholds should continue or make a decision to withdraw approval of the CPS if it is determined that the SMC is deviating substantially from the approved CPS.

2.0 SUBCONTRACT REVIEWS

The SM shall provide subcontracts and documentation for review as follows:

2.1 ADVANCE NOTIFICATION

2.1.1 Notification to ACO prior to award, with copy of intended subcontract

Dollar Level	**Type of Contract**
Any	Other than Fixed Price

2.1.2 The PCO waives the requirement for advance notification of fixed price contracts.

2.2 CONSENT

2.2.1 Request for consent to subcontract to ACO

2.2.1.1 <u>With</u> Approved CPS

<u>Dollar Level</u>	<u>Type of Contract</u>
>$125K	Other than Fixed Price
>$1M	Fixed Price (sole source)
>$2.5	Fixed Price (competitive)

2.2.1.2 <u>Without</u> Approved CPS

<u>Dollar Level</u>	<u>Type of Contract</u>
>$25K	Other than Fixed Price (except T&M)
>$50K	Time-and-Materials
> $100K	Fixed Price

2.3 CONSENT TO SUBCONTRACT GUIDELINES

The request for consent to subcontract and supporting documentation shall be submitted to the ACO electronically at least 10 working days prior to intended subcontract award date. The ACO review will include the considerations listed in FAR 44.202-2 as well as consent limitations in 44.203. The SM request shall include all applicable informational elements listed in FAR 52.244-2, Subcontracts, subparagraph (f)(1). Additionally, the consent request shall include:

- A clear analysis of the award decision, including all factors considered
- Copy of proposals received and an abstract of proposals
- Copy of proposed subcontract, including any changes to terms and conditions
- Summary of negotiations, including explanation of variance between proposed and negotiated prices
- Separately priced bonds and insurance, if coverage exceed 3.7.4 requirements
- Specific funding required for the basic subcontract, supplemental growth, options, and projected SM administrative costs
- Milestone schedule

2.4 ADDITIONAL REVIEW REQUIREMENTS

2.4.1 COTR/ACOTR specification reviews are always required regardless of the level of subcontract review.

2.4.2 For any subcontract requiring formal consent, the associated solicitation shall be submitted to the ACO for pre-issuance review electronically at least 10 working days prior to intended issuance date. The solicitation package submitted shall include:

- Solicitation
- Documentation of specification review and approval by the COTR/ACOTR
- Source List
- Detailed estimate
- Basis for determination of liquidated damages, diversion/inter-port differentials, bonding, and insurance, if coverage exceeds 3.7.4 requirements

Thereafter, a copy of all changes or amendments to the solicitation will be provided to the ACO and COTR/ACOTR concurrent with issuance.

2.4.3 Notwithstanding the established review thresholds, the ACO or PCO may request a pre-award review of any complete subcontract, or part thereof (e.g., sole source, non-commercial items).

2.5 SPECIAL PROCEDURES FOR MISSION ESSENTIAL AND EMERGENCY REPAIRS

The SM shall only purchase supplies or services authorized by a Task Order (TO) or TO modification except for mission essential and emergency repairs described below:

2.5.1 Mission Essential and Emergency Repairs: Foreign and domestic

Mission essential repairs are defined as repairs necessary to support a No-Notice Activation, or repairs necessary to prevent or correct unanticipated change in a ship's readiness status to C-3 or C-4.

An emergency is any action that is needed to protect or prevent the loss of life, limb, or property.

2.5.2 Mission Essential Repair: General Policy

The SM shall notify the ACO and COTR/ACOTR as soon as possible, and at a minimum:

- Define the intended work in as much detail as possible.
- Develop an estimate of cost, and an initial not to exceed value.
- Make all attempts possible to obtain competition, given the circumstances.
- Obtain fixed price rates for subcontracted labor (to include straight time and overtime) fully burdened material, mutually acceptable terms and conditions.
- Recommend project start and completion dates.
- Obtain verbal authorization for no-notice activation from personnel designated in Section G.6. Obtain verbal authorization for other mission essential and emergency repairs from the ACO as soon as practical. The ACO will issue a written TO confirming verbal authorizations as soon as possible.

2.5.3 Mission Essential Repairs Inside the United States

2.5.3.1 The SM shall comply with the policies of Section 2.5.2 and all appropriate aspects of its approved CPS.

2.5.3.2 All appropriate flow-down clauses shall be used, **inclusive of Service Contract Act FAR-52.222-41.**

2.5.4 Mission Essential Repairs **Outside** the United States

MARAD has been granted authority to waive the flow-down clauses required by FAR Part 44 for all non-commercial subcontract repairs accomplished in foreign ports. There are no mandatory flow-down clauses for foreign commercial item repairs. The SM shall comply with the policies of Section 2.5.2 and all appropriate aspects of its approved CPS as closely as possible, given the circumstances.

2.5.5 Planned Repairs **Outside** the United States

Aside from the waived flow-down clauses of FAR Part 44 noted above, the SM shall conduct planned foreign repairs (e.g. pre-positioned vessels) in accordance with all other aspects of Section 2.5.2 and its approved CPS.

2.5.6 Emergency

The SM is authorized to take whatever action is deemed necessary to protect or prevent the loss of life, limb, or property.

3.0 MARAD SPECIFIC SUBCONTRACT REQUIREMENTS

3.1 SUBCONTRACT FUNDING

MARAD may obligate funding for subcontracts on the initial TO, or may elect to obligate funding at a later date via TO modification. The SM is expected to timely execute the approved business plan by soliciting services or supplies "subject to the availability of funds;" however, the SM shall not sign a contract with a subcontractor and shall not incur a legal obligation without a funded TO. A separate TO will be issued for each subcontract >$200K, and no other costs will be chargeable to this TO. For subcontracts <$200K, the SM may use funds from multiple TOs. However, the SM must be able to track funding back to those TO's, and the aggregate amount of subcontracts issued must not exceed the funding on the TOs.

3.2 SEGREGATION AND MONITORING OF FUNDS

The SM is responsible for performing the ordered work, by the required delivery date, and within the authorized funding levels for each CLIN of the TO. The SM shall segregate and monitor costs accordingly.

The SM must notify the ACO in writing when 75% of the funds provided on the TO have been expended. SM are cautioned that this notification requirement applies to individual TOs even when multiple TOs are used on a project. Further, the SM shall notify the COTR/ACOTR and ACO at any point that it is determined that the ordered work cannot be accomplished within the required delivery and/or within the authorized funding.

The SM shall provide a tracking report in Excel spreadsheet format upon request. The spreadsheet shall include the following data elements, at a minimum:

- Vessel Name
- SM Contract number
- TO number
- CLIN number
- DSN number
- DSN funded amount
- DSN actual cost
- Short description of services/supplies
- Dollar Amount invoiced
- Subcontractor name

o Subcontractor invoice number
o Subcontract number

3.3 SUBCONTRACT SOCIOECONOMIC STATISTICAL REPORTING

All SM regardless of business size, shall report to each ACO by the 5th of each month, the total number and total dollar value of subcontracts awarded by the SM for that MARAD region as follows:

Type of Firm (U.S.)	Total # of subcontracts	Total Dollars
SDB Awards	_____	_____
Women Owned SB	_____	_____
SBA 8(a) SB Awards	_____	_____
HUBZone SB Awards	_____	_____
Veteran Owned SB Awards	_____	_____
Service Disabled Veteran Owned SB	_____	_____
Total Small Business Awards	_____	_____
Other U.S. Large Business Awards	_____	_____
Total U.S. Subcontract Awards	_____	_____
Total Foreign Subcontract Awards	_____	_____
Total Subcontract Awards	_____	_____

NOTE: Awards to small businesses must be counted in all appropriate categories. For example, an award to a Woman-owned, HUBZone certified firm would be included in both Woman-owned and HUBZone firm figures, but included only one time in Total Small Business Awards. In other words, the Total Small Business Awards will not necessarily equal the sum of all small business awards for the several types of small business firms.

SM certified as a large business shall monitor small and minority business awards in relation to the SM's subcontracting plan goals, accumulate data on all subcontract awards, including those less than $50,000 and submit a SF-294 (Exhibit I), Subcontracting Report for Individual Contracts and SF-295 (Exhibit II), Summary Subcontract Report to the ACO as required by FAR.

3.4 SUBCONTRACT DOCUMENTATION

For purposes of Government auditing, the SM shall establish and maintain an individual file for each subcontract, which may be in electronic format. The file shall be identified with a sequential number for tracking. The file shall be adequately documented to establish the propriety of the transaction and the price paid, and that the SM complied with its commercial purchasing procedures.

The subcontract file shall contain the following, as a minimum:

o Copy of TO(s), with adequate funding authorized for this purpose
o Subcontract, including clearly defined requirements (see Section 3.7)
o Copy of all modifications to the subcontract
o Documentation of competition obtained for purchases >$2,500 or its absence properly justified
o Documentation of purchase decision, evidencing that the price paid was fair and reasonable and the subcontractor selected represented the best value to the government
o Documentation of negotiations (if conducted), including explanation of variance between proposed and negotiated subcontract prices
o Proper approvals, including SM internal approvals in accordance with commercial procedures and MARAD specification, solicitation, and award approvals
o Documentation of inspection and acceptance
o Documentation of payment in accordance with subcontract terms
o Copy of ACO direction to use Government source of supply (i.e., GSA) or approval of unique terms and conditions (i.e., insurance, bonds, demurrage, progress payment)
o Documentation of rationale for not using directed sources (i.e., fuel)
o Closeout documentation, including final invoice payment marked as such.

Documentation may be maintained in separate files/systems where logical (e.g., documentation of payment in electronic accounting system), provided that the individual subcontract file indicates where the documentation is located and it is available for Government review at the SMGR corporate facility.

3.5 SUBCONTRACTOR PAYMENTS

The SM shall encourage vendors to submit invoices promptly. Ideally, the SM should encourage the use of electronic invoicing from the subcontractor to achieve accurate, timely invoices for review and payment. Prompt submission of invoices can be a consideration for best value as it permits obligated funds to be liquidated and excess funds deobligated.

The SM is responsible to verify the validity and accuracy of all subcontractor invoices prior to forwarding them to MARAD for reimbursement. Repeated invoice inconsistencies and errors are a reflection of poor quality control processes and will impact the SM's performance assessment. MARAD will reclaim overpayments directly from SM. The SM shall submit invoices after receipt of supplies/services in accordance with Section G.14.

In the rare situation where commercial practice is for buyer financing of goods or services in excess of the SM stipulated minimum working capital requirements (Section G.10), the SM may request advance payment on a case-by-case basis. For purchases of commercial items, financing of the contract is normally the contractor's responsibility. However, in some markets the provision of financing by the buyer is a commercial practice. The amount of advance payment requested shall not exceed the amount to be actually paid in advance based on the best terms the SM is able to negotiate with the agent or service provider. SM shall submit their request for advance payment (i.e., payment in advance of receipt of supplies/services) to the ACO via e-mail with a copy to the COTR/ACOTR and FCO, in the following format. The e-mail should be marked as URGENT.

"Request advance payment in the amount of $_____ (insert amount) under Contract _____ (insert SM Contract #) / Task Order _____ (insert TO #, if applicable), for _____ (insert description of services/supplies). Documents to support the amount requested are attached (i.e., detailed estimate, pro forma invoice from the subcontractor). The scheduled pay date is _____ (insert date)."

The SM is to include a clear statement or rationale stating why advance payment is necessary and that the value exceeds their contract stipulated minimum working capital.
The ACO will evaluate and approve/disapprove the request via e-mail. If approved, the TO will also indicate that advance payment is authorized. The SM shall submit an invoice, indicating the date when payment is required in the certification statement block on the EIS invoice form and indicating in the description field on the supporting spreadsheet that this is an advance payment. MARAD will endeavor to meet the specified payment date, however, be advised that commercial advance payments are not subject to the interest penalty provisions of the Prompt Payment Act in accordance with FAR 32.9.

3.6 SUBCONTRACTOR CLAIMS AND DISPUTES

Subcontracts are between the SM and the subcontractor, and the SM is responsible for resolving subcontract disputes. The SM shall advise the ACO and COTR/ACOTR of disputes, changes in status of disputes, and potential costs or delays in delivery or possible litigation. MARAD will not directly participate in disputes and/or settlement.

MARAD endorses and recommends the use of alternative disputes resolution (ADR) procedures. The SM is responsible for all administrative and legal costs associated with resolving such disputes, except when the government has authorized reimbursement by issuance of a TO. When private counsel has been authorized, the government will reimburse reasonable costs associated with such representation subject to the funding limitations of TO.
Payments of judgments or settlements resulting from this disputes resolution process are the responsibility of the SM, although the SM may request reimbursement provided that indemnification under Section G.7.4.1 does not apply. SM are cautioned to seek prior approval from the ACO of settlements, which the SM intends to submit for reimbursement, in order that a reserve of appropriated funds can be made for the claim. The liability of the United States under this clause is subject to the availability of appropriated funds.

If a dispute is not settled between the SM and the subcontractor and the matter advances to a formal claim in the Courts, Section G.7 Claims and Litigation will apply.

3.7 GENERAL SUBCONTRACT POLICIES

3.7.1 Subcontract Basic Content - SM subcontracts shall contain the following information, at a minimum:

- Identification number
- Date of Subcontract Award
- Description of supply/service

- o Delivery/performance date
- o Place of delivery/performance
- o Packing or shipping instructions, if any
- o Address to submit invoices
- o Terms and Conditions

3.7.2 Flow Down Clauses - The SM shall incorporate appropriate flow-down clauses in subcontracts inclusive of the Service Contract Act (SCA). U.S. Department of Labor Wage Determinations can be found at http://www.wdol.gov/sca.aspx#0 . The Wage Determinations can be found under the following numbers:
Texas, Houston 2005-2515
Texas, Beaumont 2005-2505
Texas, Orange 2005-2505
Texas, Channelview (Harris County) 2005-2515
Texas, Port Arthur (Jefferson County) 2005-2505
Texas, Corpus Christi (Nueces County) 2005-2507
Virginia, Norfolk and Newport News 2005-2543
Massachusetts, Buzzards Bay (Barnstable County) 2005-2259
Massachusetts, Boston (Suffolk County) 2005-2255
Maine, Castine 2005-2247
Maryland, Baltimore 2005-2247
South Carolina, Charleston 2005-2473
Florida, Jacksonville 2005-2115
New York, New York 2005-2375
Florida, Tampa (Hillsborough County) 2005-2125
Alabama, Mobile 2005-2009
California, Alameda, Contra County 2005-2051
Washington, Pierce County 2005-2567

The Ship Manager is authorized to utilize the clause set forth in H.22, Physical Loss or Damage to the Vessel or Other Government Property during Dry Docking or Shipyard Availability (Oct 2007), to limit the shipyard's liability during the dry docking of RRF vessels. Under H.22, the Maritime Administration assumes the risk of physical loss or damage to any part of the vessel, its machinery, equipment, stores, and other property, including cargo, if owned by the Government, which occurs during a dry docking or shipyard availability, except to the extent the Ship Manager's Subcontractor (the shipyard) is liable under the following clause. The Ship Manager shall report all loss or damage to the vessel or other government property including, but not limited to, loss or damage for which the Subcontractor is liable under H.22. If such loss or damage exceeds the limit of liability set forth in H.22, the Ship Manager shall promptly notify the ACO, both verbally and in writing, of the loss or damage and await direction from ACO. By authorizing the Ship Manager to include H.22 in a subcontract with a shipyard the Maritime Administration agrees to release the Ship Manager from, and not to seek indemnification from the Ship Manager for, the risks assumed by the Maritime Administration under H.22, except when the indemnification provision of Clause G.7.4 of the Ship Manager Contract applies.

Flow-down clauses vary with the type of item, price, and place of purchase. The SM is responsible to select and apply the correct clauses to avoid unnecessary cost to the Government.

3.7.2.1 Commercial Items - In accordance with FAR 44.402, all commercial item purchases shall include the flow-down clauses listed in FAR 52.244-6, Subcontracts for Commercial Items, and SCA, except for subcontracts obtained outside the United States. Supplies/services ordered by MARAD are considered commercial items unless otherwise stated on the TO.

3.7.2.2 Non Commercial Items - Purchases for supplies and services that do not qualify as commercial items (as determined by the MARAD ACO) shall include all appropriate clauses that flow-down from the SM Contract, **including SCA.**

3.7.3 Subcontract terms - The subcontract shall not include any language implying or stating that it is an agent of the Federal Government, and the SM shall not sign as "agent" or 'SM for MARAD." The subcontract shall not include terms that bind the Government to the results of arbitration, judicial determination, or voluntary settlement between the prime contractor and subcontractor.

3.7.4 Insurance - The SM shall require insurance from subcontractors to protect Government property in an amount appropriate to the subcontract, which shall be determined on a case-by-case basis. Typically, when a vessel is transported to a shipyard facility for a

repair availability, MARAD requires the following types of insurance and minimum coverage during the entire performance of the subcontract:

(a) Workmen's Compensation, including Longshoremen & Harbor Worker's Act coverage - no minimum.

(b) Employers Liability - $5 million bodily injury by accident, each accident - $5 million bodily injury by disease each accident - $5 million bodily injury by disease in the aggregate.

(c) Maritime Employers Liability (Jones Act) - $5 million for each person per occurrence and $5 million in the aggregate.

(d) Comprehensive General Liability - $5 million combined single per occurrence limit for bodily injury and property damage and $5 million in the aggregate.

(e) Ship Repairers Legal Liability - $5 million per vessel, per occurrence.

(**f)** Pollution Liability - $5 Million per occurrence.

The SM shall ensure that indemnification extends to MARAD, and the insurance certificate shall name the United States of America as a secondary source certificate holder as owner, along with the SM as vessel operator. Such policies shall contain a statement that there is no recourse against the USA for payment of premium. The SM shall stipulate that upon request the subcontractor shall provide a copy of all original insurance policies within 5 calendar days. The SM shall ensure that the coverage does not contain exclusions that would effectively negate coverage for all but third party liabilities. All such insurance will contain 30 calendar days advance notice of cancellation or of any non-renewal which is the option of the insurer be provided in writing to the U.S. Department of Transportation, Division of Marine Insurance , **MAR-780, W23-453, 1200 New Jersey Ave., SE, Washington, DC 20590.**

The SM shall obtain and review proof of insurance coverage (i.e., certificate of insurance, policy). The ACO may request that the SM send the subcontractor insurance to the MARAD Division of Marine Insurance for review.

3.7.5 Supplemental Material/Lower Tier Subcontract Markup - The SM shall not include a percentage markup (i.e., material handling charge, burden rate) in its subcontracts for supplemental material or lower tier subcontracts. This type of arrangement is considered a Cost-Plus-A-Percentage-Of-Cost type contract, which is prohibited by FAR.

3.7.6 Subcontractor Screening

3.7.6.1 The SM shall verify that no apparent conflict of interest/improper affiliations exist between the SM and subcontractors.

3.7.6.2 The SM shall verify that proposed subcontractors are not suspended and/or debarred by consulting the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-procurement Programs, website at http://epls.arnet.gov. If the SM intends to subcontract with a party that is debarred, suspended, or proposed for debarment, notification to the ACO is required in accordance with FAR 9.405-2.

3.7.6.3 SM shall evaluate subcontractor performance to establish qualified sources, and to be used as part of the evaluation of best value. The SM is expected to factor subcontractor past performance into its decision on award. The SM must support decisions not to award based on past performance.

AWARD TERM INCENTIVE OPTION PLAN (ATIOP) For Ready Reserve Force (RRF) Ship Manager Contracts Awarded Under Solicitation DTMA8R04004

Approved by

Term Determining Official
Procuring Contracting Officer

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PART 1 INTRODUCTION

A. Overview

This plan covers the administration for the award term and additional vessel incentive option provisions of contracts to be awarded under Solicitation DTMA8R04004 for ship manager services in support of the Maritime Administration's (MARAD) Ready Reserve Force (RRF) Program.

B. Contract Matters

The following matters, among others, are covered in the contract(s):

1. The contractor (Ship Manager) is required to provide services to maintain assigned RRF vessels in Fully Mission Capable Readiness Status and efficiently activate and operate these vessels in support of national emergencies and defense objectives. The scope of services to be provided is detailed in Section C of the Contract.

2. There are fifty-four (54) vessels included in this acquisition. Most of the groups consist of two or three ships of the same class. Multi-year contracts will be awarded for fifty-one (51) of the vessels. With the exception of two ship groups, the resulting contracts will have one four-year base performance period, with two 3-year options. The base term of the contracts shall not exceed 48 months from its effective date, with annual cancellation ceilings through contract year 10, in accordance with the provisions of FAR Clause 52.217-2, CANCELLATION UNDER MULTI-YEAR CONTRACTS. The total term of the resulting contracts shall not exceed ten (10) years, including all option years.

3. One single-vessel group (#6) is scheduled to be awarded for one year with two 1-year options.

4. One two-ship group (#11) will be awarded as a multi-year contract with a two-year base performance period and eight 1-year options, with a cancellation ceiling for contract year 2, in accordance with the provisions of FAR Clause 52.217-2, CANCELLATION UNDER A MULTI-YEAR CONTRACTS. The total term of the contract for Ship Group 11 shall not exceed 10 years, including all option years if exercised.

5. Ship groups (SG) 6 and 11 will not be considered for incentive awards due to the uncertainty of the program requirement and associated funding.

6. The estimated cost for the base period of performance is described in Section B of the contract. The services to be performed under this contract will be incrementally funded for each performance period.

7. Performance periods beyond contract year 1 will be subject to availability of funds.

8. The fixed price per diem rates for the option years (i.e., award terms) and additional vessels are subject to escalation in accordance with the Economic Price Adjustment (EPA) Clause, FAR 52.222-43, inclusive of Consumer Price Index (CPI) and future wage determinations.

9. The award term for the base years and option years, if exercised, are (except for SG 6 and SG 11):
    a. Base year = 48 months (4 years) from effective date of contract **(07/27/2005 through 07/26/2009)**
    b. 1st Award Term Incentive Option = 36 months (3 years) – **(07/27/2009 through 07/26/2012)**
    c. 2nd Award Term Incentive Option = 36 months (3 years) – **(07/27/2012 through 07/26/2015)**

10. The option for additional terms and/or additional vessels is determined by the Government's evaluation of the contractors' performance in terms of the criteria stated in this Award Term Incentive Option Plan (ATIOP), consistent with other factors such as, results from Contract Administrative Reviews (CAR), information contained in the Ship Manager Performance Evaluation and Appraisal System (SM-PEAS), etc., **and other documented and pertinent contractor performance information.** In determining whether to award an incentive option for additional vessels, the Government will consider the contractor's experience by class of ship and the availability of ships. This determination and the methodology for determining the additional terms, and additional vessels, if applicable, are unilateral decisions made solely at the discretion of the Government.

11. The Term Determining Official (TDO) may unilaterally change the particulars of this Plan, as covered in Part VI, below, providing the contractor receives notice of the change at least fifteen (15) calendar days prior to the beginning of the evaluation period to which the changes apply.

C. Award Term Incentive Option

1. The determination to award an additional term incentive option is contingent upon the contractor maintaining excellent levels of ongoing performance in all areas of the contract, as well as exhibiting continuous improvements in performance, and reductions of costs, whether specified as award term evaluation areas or not, for each evaluation period throughout the term of the contract. This is designed to reinforce the importance of overall superior contract performance.

2. The exercise of additional award term incentive options to the contractor is unilaterally determined by the Government's evaluation of the contractor's performance. See Part IV.

D. Additional Vessels Incentive Option

1. The determination to award additional vessel options is contingent upon the contractor maintaining excellent levels of ongoing performance in all areas of the contract, and exhibiting continuous improvements in performance and reduction of costs, whether

specified as award term evaluation areas or not, for each evaluation period throughout the term of the contract. This is designed to reinforce the importance of overall superior contract performance.

2. The award of additional vessel option to the contractor is unilaterally determined by the Government's evaluation of the contractor's performance. See Part IV.

PART II EVALUATION SCHEDULE AND SCORING

A. Schedule of Evaluation Periods for Base Years and Award Term Incentive Option Years

The Government will complete an initial performance evaluation at the completion of the ninth month of the base year. This evaluation period will be scored but not counted in the Award Term Decision Point (ATDP), but will be used as a "wake-up" period for the contractor, at which time the Government will identify areas of performance impacting the contractor's ability to obtain an award term and additional vessels option. The Government will complete a performance evaluation every six (6) months thereafter, following the initial 9-month evaluation, which will be scored and considered in the award term incentive determination.

B. Evaluation Scoring

1. Each evaluation will be worth 1000 points. The decision to grant the first (1st) award term incentive option will be made after the fourth (4th) evaluation. To earn the first (1st) award term incentive option, the contractor must have accumulated a minimum of 3100 points out of the 4000 potential points, with no more than one (1) individual evaluation receiving a score of less than 700 out of 1000. The Contracting Officer shall notify the contractor of the decision no more than ninety (90) days nor less than sixty (60) days prior to the end of the performance period for the third year of performance. **Beyond the point evaluation, the TDO will consider other relevant contractor performance data. If a contractor falls within 10% of the minimum score, the TDO may grant the award term incentive option if other performance data supports such a consideration, and if the award is within the best interests of the program and the Government.**

2. To determine whether to grant a second or subsequent award term incentive option, the Government will consider the contractor's performance in the four (4) most recent evaluations. To earn an additional award term incentive option, and additional vessel option, if applicable, the contractor must have accumulated at least 3500 points out of the 4000 points possible on those evaluations, with no more than one individual evaluation receiving a score of less than 800 out of the 1000. The Contracting Officer will notify the contractor no more than ninety (90) days nor less than sixty (60) days prior to the end of the award term. **Beyond the point evaluation, the TDO will consider other relevant contractor performance data. If a contractor falls within 10% of the minimum score, the TDO may grant the award term incentive option if other performance data supports such a consideration, and if the award is within the best interests of the program and the Government.**

3. If the TDO determines to grant an award term incentive option, the Contracting Officer shall execute a modification to add the award term incentive option period to the contract performance period.

4. If the TDO determines to grant additional vessels via the incentive option, the Contracting Officer shall execute a modification to exercise the incentive option by adding the ship group to the contract.

5. If the contractor decides to not accept the award term incentive option period and/or the additional vessels option, the contractor must notify the Contracting Officer in writing no later than 240 days prior to the start of the applicable award term period. The contractor, however, remains fully responsible for continued satisfactory performance for the remaining performance period of the contract in spite of such a decision.

C. ATDP Timetable

The schedule below reflects the timetable for evaluations of award term incentive option decision points. The Award Term Decision Point (ATDP) precedes the Contracting Officer's determination, under FAR Part 17.207, to exercise the option.

Schedule of Evaluation Periods and Award Term Incentive Option Periods									
Core Performance Periods				Award Term Incentive Option Periods					
Contract Base Year 1	Contract Base Year 2	Contract Base Year 3	Contract Base Year 4	1st Award Term Contract Year 5	1st Award Term Contract Year 6	1st Award Term-Contract Year 7	2nd Award Term Contract Year 8	2nd Award Term Contract Year 9	2nd Award Term Contract Year 10
Jan 2006 Evaluate for initial period (9 months of 1st CY) ("Wake-up Period")	July 2006 1st six-month evaluation	July 2007 3rd six-month evaluation	July 2008 5th six-month evaluation	July 2009 6th six-month evaluation	July 20010 8th six-month evaluation	July 2011 10th six-month evaluation	July 2012 12th six-month evaluation	July 2013 13th six-month evaluation	July 2014 15th six-month evaluation
	Jan 2007 2nd six-month evaluation	Jan 2008 4th six-month evaluation (1st ATDP)	Jan 2009 6th six-month evaluation	Jan 2010 7th six-month evaluation	Jan 2011 9th six-month evaluation (2nd ATDP)	Jan 2012 11th six-month evaluation	Jan 2013 12th six-month evaluation	Jan 2014 14th six-month evaluation	

PART III ORGANIZATIONAL STRUCTURE FOR AWARD TERM ADMINISTRATION

The following organizational structure is established for administering the award term and additional vessel option provisions of the contract(s). Note that this structure is subject to change at the discretion of the Government.

A. Award Term Determination Official (TDO)

1. The TDO is the Director, Office of Ship Operations

2. Primary TDO responsibilities are:
   a. Approves the Award Term Plan and any changes thereto;
   b. Reviews recommendations made by the Award Term Review Board (ATRB) and considers all information from pertinent sources;
   c. Determines the earned award term points for each evaluation period;
   d. Appoints the ATRB Chairperson;
   e. Approves award term and additional vessel options earned for each evaluation period as addressed in Part III below.

B. Award Term Review Board (ATRB)

1. The Chairperson of the ATRB is the Deputy Director, Office of Ship Operations, or some other person appointed by the TDO. The following are voting members of the ATRB:

   a. Deputy Director, Chairperson
   b. Chief, Division of Maintenance & Repair, Deputy Chairperson
   c. Procuring Contracting Officer
   d. Recorder provided by MAR-380
   e. Other Member – if deemed necessary by the Chairman - TBD
   f. *Quality Assurance Evaluator(s) – TBD (delegated Contracting Officer's Technical Representatives and Administrative Contracting Officers)*

2. The Chairperson may recommend the appointment of other non-voting members to assist the ATRB in performing its functions. Possible non-voting members are:

   a. SOMO - TBD
   b. FCO – TBD
   c. Logistics Manager – TBD
   d. Chief Counsel – TBD

3. The primary responsibilities of the ATRB are:

   a. Review Program Monitors' evaluations of the contractor's performance;

b. Conduct periodic evaluations of contractor performance by reviewing all performance elements prior to ATRB meetings, noting questionable areas and computing a tentative score for each category;
c. Consider all information from pertinent data, discusses events with fellow members at the meeting(s), and requiring clarifications from Program Monitors, if necessary;
d. Calculate and vote on earned award term points on the basis of what is presented and substantiated;
e. Prepare and submit ATRB Report to the TDO covering the ATRBs finding and recommendations for each evaluation period; and
f. Recommend changes to the ATIOP, if necessary.

C. Performance Monitors (PMs)

1. A monitor will be assigned to each or several performance areas to be evaluated. A list of performance monitors with their assigned areas of evaluation is shown in Exhibit 1 to the ATIOP.

2. Each monitor will be responsible for complying with the General Instructions for Performance Monitors (Exhibit 2) and any specific instructions of the ATRB Chairperson.

3. The primary responsibilities of the PMs are:

   a. Monitor, evaluate, and assess contractor performance, and maintain written records of contractors performance in assigned area(s);
   b. Ensure that fair and accurate evaluation is obtained;
   c. Prepare interim (mid-point) evaluation reports as directed by ATRB;
   d. Recommend appropriate changes in this Plan for consideration, as addressed in Part VI below.

PART IV METHOD FOR DETERMINING AWARD TERM INCENTIVE OPTION AND ADDITIONAL VESSELS OPTION

A determination of the award term incentive option and, if applicable, additional vessel option earned for each evaluation period will be made promptly by the TDO after the end of the period. The method to be followed in monitoring, evaluating, and assessing contractor performance during the period, as well as for determining the award term and additional vessel options, is described below.

A. The ATRB Chairperson will assign a performance monitor(s) for each or several performance areas and/or sub-areas to be evaluated under the contract. PMs will be selected on the basis of their expertise relative to prescribed performance area emphasis. The PM role may be in addition to, or an extension of, regular responsibilities. The ATRB Chairperson may change monitor assignments at any time without advanced notice to the contractor. The ATRB Chairperson will notify the contractor promptly of all monitor assignments.

B. The ATRB Chairperson will ensure that each PM receives the following:

a. A copy of the contract and all modifications;
b. A copy of this Plan, along with any changes made in accordance with Part V, below;
c. Appropriate orientation and guidance; and
d. Specific instructions applicable to a monitor's assigned performance area(s), if applicable.

C. PMs will monitor, evaluate and assess, and maintain written record of contractor performance and will discuss the results with contractor personnel or management, as appropriate, in accordance with the General Instructions for Performance Monitors detailed in Exhibit 2 of this Plan, as well as with specific instructions and guidance furnished by the ATRB Chairperson.

D. PMs will submit written quarterly performance monitor reports and, if required, make verbal presentations to the ATRB.

E. As requested, the ATRB Chairperson will request and obtain performance information from other MARAD units or personnel normally involved in observing contractor performance or are recipients of contractor services.

F. Periodically, the ATRB will consider PM Reports and other performance information it obtains and will discuss the reports and information with PMs or other personnel, as appropriate.

G. Promptly, at the end of each evaluation period, the ATRB will consider all the performance information it has obtained, and will summarize its preliminary findings and recommendations for coverage in the ATRB Report.

H. The ATRB Chairperson will prepare the ATRB Report for the period and submit it to the TDO for use in determining the award term and additional vessels, if applicable, earned. The

ATRB Report will include a recommended range of award; i.e., additional award terms and/or vessel(s) options, as applicable, with supporting documentation. When submitting the ATRB Report, the Chairperson will inform the TDO whether the contractor desires to present any matters to the TDO before the award term incentive option and/or additional vessel option determination is made.

I. The TDO will consider the ATRB Report and discuss it with the ATRB Chairperson or other personnel, as appropriate. If requested by the contractor, or if the TDO considers it appropriate, the TDO will meet with the contractor for discussions. If requested by the TDO, the ATRB Chairperson and any other personnel involved in performance evaluations may be required to attend the meeting with the contractor.

J. The TDO will determine the incentive options earned during the evaluation period. The award term incentive option, as well as additional vessels option, will not result solely from mathematical summing, averaging, or the application of a formula. The TDO's determination of the award term incentive option, and/or additional vessel option, and basis for this determination will be stated in the Award Term Incentive Determination submitted to the Contracting Officer. The submittal will be signed by the TDO and his findings delivered to the Contracting Officer.

K. The determination to exercise an incentive option shall be made in accordance with FAR Part 17.207. The Contracting Officer will notify the contractor of the decision no more than ninety (90) days nor less than sixty (60) days prior to exercise of the option.

PART V AWARD TERM INCENTIVE OPTION/ADDITIONAL VESSEL(S) OPTION EVALUATION CRITERIA

A. The evaluation criteria against which contractor performance will be evaluated are:

1. Quality of Service
2. Cost Control
3. Timeliness of Performance
4. Contractor Business Relations

B. Six (6) critical performance elements will be evaluated with respect to the above four (4) evaluation criteria. These six (6) critical areas for evaluation, and their associated weights, which reflect the performance priorities of the Government, are presented in Exhibit 4. Note that for any performance period, performance elements and their associated evaluation criteria and weights may be changed to reflect the type of work being performance or changes in program emphasis.

1. Responsive and High-Quality of Fleet Maintenance Requirements
2. Successfully Perform and Support Core RRF Requirements (Activation/Operation/Deactivation)
3. Adhere to Sound Safety, Security and Environmental Standards and Practices with No Adverse Impact on Personnel, Environment and Property
4. Adequately Crew Vessels with Qualified Marine Personnel
5. Compliance with Government and Company Business Policies, Procedures and Practices
6. Effective Management and Control of Costs

C. The performance elements and sub-elements will be evaluated based on the following general criteria. **Specific evaluation criteria for each sub-area included** in the QASP, Technical Exhibit 2 of the contract.

1. Responsive and High-Quality of Fleet Maintenance Requirements
   1-1 Preventive Maintenance Plan (PMP) Execution
   1-2 Regulatory Body Classification/Certification
   1-3 Readiness of the Vessel
   1-4 Quality and Completeness of Business Plan (M&R Work Plan)
   1-5 Quality of Ship Manager's Execution of Business Plan (M&R Work Plan)
   1-6 Logistics

2. Successfully Perform and Support Core RRF Requirements (Activation/Operation/Deactivation/Logistics)
   2-1 Quality of Vessel Activation and Deactivation
   2-2 Quality of Ship Operations

3. Adhere to Sound Safety, Security and Environmental Standards and Practices with No Adverse Impact on Personnel, Environment, and Property

3-1 Environmental
3-2 Security
3-3 Safety

4. Adequately Crew Vessels with Qualified Marine Personnel
   4-1 Contract Manning Levels and Quality

5. Compliance with Government and Company Business Policies, Procedures and Practices
   5-1 Quality Assurance
   5-2 Acquisition Procedures
   5-3 Acquisition Operations
   5-4 Deliverables

6. Effective Management and Control of Costs
   6-1 Effectively manages and controls costs by implementing business processes and practices that accurately estimate, track, reconcile and close-out actions; as well as provide reduced costs to the Government while continuously improving performance throughout contract performance period.

D. The numerical ranges and adjective definitions in Exhibit 5 will be used in the award term/additional vessel(s) determinations.

Each of the performance elements and sub-elements described in Exhibit 4 will receive a score assigned to the adjective definitions in Exhibit 5. The total weighted average score of performance elements will be converted into a percentage of available points to be gained for the evaluation period based upon the chart in Exhibit 5.

C. The contractor does not "earn" an award term incentive option or additional vessels option solely by meeting the criteria of the ATIOP. In determining whether to award an incentive option for additional vessels, the Government will consider the contractor's experience by class, as well as the availability of vessels. However, under the terms and conditions of the contract, if the contractor fails to meet the criteria of the ATIOP, the Contracting Officer may not consider the exercise of an option.

PART VI CHANGES IN PLAN COVERAGE

Right to Make Unilateral Changes

Any matters covered in this Plan not otherwise requiring mutual agreement under the contract will be changed by the Contracting Officer via a unilateral modification attaching the revised ATIOP. The change(s) will be made no later than fifteen (15) calendar days before the start of the applicable evaluation period.

Method for Changing Plan Coverage

1. Personnel involved in the administration of the award term incentive option and additional vessels option provisions of the contract are encouraged to recommend changes in plan coverage with a view toward changing management emphasis, motivating higher performance levels, or improving the award term determination process. Recommended changes should be sent to the ATRB Chairperson for consideration and drafting.

2. Prior to the end of each evaluation period, the ATRB will submit changes to the next evaluation period for approval by the TDO with appropriate comments and justifications, or inform the TDO that no changes are recommended for the next period.

3. The TDO will notify the Contracting Officer at least fifteen (15) days before the beginning of the evaluation period what changes, if any, are to be applied and the Contracting Officer will make the changes via a revised ATIOP as stated in Paragraph VI.A. above. If the contractor is not provided with this modification at least fifteen (15) calendar days before the beginning of the next evaluation period, the existing plan coverage will continue in effect for the next evaluation period.

4. No change to the ATIOP shall be effective until a modification is issued by the Contracting Officer.

PART VII APPENDICES OF EXHIBITS

Exhibit 1 – Performance Monitors
Exhibit 2 – General Instructions for Performance Monitors
Exhibit 3 – Actions/Schedules for Award Term/Additional Vessels Options Determination
Exhibit 4 - Factors and Weights for Performance Evaluation
Exhibit 5 - Rating Guidelines
Exhibit 6 - Award Term Incentive Option Conversion Chart

Exhibit 1
Performance Monitors

Performance Monitors	Major Functional Areas
Chairperson	Assigns PM for each or several performance areas and/or sub-areas to be evaluated. Ensures that each PM receives a copy of the contract and all modifications; a copy of this ATIOP, along with any changes, and provides appropriate orientation and guidance, and specific instructions to assigned performance area(s), if applicable.
Marine Surveyors	Maintains written records of the contractor's performance in their assigned evaluation area(s) so that a fair and accurate evaluation is obtained. Prepares interim and end of year evaluation reports as directed by the ATRB Chairperson. Performance monitors may also include the Contracting Officer's Technical Representative and Quality Control Personnel.
Administrative Contracting Officers (ACOs)	Ensures compliance with contract requirements, specifically all regulatory and reporting requirements, company commercial purchasing procedures, management of subcontracts, and implementation of approved subcontracting plans. Conducts annual CARs, prepares written report of findings in SM-PEAS, and maintain written records of contractor's performance in assigned evaluation area(s).
Term Determining Official (TDO)	Approves the ATIOP and any changes thereto. Reviews recommendations made by the ATRB and determine the earned award term points for each evaluation period. Approves award terms and additional vessels.

Exhibit 2
General Instructions for Performance Monitors

1. Monitoring and Assessing Performance
   a. Monitors will review the ATIOP, and may discuss it with appropriate contractor personnel, and encourage maximum understanding of the evaluation and assessment environment.

   b. Monitors may schedule status meetings, as appropriate, to ensure tasks are on schedule or problems are identified as early in the evaluation period as possible.

   c. Monitors will plan and accomplish both announced and unannounced assessment visits at the contractor's facility and/or vessel locations; however, before each announced visit, the monitor should contact appropriate contractor personnel who may accompany the monitor, if desired.

   d. Monitors will discuss with contractor personnel, as appropriate, any observed deficiencies and/or recommendations. Adverse items or areas of poor performance will be addressed to afford the contractor an opportunity to clarify possible misunderstandings and to correct or resolve deficiencies.

   e. Monitors must remember that contacts and visits with contractor personnel are to be accomplished within the context of official contractual relationships. Monitors shall avoid any activity or association which might cause, or give the appearance of causing, a conflict of interest.

   f. Monitor discussions with contractor personnel are not to be used to instruct, to direct, to supervise, or as an attempt to control those personnel in the performance of this contract. The role of the monitor is to monitor, assess, and evaluate the contractor's performance; not to manage the contractor's effort.

2. Documenting Evaluations and Assessments
   Evaluations and assessment conducted, results obtained, and discussions with contractor personnel will be documented in a quarterly report submitted by the Chairperson, ATRB, to the TDO.

3. Evaluation/Assessment Reports
   Monitors will prepare a formal Performance Monitor Report in accordance with the following instructions for submission to the ATRB, or other, if applicable, not less than 14 days prior to the last day of the evaluation period.

4. Performance Monitor Reports
   The Performance Monitor Report will be submitted by each monitor for that monitor's area of responsibility. The report will summarize and evaluate the contractor's performance for that monitor's area of responsibility and document specific reasons for the evaluation. Guidelines for evaluations are contained in Exhibit 4, below. Significant events should be documented and attached to the report, if applicable. A recommended rating (see Exhibit 6) for each functional area (see Exhibit 5) which falls within the monitor's area of responsibility should be included in the report.

5. Verbal Reports
   Monitors will be prepared to make verbal reports as required by the ATRB Chairman or the TDO.

Exhibit 3
Actions/Schedules for Award Term/Additional Vessels Option Determination

The following is a summary of the principal actions involved in determining the award term and/or additional vessels option for each evaluation period.

Action	**Schedule**
1. The CO provides notification of any changes to the ATIOP	15 days prior to performance period
2. ATRB may recommend any changes to the ATIOP to TDO. (Time must be allowed for negotiation with contractor and possible ADR procedures)	Normally at least 90 days prior to end of period
3. Interim Evaluations (IE)	
(a) ATRB Recorder notifies each ATRB member and performance monitors	14 days prior to IE
(b) Monitors assess performance and discuss results with contractor	Ongoing after Contract NTP
(c) Monitors submit Performance Monitor Reports to the ATRB	10 days after the scheduled evaluation performance period
(d) ATRB Chairperson determines interim evaluations results and notifies contractor of strengths and weaknesses.	14 days after receipt of the IE PM Report
(e) Contractor written response to strengths and weaknesses to ATRB Chairperson, as applicable	14 days after receipt of ATRB report
(f) ATRB meets and summarizes preliminary findings and positions of the ATRB Report to TDO	7 days after the end of the performance period
4. TDO Complete Review of ATRB Report	60 days after receipt of ATRB Report
5. FAR 17.207 determination by CO	Prior to issuance of notice of intent to exercise option
6. Award Term Incentive Determination Notification to Contractor by CO	Within 90 days of Government intent to exercise option
7. Contractor notice of non-acceptance of additional terms and/or additional vessels options	240 days prior to start of applicable award term

Exhibit 4
Factors and Weights for Performance Evaluation

Performance Goals	*Goal Weights*	**Quality of Product & Service** Meeting Requirements Reporting Accuracy Technical Excellence Appropriate Qualified Staff	**Cost Control** Budget Control Billing Accuracy Funds Tracking/ Reporting Cost Efficiencies	**Timeliness of Performance** Mtg Milestones/Deliverables Reliable Estimates Responsiveness to Technical Guidance Reporting Timeliness Project Completion	**Contractor Business Relations** Effective Mgmt Responsiveness to Contract Needs Problem Resolution Reasonable & Cooperative
GOAL 1 – RESPONSIVE AND HIGH-QUALITY OF FLEET MAINTENANCE REQUIREMENTS	**200**				
1-1 Preventive Maintenance Plan (PMP) Execution	35	*10*	*5*	*10*	*10*
1-2 Regulatory Body Classification/ Certification	35	*10*	*5*	*10*	*10*
1-3 Readiness of the Vessel	35	*10*	*10*	*10*	*5*
1-4 Quality and Completeness of Business Plan (M&R Work Plan)	20	*5*	*5*	*5*	*5*
1-5 Quality of Ship Manager's Execution of The Business Plan (M&R Work Plan)	20	*5*	*5*	*5*	*5*
1-6 Logistics					
GOAL 2 - SUCCESSFULLY PERFORM AND SUPPORT CORE RRF REQUIREMENTS (ACTIVATION/ OPERATION/DEACTIVATION)	**150**				
2-1 Quality of Vessel Activation and Deactivation	75	*20*	*20*	*20*	*15*
2-2 Quality of Ship Operations	75	*20*	*20*	*20*	*15*

Performance Goals	*Goal Weights*	**Quality of Product & Service** Meeting Requirements Reporting Accuracy Technical Excellence Appropriate Qualified Staff	**Cost Control** Budget Control Billing Accuracy Funds Tracking/ Reporting Cost Efficiencies	**Timeliness of Performance** Mtg Milestones/Deliverables Reliable Estimates Responsiveness to Technical Guidance Reporting Timeliness Project Completion	**Contractor Business Relations** Effective Mgmt Responsiveness to Contract Needs Problem Resolution Reasonable & Cooperative
GOAL 3 - ADHERE TO SOUND SAFETY, SECURITY AND ENVIRONMENTAL STANDARDS AND PRACTICES WITH NO ADVERSE IMPACT ON PERSONNEL, ENVIRONMENT, AND PROPERTY	**200**				
3-1 Environmental	75	*20*	*10*	*20*	*25*
3-2 Safety	50	*15*	*10*	*15*	*10*
3-3 Security	75	*20*	*10*	*25*	*20*
GOAL 4 – ADEQUATELY CREW VESSELS WITH QUALIFIED MARINE PERSONNEL	**200**				
4-1 Contract Manning Levels and Quality	200	*50*	*50*	*50*	*50*
GOAL 5 – COMPLIANCE WITH GOVERNMENT AND COMPANY \BUSINESS POLICIES, PROCEDURES AND PRACTICES	**100**				
5-1 Quality Assurance	25	*10*	*5*	*5*	*5*
5-2 Acquisition Procedures	30	5	*10*	*10*	*5*
5-3 Acquisition Operations	20	5	5	5	5
5-4 Deliverables	25	*10*	*5*	*5*	*5*

Performance Goals	*Goal Weights*	**Quality of Product & Service** Meeting Requirements Reporting Accuracy Technical Excellence Appropriate Qualified Staff	**Cost Control** Budget Control Billing Accuracy Funds Tracking/ Reporting Cost Efficiencies	**Timeliness of Performance** Mtg Milestones/Deliverables Reliable Estimates Responsiveness to Technical Guidance Reporting Timeliness Project Completion	**Contractor Business Relations** Effective Mgmt Responsiveness to Contract Needs Problem Resolution Reasonable & Cooperative
GOAL 6 - EFFECTIVE MANAGEMENT AND CONTROL OF COSTS	**100**				
6-1 Effectively manages and controls costs	100	*20*	*30*	*30*	*20*

Exhibit 5
Rating Guidelines

Summarize contractor performance in each of the rating areas. Assign each area a rating of N/A (Not Applicable), 0 (Unsatisfactory), 1 (Poor), 2 (Fair), 3 (Good), (4) Excellent, and (5) Outstanding. Use the following instructions in making these evaluations. Ensure that this assessment is consistent with the Agency's Quality Assurance Surveillance Plan (QASP).

Rating	*Quality of Product/Service*	*Cost Control*	*Timeliness of Performance*	*Business Relations*
	• Compliance with contract and requirements • Technical quality/ accuracy of reports/ deliverables • Ability to meet work assignment goals and objectives • Appropriateness of professional mix to ensure quality of work while minimizing cost and time expenditures • Adherence to regulations, procedures and guidelines	• Ability to meet cost estimates stated in the work plan and TO's • Current, accurate and complete billings • Record of forecasting and controlling target costs • Cost reductions	• Development & maintenance of planned schedules and budgets for deliverables • Responsive to technical direction • Timely completion of task, including subcontract administration activities • Met delivery schedules according to the schedule/deadlines given in contract, task order and/or work plan	• Responsive to contract requirements • Ability to effectively manage subcontractors' costs and resources • Ability to meet, manage and adhere to subcontracting plans • Notification of problems; ability to identify and resolve problems • Maintains regular communication link with appropriate Agency personnel and provides appropriate information enabling Agency personnel to keep abreast of work progress and issues
0 – Unsatisfactory	Noncomformances are jeopardizing the achievement of contract requirements despite major Agency involvement	Inability to manage cost issues is jeopardizing performance of contract requirements despite major Agency involvement	Delays are jeopardizing performance of contract requirements despite major Agency involvement	Response to inquiries, technical/service/ administrative issues is not effective.
1 – Poor	Overall compliance requires major Agency involvement to ensure achievement of contract requirements.	Ability to manage cost issues requires major Agency involvement to ensure achievement of contract requirements	Delays require major Agency involvement to ensure achievement of contract requirements	Response to inquiries, technical/service/administrative issues is marginally effective
2 - Fair	Overall compliance requires minor Agency involvement to ensure achievement of contract requirements.	Ability to manage cost issues requires minor Agency involvement to ensure achievement of contract requirements	Delays require minor Agency involvement to ensure achievement of contract requirements	Response to inquiries, technical/service/administrative issues somewhat effective
3 - Good	Overall compliance requires no Agency involvement to ensure achievement of contract requirements	Management of cost issues requires no Agency involvement to ensure achievement of contract requirements	Delays require no Agency involvement to ensure achievement of contract requirements	Response to inquiries, technical/service/ administrative issues usually effective
4 – Excellent	There are no quality problems	There are no unresolved cost management issues	There are no unexcused delays	Response to inquiries, technical/service/ administrative issues is effective.
5- Outstanding	The Contractor has demonstrated an outstanding performance level in any of the above four categories that justifies adding a point to the score. It is expected that this rating will be used in those rare circumstances when contractor performance clearly exceeds the performance level described as Excellent.			

Exhibit 6
Award Term Incentive Option Conversion Chart

Points	Performance Goal	QASP Correlation
1000 – 901	Outstanding	
900 – 800	Excellent	Exceeds Standards
799 – 700	Good	Meets Standards
699 – 600	Fair	Below Standards
599 – 501	Poor	Below Standards
Below 500	Unsatisfactory	

NOTE: A performance grade of unsatisfactory may be grounds for issuance of a cure notice and/or contract termination.

J-13
Required Training

Crewmembers, and replacement crewmembers, should have the following training at time of sailing. If they do not, notify the COTR and MAR-612. Any ROS crewmember without the required training should be scheduled to obtain it during ROS.

Course	ROS	FOS	Frequency	Duration	Provider
SAFETY	**SAFETY**	**SAFETY**	**SAFETY**	**SAFETY**	**SAFETY**
STCW-95	All Shipboard personnel **except Stewards Dept personnel**	All Shipboard Personnel	Periodic Upgrades	Various	Commercial Sources
Basic First Aid	CM or one engineering officer		Once Every 5 Years	Various usually 1 day	American Red Cross Or Am Heart Association
Medical Care Provider	ROS Chief Mate and one other officer	Master ,CM All Engineers, 2nd And 3rd Officers	One Time	Various	Academies, Union schools, industry in general
Medical Person In Charge	Chief Mate and one other officer	Master, CM	One Time	Various	Academies, Union schools, industry in general
Automatic External Defibrillator, CPR	ROS Crew	Medical Person In Charge	Annually	1 Day	Commercial Sources
MHE/OHE Material/Ordnance Handling Equipment	ROS entire crew if one is assigned	MCDS Vessels: FOS Crew	One Time		Navy Provided; MARAD Coordinates
Advance Firefighting	**All licensed ROS crewmembers and senior unlicensed deck and engine ROS crewmembers.**	**All other unlicensed personnel must take the five day BASIC firefighting course every five years.**	Once Every 5 Years		Commercial Sources
Basic Firefighting	**All ROS crew not taking advanced firefighting**		**Once every five (5) years**		**Availably through unions and commercial sources**
Fire And Boat Drills* Vessels Nested Together Shall Conduct Joint Fire Drills Semi-Annually.	Entire ROS crew		Monthly With One Quarterly Fire Drill In Engine Room	1/2 Day	SM Provided
Fire And Boat Drills/Abandon Ship		Entire FOS Crew	46 CFR 185.520 And	1/2 Day	SM Provided

And Man Overboard Drills			46 CFR 185.524		
CBR-D Training	Entire ROS crew	Entire FOS Crew	One Time	1 Day	MARAD Coordinated
SECURITY	**SECURITY**	**SECURITY**	**SECURITY**	**SECURITY**	**SECURITY**
Small Arms – Basic	Minimum of 5 crewmembers	Minimum of 5 Crewmembers	One time w/ annual 1-day refresher	3 Days	MSC (Govt) Provided; MARAD Coordinates
Force Protection Level I	Entire ROS crew		Once Every 3 ears	1 Hour	Provided By Anti Terrorism Ofc With Level II Training
Anti-Terrorism Level II	CM or one other licensed officer	CM and one other licensed officer	Once Every 3 ears	4 Days	MSC (Govt) Provided; SM Coordinates
Security Awareness Training		Ship security officer	Per USCG regs	Unknown – depends upon regulation	Various (private) schools and training facilities
Electronic Invoicing System Training	PE and shoreside staff	PE And Shoreside Staff	One Time		MARAD Provided
Drug Testing/Urine Collection	Designated Drug Tester	Designated Drug Tester	Once Every 5 Years	Commercial Sources	Drug Testing/Urine Collection
FOR PREPO SHIPS ONLY: Level one Force Protection Anti-terrorism level ll CBR-D1 CBRD Officer Small Arms Shipboard Security Tactics	 All shipboard personnel Force Protection Officer only All shipboard personnel CBRD officer only Five (5) shipboard personnel Five personnel		 Annually Renewable every three yrs Every five years Every five years Annually Renewable every three years	 1 Hour 4 days 1 day course	

COMMUNICATIONS	**COMMUNICATIONS**	**COMMUNICATIONS**	**COMMUNICATIONS**	**COMMUNICATIONS**	**COMMUNICATIONS**
MERCOMMS	CM	CM and other Communication Officers	One Time	5 Day Communications Training In Panama City, FL	MSC Provided; MARAD/SM Coordinates
RESERVED			.		
ENVIRONMENTAL	**ENVIRONMENTAL**	**ENVIRONMENTAL**	**ENVIRONMENTAL**	**ENVIRONMENTAL**	**ENVIRONMENTAL**
HAZWOPER – Basic	Entire ROS crew		One Time	5 Days	MARAD Provided
HAZWOPER – Refresher	Entire ROS crew		Annually		MARAD Provided
PERSONNEL	**PERSONNEL**	**PERSONNEL**	**PERSONNEL**	**PERSONNEL**	**PERSONNEL**
EEO/Prevention Of Sexual Harassment/Corporate Policies	ROS Crew	FOS crew orientation by SM		1 Day	SM Provided
RRF Videos: SOPEP/VRP; MARAD Safety Series; Master's Orientation Video; Prevention Of Sexual Harassment; Bloodborn Pathogens; MSC Surge Rep Sailing Instructions; Proper Bunkering Techniques	All Shipboard Personnel	All Shipboard Personnel	One Time	By Log; Within 14 Days Of Joining Ship	SM Provided
Use Of MARAD IT System	PE, Selected Shoreside And ROS Staffs	PE, Selected Shoreside	One Time	5 Days	MARAD Provided
Use Of RMS and legacy systems still in place	PE, CE and selected staffs	PE, CE and one other licensed officer.	One Time	3 Days	MARAD Provided
Landing Signal Officer Or Landing Signal Enlisted and Helicopter Firefighting Course	CM	Crewmembers On Ships With Helicopter Platforms	One Time	5 Days	Military Provided; MARAD Coordinates
Cargo Crane Maintenance Training	CM, CE and one other licensed officer	All Crewmembers On T-ACS Ships	One Time	5 Days	Commercial Source; MARAD Coordinates
Helicopter control – officers	CM T-AVBs	CM T-AVBs	One time	5 days	Through MSC
		..			

MARAD Reimbursement Policy on Training: J-13 contains Government directed training and is therefore reimbursable - see J9. Reimbursables are per person and are always IAW Federal Travel Regulations. MARAD will reimburse travel-related expenses: transportation, subsistence, and lodging IAW FTRs. The Government will reimburse tuition and course materials for each

separate instance of training unless covered by mariner fringe benefits. This may be in connection with maintaining or upgrading STCW requirements, licenses, or any other required training directed by the Government. MARAD (MAR 613) will assist in the coordination and scheduling of Government provided training. Training drawdowns do not relieve the Ship Manager from its responsibility to activate and operate the ship with qualified marine personnel.

STCW requirements not listed above, may be reimbursable if approved by the COTR as beneficial for the vessel.

The Government maintains the right to bring the instructor and materials to the vessel thereby making it GF training.

RRF OPERATIONS MANAGEMENT MANUAL

TECHNICAL EXHIBIT 1 (TE1)

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1. RRF MANAGEMENT MANUAL - OVERVIEW

1.1 GENERAL

The Ready Reserve Force (RRF) Operations Management Manual contains the Office of Ship Operations policy and procedures for maintenance and operation of the RRF vessels. This document contains several “RESERVED” sections to permit growth.

1.2 FOR SHIP MANAGER CONTRACTS:

The *RRF Operations Management Manual* is Technical Exhibit 1 (TE-1) of all Ship Manager contracts (SMC) resulting from DTMA8R04004. Changes to TE-1 will be made by contract modification. For purposes of Ship Manager contracts the terms *RRF Operations Management Manual, MARAD Ops Manual are* interchangeable with the term TE-1. All editions of this management manual associated with other contracts or RFPs are obsolete and should be destroyed.

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2. ACRONYMS, ABBREVIATIONS, and DEFINITIONS

The following acronyms, abbreviations and definitions are used throughout the contract and technical exhibits:

Side line – indicates new acronym or revised definition.

100% on-hand or on-order: For each line item, the number of items on board the vessel plus the number of items "on order" equals the vessel's authorized allowance in RMS.

ABS - American Bureau of Shipping.

Accountable Property – MARAD-owned Personal Property with an original purchase price of greater than $2,500 or as identified in TE – L1. Term interchangeable with any reference for Controlled Property. Controlled Property or Controlled Equippage is old terminology**.**

ACP – Alternative Compliance Program.

ADCON- Administrative Control.

Administrative Contracting Officer (ACO) - a warranted Contracting Officer (CO) in a MARAD Regional Contracting office, authorized by the Procuring Contracting Officer (PCO) to enforce and administer contracts, within specified guidelines set by MARAD.

AFFF - Aqueous Film Forming Foam.

agent - Is used to designate those people traditionally termed as agents in ports, example: chandlers, or transfer agents. It in no way signifies that the Ship Manager awarded this contract may transfer the authority or responsibilities of this contract to another entity.

Agent - The Ship Manager. The Ship Manager is an Agent of the Maritime Administration except when executing a repair work order as a prime.

Alcohol - Any form or derivative of ethyl alcohol (ethanol).

Alcohol Concentration - Either grams of alcohol per 100 milliliters of blood, or grams of alcohol per 210 liters of breath.

ALMSC - All MSC messages addressed to all MSC Commands, activities, units and elements.

Alterations - Planned changes to the configuration, location, type, or number of pieces of equipment or systems; changes in the arrangement and outfitting of ship's structure.

AMVER - Automated Mutual-Assistance Vessel Rescue (System).

Ancillary Equipment - Subordinate equipment. All references to an RRF vessel and its appurtenances shall be interpreted to include subordinate equipment and their appurtenances. Should a Ship Manager have any doubt with respect to a given piece of equipment, he should contact the marine surveyor who will determine whether or not the equipment is ancillary equipment.

Anniverary Date of NTP: Same calendar day as NTP one year later.

AOA - Amphibious Objective Area.

AOR - Area of Responsibility.

APF - Afloat Preposition Force.

APL - Allowance Parts List.

APO - Accountable Property Officer. Also military postal address for Army personnel stationed overseas. Needs to be read in context.

Articles - an agreement between the Master and a crewmember stipulating the basic terms and conditions of employment and wages for a specific voyage.

As Required (Fixed Price) - Is included in the fixed price.

As Required (Reimbursable) - A reimbursable contract item, requires the approval of the Administrative Contracting Officer.

Assistant Contracting Officer's Technical Representative (COTR) - a person who assists the Contracting Officer's Technical Representative (COTR). This position is delegated specific authority and responsibility by the PCO. Delegation by the PCO is usually via the ACO, but may be done directly by the PCO.

AT/FP - Anti Terrorism/Force Protection

Availability - A period of time assigned a ship for the accomplishment of inspections, maintenance, repairs, alterations, or drydocking. Industrial assistance is usually used in connection with an availability. Sometimes referred to as Repair Availability or RAV.

AWR-3 - Army Warfare Reserve -3.

BAC - Blood Alcohol Concentrate.

BAL - Builder's Allowance Lists.

BOA - Basic/Blanket Ordering Agreement.

BRF - Beaumont Reserve Fleet.

BUMEDINST - Bureau of Medicine Instruction. In this contract, an instruction issued by the Naval Bureau of Medince.

Bunker "C" - A residual fuel used in the marine industry to propel steam turbine vessels. Also referred to in the petroleum trade as #6 oil.

Business Plans - encompass all known facets of the maintenance, repair, manning, training, regulatory compliance, and operations (if planned) of the vessel. The Business Plans shall identify all estimated resources and scheduling for successful execution. Each vessel shall have three Business Plans associated with it: Current Year Business Plan; Budget Year Business Plan; FiveYear Business Plan

Current Year Business Plan – is the COTR approved work plan the ship manager executes during the current fiscal year.

Budget Year Business Plan - includes estimates, schedules, and projects work the ship manager will execute in the following fiscal year. The Budget Year Business Plan becomes the Current Year Business Plan in the following fiscal year.

Five Year Business Plan - Estimates, schedules, and projects work the ship manager will execute during the five fiscal years subsequent to the Budget Year Business Plan.

C-Rating - Used as part of Department of Navy casualty reporting system for RRF vessels when in full operating status (FOS) under DOD operational control (OPCON.) **C-1** fully capable, **C-2** minor equipment casualty which does not affect the day to day operation of vessel; **C-3** equipment failure which restricts the day to day operation of the vessel and **C-4** major equipment or system failure which prevents the vessel from performing its mission.

C-Status - Readiness status of RRF vessels when in Phase M maintenance:

- **C-1 No mission degrading deficiencies.** Describes a ship having no known deficiencies which impact its mission or activation within assigned R-Status.

- **C-2 Documented and correctable mission degrading deficiencies.** Describes a ship, which has mission degrading deficiencies, which can be corrected within the assigned R-Status.

- **C-3 Mission degrading deficiencies exist which cannot be corrected within the assigned readiness period.** Describes a ship which, can be activated within its prescribed R-Status but has deficiencies which cannot be corrected within the R-Status, and limits the full mission capability of the ship.

- **C-4 Major Deficiencies Prevent the Ship Activating or Performing its Primary Mission and cannot be corrected within the assigned R-Status:** Describes a ship which cannot be fully mission capable within the assigned R-Status, or a ship which has a COI which will either expire within 15 days or a COI that has expired. RRF-20/30 ships are excepted from C-status downgrade due to COI expiration C4 C-status applies to unscheduled or otherwise unplanned events that result in the vessel's downgrade in Readiness Status. Corrective action of C4 deficiencies does notmerit change in status to C5 (planned availability).

- **C-5 Scheduled Major Repairs in Progress,** unable to meet assigned R-Status: Describes a ship undergoing scheduled major repairs which prevent it from meeting its assigned R-Status.

CAS - Collision Avoidance System.

CASCAN - Casualty Canceled Report (Refer to COMSCINST 3121.9).

CASCOR - Casualty Correction Report (Refer to COMSCINST 3121.9).

CASREP - Casualty Report (Refer to COMSCINST 3121.9).

CBR-D - Chemical, Biological, and Radiological Defense.

CDR - Contract Discrepancy/Deficiency Report. Needs to be read in context.

CDRL – Contract Data Requirement list. TE-3.

CDS - Construction Differential Subsidy.

CFE -.Contractor Furnished Equipment.

CFM -.Contractor Furnished Material.

CFR - Code of Federal Regulations.

Chief of the Contracting Office (COCO) The individual(s) responsible for managing the contracting office within an operating administration or region. The COCO is a fully warranted contracting officer, awarded certain authority under the Department of Transportation Acquisition Regulations, and the Department of Transportation Manual. Although certain authority is reserved to the PCO under Ship Manager contracts, the COCO may perform all the duties of an ACO.

Chemical Test - Means a test, which analyzes an individual's breath, blood, urine, saliva, and/or other bodily fluids or tissues for evidence of drug or alcohol use.

CHOP - Change of Operational Control.

CI - See “Commercial Item.”

CINCLANTFLT - Commander-In-Chief, U.S. Atlantic Fleet.

CINCPACFLT - Commander-in-Chief, US Pacific Fleet.

CINCUSNAVEUR - Commander-In-Chief, U.S. Naval Forces, Europe.

CINCUSTRANSCOM - Commander-In-Chief, U.S. Transportation Command.

CIVMAR - Civilian Mariner.

CLF - Combat Logistics Force.

CLIN - Contract Line Item Number.

CM - Configuration Management. Also Chief Mate. Needs to be read in context.

CMS – Continuous Mchinery Survey

CNO - Chief of Naval Operations.

COI - Certificate of Inspection.

COMGUARD - Communications guard.

Commitment - An administrative reservation of funds against a future obligation on a contract, such as the earmarking" of funds when the agency solicits offers.

Commercial Item - Any item, other than real property, customarily used for non-Governmental purposes that has been or is offered for sale, lease, or license to the general public. Also, any installation, maintenance, repair, training, or other service offered or sold to the general public competitively in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. MARAD will define on Task Orders.

COMNAVSEASYSCOM - Commander, Naval Sea Systems Command.

COMSC - Commander, Military Sealift Command.

COMSCINST - Commander, Military Sealift Command Instruction.

CONREP - multiple acronym: Connected Replenishment or Construction Representative depending upon usage.

CONSOL - Consolidated Replenishment. Similar to UNREP except ship can only receive cargo, it cannot send to another ship.

Consumables - Consumables (supplies) are that part of the vessel's outfitting which when once used are not recoverable or have no further value. Examples of consumable items include: cleaning gear, paint, packaged petroleum products, and lubricants, rags, bulk lube oil, and general hardware.

Contracting Office - **(or Office of Acquisition)** Functional area within a MARAD regional office with specified mission for procurement support.

Contracting Officer - The warranted representative of the Government with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.

Contracting Officer's Technical Representative (COTR) – Usually an employee in the Region's Operations Office acting with oversight from MARAD Hq, Office of Ship Operations, who is responsible for the programmatic aspects of the SM contract. COTR duties are two fold: (1) To oversee and monitor the Ship Manager's technical duties, ensure technical and programmatic input to the ACO; and (2) be responsible to the Office of Ship Operations regarding the readiness and operation of RRF ships. The designation does not include any authority to make any obligations or changes that affect price, qualify, and quantity, delivery, or other terms and conditions of the Ship Manager contract.

MARAD Personnel with limited or special authority - The SMC in section G defines MARAD personnel who have been granted limited or special authority by the PCO due to their functional responsibilities and duties. For example: G. 6b defines those persons permitted to direct a SM to activate a vessel.

Contractor Purchasing System Review (CPSR) - The complete evaluation of the SM purchasing system for material and services, subcontracting, and management of subcontractors from development of the requirement through the completion of subcontract performance (FAR 44.101).

Controlled Material - Controlled equipage and High Value Items are those items which are referred to as Controlled Material(s). Controlled Material are those items that are part of the vessel's outfitting which require special attention to ensure positive control over the inventory.

Controlled Substance - Has the same meaning assigned by 21 U.S.C. 812 and includes all substances listed on Schedules I through V as may be revised from time to time (21 CFR 1308).

CONUS - Continental United States (contiguous 48 states).

Corrective Maintenance - Maintenance to restore a piece of equipment or structure to proper functioning.

COSAL - Coordinated Shipboard Allowance List.

COTP - Captain of the Port (USCG).

CPM - Critical Path Method.

CPX - Command Post Exercise.

CR – Reserved.

CREWED ROS BILLET - ROS billets are crewed each day of the year (365 days). MARAD considers the billet "crewed" over non-duty hours such as a weekend period when the crewmember is away from the ship, and when a crewmember is on temporary duty at another location such as training, or on another RRF vessel, on sick leave, or on vacation. This definition is for purposes of determining whether a billet is crewed or gapped (see gapped) when a ROS crewmember is absent.

CSR - Continuous Synopsis Record - in connection with International Ship and Port Facility Security Code (ISPS).

DAO – Division of Atlantic Operations, headquartered in Norfolk, VA.

DC - Damage Control.

DCAA - Defense Contract Audit Agency. Upon request by MARAD, DCAA audit contracts.

DCASR - Defense Contract Administration Service Region.

DEA - Drug Enforcement Administration.

DEFCON - Defense Condition.

Deficiency - Any material defect or regulatory body requirement which requires RRF funding. Deficiencies are recorded in the the MARAD IT system.

DESC – Defense Energy Supply Center. New name for agency formerly called Defense Fuels Supply Center.

Designated Maritime Physician - Hospital, clinic, or individual (licensed physician) used by the Ship Manager to provide primary care, opinion, or emergency medical care.

DFM - Diesel Fuel Marine.

DFSC - Defense Fuel Supply Center. Now obsolete. Replaced by DESC.

DGO – Division of Gulf Operations, headquartered in New Orleans, LA.

Director/Deputy Director of Acquisition - Appoints PCO and all ACOs, a MARAD acquisition executive.

Diversion, Medical - Deviation of the ship from its assigned course/mission to transfer a sick or injured crew member to other medical facilities afloat/ashore.

Dock Trial - A period of tests for equipment and personnel usually held dockside/in port. May include various safety/damage control, engineering, deck drills, or training.

DOD - Department of Defense.

DON - Department of the Navy.

DOS - Disc Operating System.

DOT - Department of Transportation.

DPAS - Defense Priorities and Allocation System.

DPO – Division of Pacific Operations, headquartered in San Francisco. CA.

Drug - Means any substance (other than alcohol) that has known mind or function-altering effects on a person, specifically including any psychoactive substance, and including, but not limited to, controlled substances.

DTG - Date Time Group.

ECR - Equipment Configuration Records.

ECSMIS - Equipment Configuration and Spare Parts Management Information System.

EMCON - Emission Control. A readiness posture whereby electronic emissions (RADAR, Radio, Satellite or other transmissions) are limited to minimize detection.

Emergency Repair - In Phase O - Operations, a repair or repairs which must be accomplished immediately to maintain the seaworthiness, safety, and readiness (at the C1 or C2 level) of the ship.

Emergency Work - any action that is needed to protect or prevent loss of life, limb, or property. See Chapter 12 of J2 for further details.

Emergent Work - Work that is economically attractive to accomplish concurrently with other work being performed even though it is not necessarily essential to do so, and is not specified on the existing Task Order.

EMI - Electromagnetic Interference.

Employee Agreement - any agreement for services that makes the worker an employee of the Ship Manager, whether or not through collective bargaining.

EMR - Electromagnetic Radiation.

EOM - Engineering Operating Manual.

EPA - Environmental Protection Agency.

EPIRB - Emergency Position Indicating Radio Beacon.

ETR - Estimated Time of Repair.

Expendable - are part of the vessel's outfit which are used in the normal day to day operation and maintenance of a vessel. Such items are subject to gradual deterioration but cannot normally be repaired economically. Examples of

expendable items include: hawsers, towing and mooring wire cables, certain low cost hand tools and certain portable power tools, certain inexpensive test equipment, shackles, slings, cargo securing gear, linens, silverware, crockery, draperies and curtains, desks and chairs.

FAR - Federal Acquisition Regulation.

FAS - Fueling At Sea.

FBI - Federal Bureau of Investigation

FCC - Federal Communications Commission.

FCO - Funds Control Officer, a MARAD employee.

FLTCINC - Fleet Commander-In-Chief.

FPM - Fleet Program Manager.

FOS - Full Operational Status, a Department of the Navy's (DON) phrase that is synonymous with Phase O Operation. Ship is manned, provisioned, all equipment operational, and performing its mission.

FOSC - Federal On-Scene Coordinator (USCG Oil Spill Rep)

FPG - Force Protection Gear

FPO - Fleet Post Office.

FSCM - Federal Supply Code for Manufacturers.

FWPCA - Federal Water Pollution Control Act.

FY - Fiscal Year.

GAA - General Agency Agreement.

GAO - General Accounting Office.

GAPPED BILLET - when an ROS crewmember permanently leaves the service of the vessel, is no longer being paid by the Ship Manager, but the replacement crewmember is not onboard, the billet is gapped.

General Agent - A vessel operating company which has been appointed by the Maritime Administration via a General Agency Agreement to be eligible to carry out specific duties and actions on behalf of the Maritime Administration.

GF - Government Furnished

GFE - Government Furnished Equipment.

GFI - Government Furnished Information.

GFM - Government Furnished Material.

GFP - Government Furnished Property. It may include any or all of the following:

> "Contractor-acquired property," means property acquired or otherwise provided by the contractor for performing a contract and to which the Government has title. See applicable GFP clause, FAR 52.245-2 or FAR 52.245-5, for explanation of title.
>
> "Government-furnished property," means property in the possession of or directly acquired by the Government and subsequently made available to the contractor.
>
> "Government property" means all property owned by or leased to the Government or acquired by the Government under the terms of the contract. It includes both Government-furnished property and contractor-acquired property as defined in this contract. All such "Government property" are subject to the provisions of the applicable clause: FAR 52.245-2 or FAR 52.245-5.

GMDSS - Global Maritime Distress and Safety System.

Good Marine Practice - practices, actions, or prudent measures which business managers or operators would take to ensure safe and economic operation of a vessel and its equipment.

Government Standards – those standards issued by the US Government to which the Ship Manager shall comply.

GPS - Global Positioning System.

Growth - Growth is additional work required to be accomplished to complete the work, which was specified. Funding for Growth is not normally included or definitized on the original repair availability subcontract, unless it is included in the initial DSN estimate, or included in the Region availability Standard DSN under "Supplement".

GRT - Gross Registered Tons.

H, M & E - Hull, Mechanical and Electrical.

HF - High Frequency.

HM/HW - Hazardous Material/Hazardous Waste.

HAZMAT - Hazardous Material. The term "hazardous material", as used in this contract, is as defined for hazardous chemicals in 29 CFR 1910.1200, the U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, and the Emergency Planning and Community's Right-To-Know Act. No RRF ship shall transfer (donate) hazardous materials or hazardous waste to any private sector, state or local/city agency

HAZWOPER - Hazardous Waste Operations Emergency Response (oil or other spill, OSHA)

HIV-AIDS – HIV (a type of virus)-Acquired Immune Deficiency Syndrome.

IAW - In Accordance With.

IC - Incident Commander (oil spill manger)

ICS - Incident Command System (oil spill or other emergency response)

IMO - International Maritime Organization.

Industrial Assistance - The use of the commercial segment of the maritime industry to provide services and/or materials.

INMARSAT - International Maritime Satellite.

Installed Equipment - Any equipment which is connected to the hull or is integral to the functioning of ship system with spare parts support.

International Ship and Port Facility Security Code (ISPS) – an amendment to the International Maritime Organization's 1974 Safety of Life at Sea Convention (SOLAS) Chapter XI Part A and B.

ISM – International Safety Management. Voluntary consensus by which an operating company has Safety policy and procedures including a Safety plan for the vessel. Required for international trade. There are two certificates: a. the International SafetyManagement (ISM) Document of Compliance (DOC), which pertains to the policy and plans of the company; and b. the Vessel Safety Management Certificate (SMC) which is specific to an individual vessel. The DOC is required before the SMC.Voluntary domestic compliance is in 33 CFR

Intoxicant - Means any form of alcohol, drug, or combination thereof.

Inventory Documentation – The count sheets used by the inventory team to inventory property.

IOPP - International Oil Pollution Prevention.

IPE - Industrial Protective Equipment (including CBRD)

ITOPF - International Convention for the Prevention of Pollution from Ships

JCS - Joint Chiefs of Staff.

JLOTS - Joint Logistics Over The Shore.

JRRF - James River Reserve Fleet.

JTR - Joint Travel Regulations. Under this contract JTR is interchangeable with Federal Travel Regulations (FTR).

KW - Kilowatt.

Label - To place a standard PC-SAL generated label as provided for in TE-L1.

LASH - Lighter Aboard Ship.

LLTM - Long Lead Time Materials.

LMO - Logistics Management Officer, MARAD employee.

LOA - Length Overall.

Logistics Management Manual - The RRF Logistics Management Manual. Provided by MARAD as part of the Ship Manager performance work statement (TE-5). This manual provides policy, procedures, and responsibilities relative to the RRF Logistics Support Program.

LOGREQ - Logistics Request.

LOTS - Logistics-Over-The-Shore.

LSS - Logistics Support System.

M&R - Maintenance and Repair.

MA-949 - "Supply, Equipment or Service Order/Contract" is the MARAD form used to obligate funding. MARAD provides specific instruction with respect to

usage of this document, including issuance of Work Orders on a MA-949 in Section G of the contract.

Maintenance Activation - Scheduled activation included in the annual shippreventative maintenance and business plan. Primary purpose of a maintenance activation is to identify and document deficiencies, test and inspect vessel and provide training for crews. Specific guidance with respect to provisions ans stores will be provided by the COTR and IAW the Ship Manager-developed preventative maintenance plan. Dock trials, quarterly lite-offs are not considered maintenance activations. They are, however, separate maintenance functions which are addressed in the ship's preventative maintenance plan.An activation followed by a period of opertation either steaming to/from a drydock/major repair facility is an example of a maintenance activation, similarly an activation and operational period to prove out a major repair to critical components such as boiler/turbine/stren tube/ etc. may be considered a maintenance activation.

MAP - Maintenance Activation Program.

MAR-### A MARAD Headquarters office, division or branch. For example:

MAR-380 Office of Acquisitions.
MAR-782 Division of Marine Insurance.
MAR-610 Office of Ship Operations.
MAR-611 Division of Ship Maintenance and Repair.
MAR-612 Division of Reserve Fleet.
Reserved.
MAR-614 Division of Logistic Support.
MAR-615 Division of Atlantic Operations
MAR-616 Division of Gulf Operations
MAR-617 Division of Pacific Operations

MARAD - Maritime Administration.

MARAD OPCON - MARAD Operational Control.

MARPOL - International Convention for the Prevention of Pollution at Sea by Oil.

MARTS - Obsolete MARAD system. (acronym associated with former maintenance management program called RRF-MARTS). Taken off line. Language remains in some reference documents and will be up-dated as documents are revised. If there are questions, consult COTR.

MCDS - Modular Cargo Delivery Station.

MDR - Medical Department Representative.

MEDEVAC - Medical evacuation.

MEI - Master Equipment Index.

MHE - Material Handling Equipment.

MFDS - Modular Fuel Delivery System

MIS - Management Information System.

MISSION ACTIVATION – with or without previous notification to MARAD, DOD issues request for ship(s) in support of military actions. All aspects of vessel activation must be completed IAW with the designated activation timeframe. Vessel will be delivered to Commander, Military Sealift Command for OPCON.

MISSION ESSENTIAL REPAIR - repair(s) necessary to support a no-notice activation, or repairs necessary to prevent or correct an unanticipated change of a ship's readiness status to C3 or C4. See J-2 Part 8.

MLSS - MARAD Logistics Support System

MOA - Memorandum of Agreement.

MOU - Memorandum of Understanding.

MOVREP - Movement Report.

MPIC – Medical Person in Charge

MRA – NAVSEA Material Readiness Assessment

MSC - Military Sealift Command.

MSC Area Command - During Phase O the ships will be under the OPCON of one of the MSC Area Commands (SEALOGLANT, Norfolk, VA; SEALOGPAC, Pearl Harbor, HI; MSC Europe, Naples, Italy; or MSC Far East, Yokohama, Japan) depending upon where the ship is located. MSC website has organizational structure defined.
The administrative task organization numbers described in *MSC SOM* chapter 1, Section 2 may be used by MSC Area Commanders in originating message traffic such as voyage sailing orders. For example, CTG FOUR EIGHT PT ONE (Commander Task Group Four Eight Point One/CTG 48.1) may be used by SEALOGLANT in lieu of his MSC administrative organization title (SEALOGLANT).

Following assumption of OPCON responsibilities, MSC Area Commands will enter each RRF ship into the Navy's Status of Resources and Training System (SORTS), which feeds the Navy Command and Control System/World Wide Military Command and Control System (WWMCCS). This system is used by the national command structure to obtain force operational readiness data

MSC OPCON - MSC Operational Control.

MSC SOM - Military Sealift Command Standard Operating Manual. COMSCINST 3121.9, Subj: MSC Standard Operating Manual (SOM) is the primary MSC operational reference for all ships operating under MSC OPCON, including RRF ships. The MSC SOM consolidates MSC policies and procedures pertaining to MSC Force operations and administration, and references other applicable directives. The MSC SOM is applicable to any person or activity connected with the operation or administration of MSC Force ships.

In the event of conflicts between the MSC SOM or COMSC instructions and Ship Manager contracts, **the provisions of Ship Manager contracts shall take precedence.**

MSCMR - Military Sealift Command Movement Report.

MSCO - Military Sealift Command Office.

MSD - Marine Sanitation Device.

MSDS - Material Safety Data Sheet. See 29 CFR 1910.120.

MSO - Marine Safety Office (USCG).

MTMC – formerly called Military Traffic Management Command; ***now see*** Surface Deployment and Distribution Center (SDDC)

N42 - Director, Strategic Sealift Division, OPNAV.

National Defense Waivers - COMSC obtains National Defense Waivers. National defense considerations may require that precedence be given to meeting ship mission deadlines over inspection and certification regulations. In such cases, Ship Managers shall notify the MARAD Surveyor of the need for a National Defense Waiver. This shall be passed to MARAD HQ and MARAD HQ will notify COMSC. Because of contractual and fiscal lines of responsibility, activation facility personnel and the on-site MARAD and Ship Manager representatives shall not take direction or accept requirements directly from any on-site MSC representative.

NAVAL OPCON as defined in the *MSC Standard Operating Manual* as "the authority delegated to a commander to direct forces (including ships) assigned in order to accomplish specific missions or tasks which are limited by function, time, or location; to deploy units concerned; and to retain or assign tactical control of those units." In respect to the OPCON of MSC Force ships, it is control for the purpose of routing, sailing, protecting, diverting, bunkering and operating ships including tactical and in-port operational control.

MSC, including all of its subordinate commands, activities and assigned ships (including RRF ships), is part of the Operating Forces of the U.S. Navy. COMSC is the administrative commander of MSC and a Navy Type Commander (TYCOM), and as such is responsible to the Chief of Naval Operations (CNO) for MSC Force readiness. An example of MSC functioning as a type commander of RRF ships is when MSC arranges for UNREP or small arms crew training.

Depending on Navy operational requirements, MSC Area Commanders may transfer OPCON of RRF ships to other Navy operational commanders. For example, OPCON of UNREP equipped dry cargo ships and tankers may be transferred to Navy Combat Logistics Force (CLF) Commanders. OPCON of RRF ships may also be transferred to Navy Amphibious Force Commanders responsible for deploying U.S. Marine Corps (USMC) forces. OPCON of T-ACS and OPDS tankers may also be transferred to Navy Amphibious Force Commanders within an AOA when supporting logistics-over-the-shore (LOTS) operations.

When RRF ships are under MSC Area Commander OPCON, Ship Managers shall conduct direct liaison with Area Command staffs as necessary to plan and coordinate ship repairs, regulatory survey and inspection, and husbanding requirements which could impact in-port cargo operations or a ship's schedule.

A change of operational control (**CHOP)** occurs at a date and time (Greenwich mean time) when the responsibility for ship OPCON passes from one OPCON authority to another. This occurs when a ship passes from one Area Commander's AOR into that of another. Since RRF ship Masters are required to send various reports to their operational commander (OPCON authorities), it is important to remember that OPCON will change upon entering another MSC Area Commander's AOR.

NAVCHAPGRU - Naval Cargo Handling and Port Group.

NBC - Nuclear, Biological and Chemical.

NCS - Naval Control of Shipping.

NDRF - National Defense Reserve Fleet. MARAD maintains the NDRF as a reserve source of vessels for use in national emergencies.

NEURS - Naval Energy Usage Report System. See COMSC will provide directions in filling out this fuel usage report required by the Navy. Report is not required until MSC requests it.

NFAF - Naval Fleet Auxiliary Force.

NIS - Naval Investigative Service

NLS - Noxious Liquid Substance.

"Non-consensus standards," "Industry standards," "Company standards," or "de facto standards," - are developed in the private sector but not in the full consensus process.

Non-expendables – Non-expendable supplies are those outfitting items required for the maintenance and operation of the vessel but are subject to economical repair when no longer serviceable, rather that disposed of and replaced. Examples of Non-expendables include: Chronometers, televisions, and sextants. Many of these items may also be considered Accountable Property.

Normal Operational Period - Vessel in Phase O, up to 180 days.

NOSC - Naval On-Scene Coordinator (oil spill when RRF under MSC OPCON).

Notice Activation - An activation request issued to MARAD by DOD with previous discussions held with respect to the activation scenario. In some cases activation time frames are stretched out and Ship Managers are given specific instructions, such as crew training or equipment preparation

Non-official visitors: must sign a Waiver of governmental Responsibility for injury/accidents/ or illness occurring while onboard the vessel. MARAD will provide the Ship Manager with the appropriate waiver form upon request. The Ship Manager shall retain the signed forms for two years. All costs associated with non-official visitors shall be borne by the Ship Manager. Non-official visitors are not authorized to remain overnight onboard an RRF vessel.

No-notice Activation: An activation request issued to MARAD by DOD without any advance discussion. Intended to test MARAD's complete response system. No –notice activations may stand alone or be followed by a military mission or humanitarian operations. Also called "Turbo-Activations."

NPFC - Naval Publications and Forms Center.

NRC - National Response Center. Also Nuclear Regulatory Commission. Needs to be read in context.

NSA - National Shipping Authority.

NSN – Navy Stock Number.

NSN - National Stock Number.

NTP - Naval Telecommunications Publication. Also Notice to Proceed. Needs to be read in context.

NTP - Notice to Proceed. The date designated by a contracting officer after contract award, via contract modification, as the start of work. Work performed before that date will not be subject to payment.

NTVRP – Non-tank vessel response plan. Now combined with SOPEP to form the NTVRP/SOPEP.

NWP - Naval Warfare Publication.

Obligation - A Government liability resulting from a contract, task order, or similar contractual document. A legal duty is incurred to pay the amount due. When a contractor has delivered the supplies or services and the Government has accepted them, the obligation is liquidated by payment to the contractor.

OCA - Operational Control Authority.

OCMI - Officer In Charge of Marine Inspection, USCG.

OFA - Office of Financial Approvals.

Official Visitor – are those personnel routinely expected to be associated with the vessel who are specifically authorized by MARAD. This includes: members of the ship's crew, Ship Manager personnel, Union personnel with union identification and business onboard the ship. MARAD personnel, vendors acting in their official capacity, Government personnel designated as supercargo during Phase O, USCG, and ABS inspectors. Official visitors do not include: spouses, friends/guests, children, or the general public unless a specific MARAD sponsored event is scheduled. See also non-official visitor.

OMA - Operational Maintenance Actions.

OPA 90 - Oil Pollution Act of 1990.

OPCON - Operational Control.

OPDS - Offshore Petroleum Discharge System.

OPCTR - Operations Center. Also abbreviated Ops Ctr. MARAD establishes centers during mission operations such as Desert Shield/Desert Storm, Enduring Freedom and Operation Iraqi Freedom. The mission of these centers is support senior MARAD management during the operation. The centers are staffed by Government civilians and reservists. MARAD regions may also establish operations centers. Ship Managers will be notified of the establishment of such a center during mission operations and provided directions for both classified and unclassified communications with the centers.

Operations Manual - The *RRF Operations Management Manual* (TE-1). Provided by MARAD as part of the Ship Manager contract. This manual provides policy, procedures, and responsibilities to support the RRF program. References to this manual are abbreviated "TE-1, SEC #."

OPNAV - Office of the Chief of Naval Operations.

OPNAVINST - Chief of Naval Operations Instruction.

OPSEC - Operational Security.

ORB - Oil Record Book.

OSC - On-Scene Coordinator.

OSHA - Occupational Safety and Health Administration.

OSRO - Oil Spill Response Organization

OTSR - Optimum Track Ship Routing.

OUB – OPDS Utility Boat

Outfit - Includes consumable, expendable, mission essential material, and all items required by regulatory authorities such as the U.S. Coast Guard and the American Bureau of Shipping, e.g., lifesaving, fire fighting, transfer at sea, communications, stewards, deck, navigation, and engineering items and equipment. MARAD vessels have allowance lists.

Outfitting – All Personal Property other than the vessel itself.

Outport Locations - Various berthing locations for RRF vessels remote from NDRF sites. Berths may be located on the U.S. east, west, and gulf coasts, Tsuneishi, Japan; at either commercial port facilities, repair facilities or U.S. Government-owned facilities. Vessel berths are GFP.

PAS - Project Administrative System. Also Pre-Award Survey. Needs to be read in context.

PBSC – Performance Based Service Contract.

P&I - Protection and Indemnity (Insurance).

P4P - Phase IV Maintenance Procedures. Old termonology.

PEAS – Performance Evaluation and Appraisal System. Interchangable with "SM-PEAS." An internal MARAD software program to enable MARAD to maintain a record of Ship Manager performance. PEAS supercedes Performance Evaluation and Tracking system (PETS) which was used in the 2000 SM Contracts.

Preventative Maintenance - is the process of inspecting, testing, and conditioning machinery, equipment, outfitting, and spaces (including structure, habitability areas, cargo areas, etc.) to ensure readiness and mission capability is sustained at the required readiness level (ROS 4, ROS 5, RRF 10, RRF 20, and RRF-30) and during any Phase O periods. Preventative maintenance includes all regulatory body inspections and tests for the vessel .

Procuring Contracting Officer (PCO) - A warranted contracting officer with the authority to issue the solicitation, negotiate, award and administer SM Contracts. In accordance with FAR 42.2, the PCO shall delegate specific duties to the ACO, in writing, at time of award. Such delegation shall be distributed to Ship Managers at notice to proceed. Without additional, specific written authority, only the PCO may modify the basic terms and conditions of a SM contract. The PCO may perform all the duties of the ACO.

PE - Port Engineer.

Phase(s) - The RRF Program is divided into phases. The Ship Manager will participate in some but not all phases, nor does each phase automatically have a per diem associated with it.

Physical Condition - The physical condition of an equipment item that considers cracks, chips, dents, abrasions, rust, corrosion, and general cleanliness.

Physical Inventory – The sighting, or the physical "hands on" counting of property.

PM/CM – Preventative Maintenance/Condition Monitoring.

PMS - Preventive Maintenance System - Those inspections, servicing procedures, and tests accomplished on equipment to prevent failure.

POA&M - Plan of Action and Milestones.

POSIT - Position Report.

PPE - Personnel Protective Equipment

PREREP - Prearrival Report.

Procurement Contracting Officer (PCO) - That MARAD individual with the assignment, authority, and responsibility to issue the Ship Manager solicitation, negotiate and award a Ship Manager contract. The PCO delegates authority for the administration of the contract to the ACO.

Program Phases

The RRF Program has five (5) phases. Phases I through III, (Acquisition, Upgrade and Initial Deactivation) deal with the acquisition of vessels new to the RRF and their preparation for RRF service. Since this process takes place before the assignment of a Ship Manager, these phases will not be discussed. Ships assigned to Ship Managers are in one of the following Phases; Phase M - Maintenance, or Phase O - Operation.

Phase M – Maintenance.

During this phase, the vessel is preserved, tested, repaired and maintained in its required state of readiness.

Phase O - Operation.

This Phase involves the operation of the vessel for a specific mission or exercise.

Property Custodian - Any person authorized to have public property in his custody or possession. The person having the property in his custody assumes a public trust that the property will be utilized for the purpose authorized by law or regulation. The property custodian must always be prepared to produce the property or evidence of its authorized disposal.

Provisioning - In Phase O and Phase M all provisioning is either GF or reimbursable unless specifically specified elsewhere in the contract as being fixed price (e.g ROS subsistence, Phase M Preventative Maintenance materials).

PRS - Performance Requirements Summary.

PTS - Personnel Tracking System.

PWS - Performance Work Statement. Section C and ALL Technical Exhibits.

QA - Quality Assurance.

QASP – Quality Assurance Surveillance Plan (TE-2). Developed by and used by the Government to monitor performance during the performance period.

QI - Qualified Individual. See documents on oil spill response.

Quality Control - Those actions taken by a Ship Manager to control the production of goods or services in the most efficient and effective manner.

RADHAZ - Radiation Hazard.

RAS - Replenishment At Sea.

RCHB - Reserve Cargo Handling Battalion.

Reasonable Cost - A cost is reasonable if, by its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.

Region or Regional Office - A MARAD office located other than Washington DC with authority, duties, and obligations towards specific NDRF/RRF vessels assigned to it.

Regional Contracting Office - Functional area within a MARAD Regional Office with a specific procurement support mission for SM Contracts. These include: South Atlantic Region (SAR); Central Region (CR); and Western Region (WR). This does not include the Office of Acquisition, MAR-380, at Headquarters.

Repair Parts - Items carried on board IAW the vessel's allowance list to support the maintenance and repair of equipment.

Repair Period - That period of time when a ship is undergoing scheduled inspections, repairs, maintenance, preventive maintenance, or alterations/conversions. Repairs shall be accomplished IAW regulatory requirements.

Repatriation, Medical - The return, for medical reasons, of a crew member, to a required home/port of embarkation or as may be required by employment agreement.

Reserve Fleet Sites - Nested anchorages for RRF and NDRF vessels located at James River Reserve Fleet, Fort Eustis, Virginia; Beaumont Reserve Fleet at Beaumont, Texas; and Suisun Bay Reserve Fleet, Benicia, California.

RFP - Request For Proposals.

RFS - Ready for Sea.

RMA - Retention Maintenance Actions.

RMS - Ready Reserve Maintenance System. MARAD has procured licensing to use ABS Nautical System ver 5. Training will be provided to SM personnel. Any modiciation or change to this system is at the discretion and expense of MARAD.

RO - Radio Office(r).

RO/RO - Roll On/Roll Off vessel.

ROB - Remain On Board.

ROS - Reduced Operational Status.

a. During any Phase MARAD may designate a vessel in ROS with a specific maintenance crew assigned.

b. In Phase O, ROS is a Department of the Navy term indicating that period of time during which no operational need for the ship exists. Such times may include periods when the ship is layberthed or at anchor. Ships are often manned at less than full complement, but must maintain the capability of transitioning to Full Operating Status within a short time frame. In either (a) or (b), the Ship Manager will be notified by MARAD that the vessel is entering ROS.

And ROS per diems still apply.

ROS-# "#" indicates a timeframe, to make a Reduced Operational Ship Ready For Tender, for example: ROS-4 indicates 4 days to activate; ROS-5 indicates five days to activate. Upon direction from USTRANSCOM, MARAD may change ROS-readiness periods on a case by case basis. SM will be advised.

RRF - Ready Reserve Force.

RRF-ECMIS - Ready Reserve Force Equipment Configuration and Spare Parts Management Information System.

RRF-LMM - Ready Reserve Force Logistics Management Manual.

RRF Operations Management Manual – TE-1.

RRF- (10), (20), (30) Status - Maximum mandated activation intervals in days designated upon notice to activate for non-ROS RRF ships to become fully operational and tendered.

RO/RO – Roll-on/Roll-off vessel.

RSTARS – MARAD Readiness Reporting System, a web-based system which requires a MARAD assigned user name and password. System advises U.S. TRANSCOM and other DOD customers of the current readiness status of RRF vessels.

SAILORD - Sail Order.

SAL - Ship's Allowance List. A MARAD approved document which lists:

1. The equipment/components installed in a ship to perform its operational mission.
2. The repair parts and special tools required for operation, overhaul, and repair of these equipment/components.

SALREPT - Request for Salvage Assistance.

SAR - Search and Rescue.

SAR – RESERVED.

SBRF - Suisun Bay Reserve Fleet.

SBS - Shore-Based Spares.

SCA - Service Contract Act.

SEA TRIAL - An underway period of tests for equipment and personnel. May include various damage control, engineering, deck drills, and training.

SEABEE - barge carrying vessel with heavy lift capability of 2,000 tons via stern elevators.

SEF - Sealift Enhancement Features.

Serviceable – Parts or material that can still be used ofr its intended purpose.

SDDC – Surface Deployment and Distribution Center, formerly known as MTMC - a component of USTRANSCOM.

SHIP - Seaman's Health Improvement Program. A joint MARAD/Industry program to implement U.S. standards for medical care, fit for duty status/physician qualifications, and mariner training.

ship - an ocean going vessel; in context with this contract, the term is used interchangeably with “vessel.”

Ship Manager - A firm awarded a Ship Manager contract. The term “Ship Manager” and “contractor” may appear interchangeably in MARAD documents. May be abbreviated "SM".

Ship Manager Contract - A contract through which MARAD acquires management expertise, personnel, operational and technical support and supplies to maintain and operate RRF ships. May be abbreviated SMC or SM contract.

Ship Manager Contracting Officer - an employee of the SM corporation who is authorized by the corporation to perform contracting functions and bind the firm contractually on its behalf. This is not a Government official and may not bind the US government to any obligation.

Ship Manager Purchasing Official - an employee of the SM corporation who is authorized by the SM corporation to perform specific purchasing/procurement functions and bind the firm contractually on its behalf. This is not a Government official and may not bind the US Government to any obligation.

Shore-based Spares (SBS) – Useful Spare parts, equipment and technical manuals removed from current or former RRF or NDRF vessels and stored in the three RRF SBS warehouses.

SITCASREP - Situation Casualty Report.

SITREP - Situation Report.

SLP - Standard Lay-up Procedures.

SM - See “Ship Manager”

SMC - Ship Manager Contract. A contract through which MARAD acquires management expertise, personnel, operational, technical support and supplies, to maintain and operate RRF ships.

SM-PEAS - Ship Manager-Performance Evaluation and Appraisal System. See PEAS.

SNDL - Standard Navy Distribution List.

SOA - Speed of Advance.

SOCP – Ship Owner’s Cooperative Program.

SOL - Shipboard Outfit List.

SOLAS - Safety of Life at Sea convention.

SOM - Standard Operating Manual.

SOMO - Ship Operations and Maintenance Officer (position located in a MARAD regional office). The individual responsible for the administration and management of a MARAD region's resources, operations, and maintenance.

SOPEP - Shipboard Oil Pollution Emergency Plan. The SOPEP has been combined with the Non-tank vessel response plan and is henceforth called the NTVRP/SOPEP.

SORTS - Status of Resources and Training System.

SOW - Statement of Work.

Spare Parts - Interchange with "repair" parts.

SPCC - Ships Parts Control Center.

SRV - Regulatory Body Documentation submodule

STCW - Standards of Training, Certification and Watchkeeping Convention

STREAM - Standard Tensioned Replenishment Alongside Method.
Stow – The reutrn or initial placement of spare parts, outfitting, drawings and technical manuals to their assigned storage location as assigned or provided for in PC-SAL.

Subcontractor - any supplier, distributor, vendor, or firm which furnishes reimbursable supplies or services to the Ship Manager either directly or indirectly when the Ship Manager is functioning as a prime contractor to MARAD under this contract.

Subsistence – Multiple definitions; sentence dependent: 1. Stores of food required to feed the ship's crew. 2. A payment to crewmembers in lieu of vessel furnished meals and berthing.

Supercargo - Terminology for personnel (military or civilian) placed onboard a ship during a voyage, many of whom are tasked to assist in the care of the cargo being carried, but may also include observers or other ship riders. While supercargoes may have a military commissioned or non-commissioned officer in charge of their task, all supercargoes will take direction from the Master or his

designated representative with respect to their conduct and the safety of the vessel.

Supplemental - to be determined**.**

Surface Transportation Command – Component command of US TRANSPORTATION COMMAND which is responsible for depot to foxhole distribution of military cargo including waterborne transportation.

T-ACS - Auxiliary Craneship.

T-AVB - Aviation Logistics Support Ships.

TAR - Transportation Acquisition Regulations, 48 CFR Chapter 12.

Task Order (TO) - An order for services placed against an established contract or with Government sources, as evidenced by a fully executed OF 347 by a duly warranted Contracting Officer. Previous references to Work Order (WO) is old terminology and should be disregarded.

TE - Technical Exhibit. In depth attachment explaining specific issues, policies, procedures, or responsibilities.

Tender – MARAD presentation of RRF vessel to MSC.

TURBO-Activation – a no-notice activation. All aspects of vessel activation must be completed within the assigned readiness period.

TYCOM - Type Commander.

UCS - Unified Command System (multiple management major oil spill)

UHF - Ultra High Frequency.

UNREP - Underway Replenishment. The process of transferring supplies from one ship to another while both ships are underway. It is accomplished using either one or both of the following methods: horizontal transfer via Connected Replenishment (CONREP) rigs and Vertical Replenishment (VERTREP) which uses helicopters to move materials between ships.

Unserviceable – Parts or material that cannot be used for its intended purpose.

USC – United States Code.

USCG - United States Coast Guard.

USCINCEUR - U.S. Commander-In-Chief, Europe (Unified Commander of European Area).

USDA - US Department of Agriculture.

USMC – United States Marine Corps.

USNS - United States Naval Ship, owned and operated by MSC.

USPHS - US Public Health Service.

USTRANSCOM - United States Transportation Command.

UWILD - Under Water Inspection in Lieu of Drydocking.

Vendor - One who sells a commercial product or service.

VERTREP - Vertical Replenishment. Transfer of cargo or personnel by helicopter.

Vessel - Ocean going conveyance. Term used interchangeably with Ship in Ship manager contract.

Vessel Configuration – An index or database of installed equipment that populate an MARAD RRF Vessel.

Voluntary Consensus Standards - In accordance with OMB Circular A-119 Voluntary Consensus Standards will be used. "Voluntary consensus standards" are standards developed or adopted by voluntary consensus standards bodies, both domestic and international. These standards include provisions requiring that owners of relevant intellectual property have agreed to make that intellectual property available on a non-discriminatory, royalty-free or reasonable royalty basis to all interested parties."

VMA - Vessel Maintenance Action.

VRP - Vessel Response Plan.

VRR - Voyage Repair Request.

Waivers – See "National Defense Waivers"

WCD - Worse Case Discharge

WR – RESERVED.

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7. Phase O - OPERATIONS

This section describes procedures and responsibilities unique to Phase O (Operations). Phase O operations can be conducted under MARAD or Navy operational control (OPCON.)

7.1 GENERAL

Once Phase O is achieved, the Ship Manager shall maintain the ships readiness at such a level so that the ships can comply fully with sailing orders. At the completion of the operational period, the vessel's operational control shall be redelivered to MARAD, and the vessel subsequently deactivated and laid up by the Ship Manager.

7.1.1 Naval Directives

A representative SAMPLE of routine directives and instructions is contained in the Military Sealift Command (MSC) Standard Operating Manual (SOM). Any Naval directives or instructions whose cost exceeds funding authorized by MARAD Task Orders shall be immediately referred to the MARAD COTR by the Ship Manager with a cost estimate.

7.1.2 Sail Orders

During Phase O, the MSC Area Commander or another operational commander will provide the ship with operational direction and may provide specific courses and speeds, restricted zone routings, or similar information for the safety of the ships based upon intelligence reports or other information not readily available to the ships.

Sealift operational task organization numbers described in *MSC SOM* Chapter 2, Section 1 may be used by MSC Area Commanders in originating message traffic such as voyage sailing orders. However, the administrative task organization numbers described above and in *MSC SOM* Chapter 1, Section 2 have been used most frequently.

MSC SOM Chapter 2, Section 2 describes the use of voyage sailing orders, frequently referred to as SAILORDs, to direct the movement of MSC Force ships, including RRF ships. Voyage sailing orders are operational orders which provide specific guidance to ship Masters with regard to load and discharge cargo ports, transit speeds, bunkering instructions, and requirements to file various reports.

Voyage sailing orders are drafted to be a useful guide to Masters and they note authorized variations to the route and speed. They also call attention to specific reporting requirements along with the reference for developing the reports. Reporting requirements typically addressed in voyage sailing orders include: Movement Reports (MOVREPs), Daily Optimum Track Ship Routing (OTSR) Reports, Weather Observation Reports, Casualty Reports (CASREPs), Ship

Sighting Reports, Prearrival Reports (PREREPs), Communications Guard (COMGUARD) Shift Reports, Position (POSIT) Reports (if required by the OPCON authority), and Mail Routing Information Reports (when applicable).

Voyage sailing orders are usually issued by message, but may be issued by letter. Sailing orders may be issued verbally and subsequently confirmed by message. As a minimum, COMSC requires that sailing orders include: task organization, any CHOP provisions, specific speed of advance (SOA) instructions, reporting requirements, and bunkering instructions. Movements of MSC point-to-point cargo ships shall be kept unclassified, except when a ship's mission and/or cargo necessitate classification. Classification will be determined by the Military Service shipping the cargo, the Navy Fleet Commander-in-Chief, COMSC, or the Naval Control of Shipping Authority. MARAD Headquarters and Regions have the capacity to receive/send classified traffic. RRF ships are not normally supplied with secure communications.

7.1.3 Deviation

MARAD vessels follow the operational commander's prescribed course until in the Master's judgment they must deviate to respond to life-saving or other common marine practices regarding aid and assistance to vessels in distress. If a vessel diverts from the operational commander's directions, full particulars shall be entered into the vessel's log including a statement as to the amount of fuel onboard at the time of diversion. When the vessel resumes her intended voyage, a second entry shall be made in the vessel's log stating full particulars, including fuel onboard and fuel consumed.

7.1.4 Inability to Perform

If a ship is unable to comply with immediate sailing orders because the Master determines compliance is not feasible or it jeopardizes the safety of the ship, he must advise the operational commander and MARAD within one hour, by immediate precedence message. The message must include intended actions and reasons for not accepting the direction. The Ship Manager shall keep the Operational Commander and MARAD fully informed of the ship(s) status until it is capable of complying with sail orders.

7.1.5 Navy Recommendations During OPCON.

As the Ship Manager reads the MSC SOM, he shall notice that COMSC frequently addresses reimbursable actions, for example the bunkering of a vessel. Please note, that although COMSC can provide endorsement for a reimbursable action, under the terms and conditions of this Ship Manager's contract, COMSC cannot direct or ensure the authorization of a reimbursable action, only the designated MARAD ACO can do this. Administrative control of the Ship Manager contract is retained by MARAD at all times. The Ship Manager must use his judgment during an operational period with respect to Naval recommendations. For example, the Ship Manager may choose to follow orders

to bunker the vessel because of mission dictates. The Ship Manager should notify the MARAD COTR as soon as possible and provide a copy of MSC's written direction or endorsement for reimbursement which ordered the bunkering. As a rule in a contingency, MARAD will not take exception to any directive issued by COMSC. In a peacetime exercise, MARAD may wish to ensure the availability of funding before concurring with the recommendation. If the Ship Manager has any questions with respect to a COMSC directed action/and whether he will be reimbursed for it, he should advise the MARAD COTR and/or the ACO and request clarification BEFORE committing himself.

Similarly, COMSC may recommend a vessel be placed "off-hire," however, COMSC cannot place a vessel off-hire, only the MARAD ACO can authorize a penalty for failure of performance.

7.1.6 Deck Operations.

The Ship Manager shall operate and navigate the ship safely in support of naval operations and arrange for services when in port (including anchorages and alongside facilities.)

General

Navigation and Seamanship Policies

Masters shall be on the bridge when: a vessel must pass in the vicinity of shoals, outlying rocks or other hazards to navigation; when making landfall; while maneuvering in ice or restricted visibility; during heavy traffic or near other ships; while steaming in restricted waters; docking and undocking; upon entering and leaving port; shifting berths; embarking/disembarking a pilot; when anchoring or weighing anchor; or at any time when the condition is such that the possibility of danger warrants the Master's presence on the bridge.

Masters shall observe weather conditions closely at all times and not hesitate to alter course or speed, or put into port or go to sea to avoid heavy weather. When varying from voyage sailing orders and resulting MOVREPs, Masters must keep operational commanders advised of all such changes and file MOVREP revisions. In addition to keeping the operational commander informed, this advisement will assist the Navy OTSR routing facility to adjust support accordingly.

Masters shall ensure that:

1. A bridge organization is established and all watch officers and unlicensed personnel are thoroughly familiar with and capable of performing their duties in accordance with the Master's Standing Orders.

2. Watch officer staffs are proficient in the Rules of the Road, the use of navigation equipment, and all steering systems including emergency steering.
3. Lookouts are posted during reduced visibility and that the bridge organization is augmented when in his judgment additional vigilance is required (e.g., posting of additional lookouts where threats of boarding occur).
4. Bridge logs and records are properly maintained. The original pages of the Deck Logbook are to be retained in the Master's files. Maintain a Night Order Book when underway.
5. Diagrams of ship maneuvering characteristics are posted conspicuously in the wheelhouse. These diagrams must be readily available when maneuvering in restricted waters, embarking a pilot, maneuvering in formation, and conducting ship handling exercises.
6. Daily readiness checks shall be performed on all bridge, navigation, and mooring equipment. Defective equipment shall be repaired and deficiency reports filed when necessary.
7. Weekly checks shall be performed on all lifesaving, fire and emergency equipment and that all steps necessary are taken to correct deficiencies.

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7.1.7 Conduct Routine Deck Operations.

The Ship Manager shall conduct routine deck operations while in Phase O - Operations, which include, but are not limited to, watch standing, routine and special evolutions, material handling operations, arranging port services, performing administrative functions, and providing security.

7.1.8 Conduct Special Evolutions.

7.1.8.1 Conduct Cargo/Material Handling Operations.

7.1.8.2 Self-Service Laundry.

The Ship Manager shall make available laundry facilities for the use of Government embarked personnel. Laundry facilities shall be available at all times and shall include sufficient amounts of all laundry and cleaning supplies.

7.1.9 Husbanding the Vessels.

7.1.9.1 Pilots.

Note: Some State Pilot Associations maintain that state licensed pilots must be used when entering and leaving U.S. Ports. Furthermore, they maintain that full charges for their services will be charged although services were rendered by a third party. The Offices of Counsel (of both MARAD and COMSC) have determined that the State Pilot Associations claim to "monopoly rights" on pilotage service for RRF vessels is incorrect.

MSC typically directs RRF ships to use Government or Government contract tugs and pilots where available. In areas of non-availability, RRF ships should use whatever services are available, technically acceptable, and cost effective.

MARAD Regions will not accept "double billing" by State Pilot Associations for "non-service." Ship Managers must bring any such occurrences to the MARAD Regions attention so that the Federal Government may take appropriate action.

> *Note: Compulsory pilotage laws of the various states are not applicable to RRF ships due to their public vessel status. The following statement by the Attorney General of the United States is quoted for information: "The public vessels of the United States have the right of entering the ports and harbors of the United States without employment of pilots, if the officers in command, under instructions, shall deem it consistent with the safety of their command. This exemption extends to all ships which belong to the United States, and employed in the public service, whether they be armed ships or not."*

7.1.10 Embarked Personnel

General

Ship Managers and Masters may be required to support the embarkation of Government personnel including passengers, supercargo personnel, and observers as directed by MSC or MARAD.

The Ship Manager shall provide food service, laundry service, and cleaning services comparable to the shipboard rating equivalent when directed. These services shall be provided on a cost reimbursable basis. When Government personnel are carried, Ship Manager crew augmentation shall be reviewed by the MARAD COTR on a case by case basis.

Information concerning various categories of embarked personnel is provided in MSC SOM Chapter 2, Section 7. The latest edition of COMSCINST 3120.19, Subj.: Administrative Procedures for Embarkation of, Carriage, and Debarkation of Supercargo Personnel in MSC Force Ships, addressees the Master's responsibilities and relationships with military personnel, allocation of space, shipboard safety requirements, behavior and discipline, weapons security, and other related subjects.

Masters shall ensure living quarters are clean and ready to receive Government personnel. Masters shall also provide assistance to properly stow all personnel gear and equipment.

7.1.11 Communications in Phase O

7.1.11.1 Use Government provided GMDSS and INMARSAT A or telex, voice data and e-mail for all Government (DOD and MARAD) operational communications and ship business.

Changes in GMDSS equipment must be provided by MAR-612 to update terminal information with INMARSAT. Application for access to the INMARSAT system must also be coordinated with MAR-612.

7.1.11.2 Message Traffic

Only official message traffic shall be handled via the Defense Messaging System. If the Ship Manager desires to send company message traffic, a commercial service shall be employed. This includes e-mail, “post offices,” “store and forward” services. All communications in FOS are reimbursable.

C-7.2 DOD/DON ISSUED MANUALS, FORMS, PUBLICATIONS.

C-7.2.1 PRECEDENCE.

If any requirements of this Contract are in conflict with any COMSCINST, including the MSC SOM, the Contract shall take precedence, unless otherwise directed by the MARAD ACO. If the Ship Manager has any question about precedence, he should contact his MARAD ACO/COTR.

C-7.2.2 COMSC STANDARD OPERATING MANUAL.

RRF vessels are provided either a print copy or CD-ROM of the Military Sealift Command (MSC) Standard Operating Manual (SOM) as part of the standard administrative documents filing cabinet. This manual is the primary MSC instruction that addresses the unique missions of the MSC fleet, and is applicable in part to RRF ships. It provides policies and procedures pertaining to the operation of ships under MSC cognizance and should be the primary reference when under MSC OPCON".

Changes to COMSC publications during operations will be forwarded to the ship by the cognizant MSC Area Commander or sub-area Office.

C-7.2.3 COMSC INSTRUCTIONS - GENERAL.

If a Ship Manager desires advance copies of COMSCINSTs, he may request them from either COMSC, M-11, Bldg 210, Washington Navy Yard, Washington, DC 20398-5100, or from the regional MSC office. COMSCINSTs and publications are provided to the Ship Manager during Phase V - Activation by the cognizant MSC Area Commander. For example, a ship activating in Mobile, AL, and intending to tender to COMSCLANT Norfolk, VA, will receive a publications package consisting of COMSCINSTs and forms from COMSCLANT. COMSCINST are also available on line at www.msc.navy.mil

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14. GENERAL ADMINISTRATION

This section describes general administrative policies, procedures, and responsibilities that apply to the RRF Program.

14.1 GENERAL

MARAD has designated a standard administrative filing cabinet onboard each RRF vessel. Usually it is located in the Master's or business office. If not readily found, consult the MARAD COTR for location and description. MAR-612 maintains the list of what is to be contained in each cabinet. The Ship Manager is responsible for the custody of these documents. The documents may be signed out via a custody card system.

14.2 VESSEL FILES

NOTE: If the Ship Manager's ISM requires a specific filing system, this system is authorized for use instead of the following. If no specific ISM filing system has been specified, then the following pertains.

Ship shall establish and maintain a separate central filing system for each assigned RRF ship. The filing system should be divided into four categories:

(1) "G" for General Shipboard correspondence and information;
(2) "D" for Deck Department correspondence and information;
(3) "E" for Engine Department correspondence and information; and
(4) "S" for Steward's Department correspondence and information.

Phase M During Phase M, Ship Managers shall set up and maintain a master set of vessel files. An index shall be included and maintained in the front cover of each file folder as a ready reference to file contents. ROS vessels should maintain a duplicate copy onboard.
Ship Manager shore staffs shall continue to maintain the master set of vessel files. However, duplicate copies of these files shall be turned over to the Master and cognizant department heads as they arrive onboard ship. Masters and Chief Engineers shall be provided with a set of all four file categories (i.e., "G", "D", "E" and "S") in their respective offices. Chief Mates shall receive a set of the General and Deck files and Chief Stewards shall receive the Steward file.

Phases O. All Ship Manager-generated correspondence shall be coded with the appropriate files series (i.e., "G", "D", "E", or "S") to facilitate proper distribution and shipboard filing. Ship Manager shore staffs shall continue to maintain the master set of vessel files to include all outgoing and incoming correspondence and messages relating to each ship.
Each department head is responsible for returning the duplicate files to the Ship Manager's Port Engineer. The contents of the duplicate files shall be compared against the master set of files, which shall then be upgraded to include a copy of all pertinent information.

14.3 LISTING OF ADMINISTRATIVE FORMS, TECHNICAL MATERIALS, PUBLICATIONS AND REFERENCE MATERIALS TO BE STOCKED ONBOARD RRF SHIPS

It is the Ship Manager's responsibility to have the proper outfitting of administrative forms and publications onboard RRF vessels for operation. The following list is provided for illustrative purposes only:

Deck Department (including items of Master's responsibility):

Miscellaneous Forms, Supplies, and Records

Abstract of Deck and Engine Log
Accident, Damage Report on Hull/Machinery
Alcohol Testing following a serious marine incident
Allotment List
AMVER Forms
Articles of Engagement - Foreign Placards
Barograph Paper
Bunk Cards
Cargo Declaration
Cargo Load or Ballast Plan
CASREP Instructions
Certificate for Search for Narcotics and other Prohibited
Charter Party)
Chronometer Rate Book
Clearance of Vessel to a Foreign Port (US Customs
Compass Observation Book
Contracts for Applicable Unions
copier toner, etc.
Course Recorder Paper
Crew Data Cards
Crew Members Individual Declaration
Crew Payoff Envelopes
Crew Repatriation Transportation Payroll
Dangerous Cargo Manifest
Death
Deck Bell Books
Deck Logs
Deck Noon Slips (Noon Position Report)
Deck Port Log: Report of Bunkers and Water
Direction Finder Observation Book
Discharge for Cause Form
Fathometer Paper
Fax Paper
"Consumables" for office supplies; i.e., scotch tape,
General Customs Declaration
Goods on Board
I-9 Immigration Form
Individual Articles
Inventory of Hazardous Materials on Board
Leave of Absence Form
List of Agents
List of Officer Personnel
Mariners Annuals

Master Payroll Spreadsheet
Master's Cash Record Receipt
Master's Cash Settlement Account
Master's Cash Statement
Master's Night Order Book
Master's Oath of Vessel in Foreign Trade
Master's Report of Oil Spillage
Master's Report of Seamen Shipped or Discharged (CG-735)
Notice of Readiness (vessel ready for load/discharge per
Official Crew List
Official Log Books
Overtime Sheets
Panama Canal Forms
Payroll for Advances Account Wages Earned
Petty Cash Receipts
Pratique (Readiness Report)
Radar Operation and Maintenance Log
Repair or Equipment Purchase
Report of Crew Shortages
Report of Property Damage Claims
Requisitioning Forms
Satellite Telex Paper
Service)
Shipping Rules for Applicable Unions
Ships Stores Declaration
Slop Chest Inventory
Stability Work Forms
Standard Office Supplies
Station Bills
Suez Canal Forms
Ullage Report
US Customs Form 226: Record of Vessel/Aircraft Foreign
USCG Discharge Books
USCG Form 2692: Report of Marine Accident, Injury or
USCG Form 2692B: Report of Required Chemical Drug and
USCG Oil Record Book, CG-4602A
W-4 Tax Withholding Forms, with Tax Withholding Tables
Wage Vouchers
Weather Fax Paper
Weather Reporting Forms/Instructions
Weather Reporting Instructions/Forms
Weatherfax Transmission Sheets

Publications/Technical Manuals

AMVER Instructions
Code of Federal Regulations:
33 Parts 1-199; 200-end
46 Parts 41-69; 70-89; 90-155; 156-199; 200-499;
500-end & Panama Canal
COMSAT INMARSAT Guide
DMA Pub 1310, Radar Navigation Manual
DMA Pub 217, Maneuvering Board Manual
HO 109, Code of Signals
HO 229, Sight Reduction Tables

HO 249, Sight Reduction Tables
IMO Publications
Light Lists
Nautical Almanacs
Naval Control of Shipping Instructions
NOAA Marine Weather Schedule
Operation Manuals for all electronics
Sailing Directions (DMA)
Tide and Current Tables
US Coast Pilots (DMA)
USCG Rules of the Road

Miscellaneous Forms, Supplies, and Records
"Consumables" for office supplies; i.e., scotch tape,
Alcohol Testing following a serious marine incident
copier toner, etc.
Death
Medical Sores & Hospital Equipment for Freight Vessels;
Report of Diseases, Injuries, Births and Deaths (USPHS)
Ships Medical Log Book
Standard Inventory & Requisition
Standard Office Supplies
USCG Form 2692: Report of Marine Accident, Injury or
USCG Form 2692B: Report of Required Chemical Drug and

Radio Department
Miscellaneous Forms, Supplies, and Records
"Consumables" for office supplies; i.e., scotch tape,
copier toner, etc.
List of Contracted Shore Comm Facilities/Schedules
Overtime Sheets
Radio Messages Transmitted/Received
Satellite Telex Paper
Standard Office Supplies

Engine Department:
Miscellaneous Forms, Supplies, and Records
"Consumables" for office supplies; i.e., scotch tape,
Accident, Damage Report on Hull/Machinery
CASREP Instructions
copier toner, etc.
Engineering Bell Books
Engineering Logs: Steam or Diesel
Engineering Noon Slips
Foreign Repair Forms
Fuel and Water Report
Noon Soundings
Oilers Log
Overtime Sheets
Requisitioning Forms
Standard Office Supplies
USCG Oil Record Book, CG-4602A

Steward Department:

Miscellaneous Forms, Supplies, and Records

"Consumables" for office supplies; i.e., scotch tape, copier toner, etc.

Menu Forms

Overtime Sheets

Requisitioning Forms

Standard Office Supplies

15. READINESS, REGULATORIES, and LEGAL STATUS OF RRF

15.1 VESSEL LEGAL STATUS

15.1.1 Federal and State Laws

All RRF ships are public vessels and are fully documented with the USCG as evidence of ownership and nationality, and are assigned official numbers and home ports. By Congressional direction RRF ships are subject to inspection (46 U.S.C. 2109), but otherwise are given full status as public vessels. This exempts the RRF ships from *in rem seizure* in domestic litigation, pursuant to the Public Vessels Act (46 App. U.S.C. 781-790) and the Suits in Admiralty Act (46 App. U.S.C. 741-752), from State regulation, including pilotage requirements, and from many pollution control statutes. This last exemption includes, but is not limited to, strict compliance with the 1973 International Convention for the Prevention of Pollution from Ships, and its 1978 Protocol (MARPOL 73/78)(implemented by the USCG via the Act to Prevent Pollution from Ships, 33 U.S.C. 1901-1912), exemption from the 1973 International Convention for the Prevention of Maritime Pollution By Dumping of Wastes and Other Matter (commonly referred to as the London Dumping Convention and implemented domestically by the Marine Protection, Research, and Sanctuaries Act a.k.a. the Ocean Dumping Act, 33 U.S.C. 1401-1445) and exemption from the Oil Pollution Act of 1990 (33 U.S.C. 2701-2761; 46 U.S.C. 3703a). Moreover MARAD's public vessels are exempted from *in rem* seizure in foreign jurisdictions (under a sovereign immunity theory).

15.1.2 International Law

RRF ship Certificates of Documentation identify MARAD as ship owner. These ships also have distinctive U.S. Government markings; i.e., gray hull, and red, white, and blue horizontal banded stack.

Under customary international law, all vessels owned or operated by a country or used on government non-commercial service are <u>entitled</u> to sovereign immunity. Accordingly, RRF ships are <u>entitled</u> to full sovereign immunity which means these ships are:

- Immune from arrest and search, whether in foreign internal or territorial waters or on the high seas;
- Immune from all foreign taxation except canal fees taxes;
- Exempt from any foreign state regulation requiring flying the flag of such foreign state either in its ports or while passing through its territorial sea; and
- Entitled to exclusive control over persons onboard such vessels with respect to acts performed onboard.

Ships accorded full sovereign immunity are expected to comply voluntarily with the laws of the host country with regard to order in the port, casting anchor, sanitation, quarantine, etc.

In the case of MSC Force ships (government-owned USNS, bareboat-chartered USNS, voyage- and time-chartered, and during contingencies, RRF ships) full sovereign immunity has only been <u>claimed</u>, and has generally been accorded, to USNS and Afloat Prepositioning Force (APF) ships. Although the U.S. Government has taken the position that all MSC Force ships are <u>entitled</u> to full immunity, our Government has not pressed this position. This avoids

numerous requests for diplomatic clearance for MSC Force time- and voyage-chartered ships and RRF ships, and avoids confusion on the part of foreign countries.

In the case of MSC Force time- and voyage-chartered ships and RRF ships, it is U.S. Government policy to claim immunity only from arrest and taxation. However, circumstances may arise where assertions of full sovereign immunity may be required for these ships, in which case the U.S. State Department will provide specific guidance.

If in the future full sovereign immunity status is claimed for RRF ships, then diplomatic clearance or a notification of visit is required prior to entering certain foreign ports. Such procedures are provided for in the latest edition of COMSCINST 3121.9, Subj: MSC Standard Operating Manual (MSC SOM).

RRF vessels display a Certificate of Public Vessel status on the bridge.
The USCG Vessel Compliance Branch advised MARAD of the following:

> USCG interprets the exception to the requirements of SOLAS (SOLAS 1974, chapter I, Part A regulation 3 (a) (i) for ships of war and troopships as being applicable to military auxiliary vessels owned by Commander, Military Sealift Command (MSC) and Maritime Administration Ready Reserve Force (RRF) vessels. No part of SOLAS is applicable to these vessels except as noted below.
>
> Notwithstanding the general exception of Coast Guard certificated ships of war and troopships from SOLAS requirements, we have from time to time invoked requirements on MSC ships and MARAD RRF vessels based upon SOLAS. This has been done on a case-by-case basis when it is clear that specific U.S. regulations have clearly been overtaken by a superior SOLAS standard.

Individual Officers-in-Charge, Marine Inspection and District Commanders are not authorized to invoke any SOLAS requirements on RRF vessels unless it has first been established as a matter of policy by Commandant. In all cases where we invoke a SOLAS requirement as a substitute for, or in addition to, a U.S. regulatory requirement your agency (MARAD) will first be consulted and then advised in writing by this office (Vessel Compliance Branch.)

16. SECTION 16 - RESERVED

17. SECTION 17 - RESERVED

18. OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS

18.1.1.1.1 Safety Drills

The senior crew member shall ensure that the minimum number of drills as required by USCG are held each month. Drills onboard ROS vessels shall be logged in the official deck and engine logbooks as is customary onboard any vessel. Drills must be realistic as possible to reinforce the circumstances that crewmembers will face in an actual emergency and be conducted with due regard to the safety of all personnel involved.

18.1.1.1.2 Safety Hazards

Safety hazards are to be corrected upon discovery. If this is not possible, all safety hazards are to be reported to the department supervisor who is responsible for marking the hazard so that no personnel are injured while correction is being arranged. Every crewmember is a safety participant.

18.1.1.1.3 Safety Equipment

All ROS crew members are entitled and encouraged to use this consumable safety equipment in the course of their duties. The Ship Manager is responsible for re-stocking consumable safety equipment as it is used. This is a reimbursable item. Department supervisors shall require all personnel to use safety equipment that is appropriate to the task at hand, during the performance of their work.

18.1.1.1.4 ROS Crew Attire

It is the responsibility of the Ship Manager to ensure proper and safe working attire for ROS crewmembers. As part of his employment practices the Ship Manager may determine whether individual ROS crewmembers are to bring clothing, shoes, glasses with them, or whether the Ship Manager shall provide it once onboard. This is a fixed price item.

18.1.1.1.5 Safety Bulletins

Although not required by the Ship Manager contract, Ship Managers who routinely provide safety bulletins to ships under their cognizance as part of their own safety effort, may do so for RRF vessels.

MARAD is dedicated to maintaining and operating ships in a safe and efficient manner. The safety of personnel shall be given primary consideration during all ship activities. MARAD has established the following requirements to promote effective occupational safety and health practices involving all personnel associated with RRF ships. The primary intent of these requirements is to define areas of desired emphasis and also to support safety requirements imposed through statutes, regulations and the International Safety Management (ISM) Code. Nothing in this section is to be construed as preventing the Ship Manager or master from taking the most effective action, which, in their judgment, may be necessary to avoid accidents.

The 1983 Memorandum of Understanding (MOU) between the United States Coast Guard (USCG) and Occupational Safety and Health Administration (OSHA) defined the statutory authority pertinent to the responsibilities of each agency. This MOU established the USCG as the dominant federal agency to prescribe and enforce standards or regulations that affect the occupational safety and health of seamen aboard Coast Guard certificated vessels. It also stated that OSHA may not enforce the Occupational Safety and Health Act with respect to the working conditions of seamen aboard USCG inspected vessels.

The ISM Code provides an international standard for the safe management and operation of ships. It requires companies to establish safety objectives and requires that they develop, implement, and maintain a Safety Management System (SMS) specifying the functional requirements for maintaining safe ships in a Safety Management Plan. The Ship Manager shall, upon request, provide MARAD with a current copy of vessel safety practices and procedures contained in the Ship Manager's Safety Management Plan.

The Ship Manager shall ensure that the Safety Management Plan, required by 46 CFR 3204(a), covers the specific needs of each RRF ship assigned during the performance of the contract. A copy of the plan shall be placed in the ship's standard administrative document cabinet.

These safety and health requirements apply directly to everyone on board vessels in Full Operating Status (FOS) as well as vessels in Reduced Operational Status (ROS). This includes, but is not limited to, the master, crew, passengers, riding crew, Ship Manager's representatives, outside contractors employed on board, port and terminal personnel, vendors, and all visitors. This section should be applied with the understanding that no set of requirements can be realistically expected to cover each and every specific circumstance or set of circumstances that may arise. Therefore, all personnel, particularly those individuals in positions of authority, are expected to exercise good judgement and discretion in applying these safety and health requirements consistent with good marine practice.

The program also applies to the RRF ships without ROS crews that are 1) initiating a safety program with a new FOS crew, 2) undergoing repair or maintenance work is being performed, or 3) as other circumstances warrant in the judgement of the Ship Manager. Individual Ship Managers must ensure that key shipboard personnel that are assigned to medical department functions, in both ROS and FOS status, have a current certification for administering Cardio-Pulmonary Resuscitation (CPR) and for the use of Automatic External Defibrillators (AED). Certifications must be issued under the auspices of a nationally recognized training curriculum such as the American Red Cross or American Heart Association. This is a Government directed (reimbursable) expense.

18.2 GOVERNMENT FURNISHED SAFETY ITEMS (GFE)

MARAD Headquarters will to make large scale start up purchases in the interests of standardizing safety equipment throughout the RRF. Once the initial start-up has been completed, each Ship Manager, in conjunction with the individual MARAD Region, is expected to assume responsibility for the maintenance and upkeep of this equipment. Each Ship Manager, in conjunction with the individual MARAD Region , shall also be responsible for small scale purchases that are ship specific. Examples of small scale

purchases include, but are not limited to the following: Multi-gas detector sensors, Evacuation signs, Automatic External Defibrillator (AED) batteries, etc.

Equipment such as gas detectors, AEDs, SCBAs, etc. shall be maintained and serviced in accordance with manufacturers instructions as well as applicable Federal and NFPA requirements.

18.2.1 Safety Videotapes

Seven (including one double pack) safety awareness videotapes are located in the standard administrative documents cabinet (also known as the yellow cabinet). These shall be used for crew indoctrination training (see below).

The video titles are:

- Back Injury, Slips, Trips, and Fall Prevention
- Heat Stress, Sight, Hearing, and Respiratory Protection
- Electrical Safety Overview
- Safety Awareness Overview
- Shipboard Drug and Alcohol Testing Policy
- Shipboard Safety Inspection Program.
- Back Care for Maritime Industry" (the double pack)

Please note that "Back Care for Maritime Industry" is a new title that has been added to the original set. All shipboard personnel will be required to watch Part One of this video, with the appropriate entries made in Video Log. Part Two is pertinent to supervisory personnel only.

Ten maritime medical emergency videotapes are also located in the standard administrative document cabinet. These tapes are intended to provide the ship's medical officer with supplemental references in addition to any medical publications currently on board.

The video titles are:

- An Elephant on the Chest – Treatment of Angina
- Green with Envy – Treatment of Seasickness
- Don't Get Choked Up – Treatment of Choking
- The Eyes Have It – Treatment of Contaminated Eyes
- Use Your Head – Treatment of Head Injury
- Don't Be a Fall Guy – Treatment of Severe Trauma
- Be Prepared – Treatment of Seizure
- One Hand for the Ship – Treatment of Amputation
- A Shock to the Heart – Treatment of Heart Attack
- Cooking Up Trouble – Treatment of Burns.

18.2.2 Reference Documents

Documents provided for reference regarding safety and emergencies are:

- Marine Fire Prevention, Firefighting and Fire Safety [1]

[1] This manual is available through the U.S. Government Printing Office (GPO) and is written under the auspices of the U.S. Maritime Administration (MARAD).

- .[2]

This book shall be kept in the standard administrative document cabinet (yellow cabinet). The Contracting Officer's Technical Representative (COTR) is the initial MARAD point of contact for issues concerning updated items that affect the scope of the contract.

18.2.2.1 Replacement of Videotapes and Reference Documents

MARAD may, when feasible, add, delete, substitute, or modify videotapes or reference documents to maintain consistency with current technology, procedures or requirements. The Ship Manager shall maintain current editions of government furnished reference publications and safety videotapes listed in this section (Section 18). Outdated videotapes and publications shall be discarded upon receipt of current editions. It is the responsibility of the Ship Manager to notify the MARAD COTR of videotapes or publications that are damaged or missing and require replacement.

18.2.3 Material Safety Data Sheets (MSDS)

It is the Ship Manager's responsibility to maintain updated MSDS for all the hazardous material on the ship.

- MSDS shall be kept on the ship in a file labeled "Safety: MSDS" for all hazardous materials currently in use onboard. This file may be kept as a paper or electronic copy.

- MSDS shall be reviewed before working with any hazardous material.

- MSDS shall be posted in relevant and conspicuous places when significantly dangerous hazardous material exposure situations exist (i.e. when hazardous cargo is being carried).

- The Material Safety Data Sheet (MSDS) files (either electronic or paper) shall support the HAZMAT inventory as accurately as possible (80% accuracy is normally considered satisfactory) and shall be maintained in such a manner as to easily cross-reference items on HAZMAT inventory with the applicable MSDS.

Federal law requires that MSDS be available from the supplier of any hazardous material (29 CFR 1910.1200 APP E). Requests should be made to obtain these when a particular product is being ordered. Missing MSDS shall be obtained from original suppliers or manufacturers whenever possible.

The Ship Manager shall train crewmembers to read and use the appropriate MSDS and heed warning labels for hazardous materials . This training shall be completed at least once in every three-month period and be noted in the Deck Logbook.

Defense Logistics Agency no longer produces the Hazardous Materials Information System (HMIS) CD-ROM, therefore its retention is no longer required. Any copies onboard may be discarded.

18.2.4 Safety Posters

MARAD shall annually provide new safety posters for each RRF vessel. MARAD shall send safety poster packets to each ship manager during the first quarter of each calendar year. It is the responsibility of each ship manager to promptly forward these safety poster packets to the RRF vessels for which the ship manager is responsible. These posters shall be placed in prominent locations, such as passageways, messrooms, lounges, etc, on all RRF vessels in full operating status (FOS) or with an ROS crew on board.

- Each vessel poster packet shall carry the vessel's annual allotment of MARAD safety posters. Individual safety poster packets shall be marked with the name of each individual RRF vessel for which the ship manager is responsible. Individual safety poster packets will contain a total of eight (8) posters consisting of two (2) posters in each category of NAV/OPS, DECK, MACHINERY/PROPULSION, and GENERAL as reviewed and approved by MARAD. .

The packet also contains a feedback form, which is to be completed by the responsible crewmember upon receipt of the safety posters from the ship manager and mailed to MARAD in the self-addressed envelope provided with the packet.

Ships without crews shall keep the same posters, changing them only after being in extended FOS status or if the posters become damaged. It shall be the responsibility of the ship manager to place the annual safety poster packet in the administrative cabinet at the earliest opportunity after receipt of the safety poster packet, on all uncrewed RRF vessels for which the ship manager is responsible.

18.2.5 Personal Protective Equipment

The Ship Manager shall ensure that appropriate levels of safety equipment and consumables are provided on each ship and that the crew is able to use the equipment. Manuals or instructions for the equipment shall be maintained and readily accessible at all times. As a reimbursable item, MARAD provides the personal protective equipment (PPE) as indicated in Exhibit A of this section. Customized specific equipment can be substituted for this equipment if it meets the same safety standards as the required equipment. MARAD does not provide customized individual specific equipment.
It is the Ship Manager's responsibility to supply general-purpose head protection, hats, and hard hats.

It is the Ship Manager's responsibility to ensure that:

- A respirator (Self Contained Breathing Apparatus or SCBA) maintenance program is implemented for all respiratory protective equipment used by fire party personnel., including accurate recordkeeping. Recordkeeping is a critical element of any respiratory protection program.

  Records shall include:

  1. The SCBA and regulator identification numbers, test equipment identification numbers, dates of servicing, a description of the action taken (including parts replaced and part

numbers involved), and identification of the repair person [29 CFR 1910.134; 49 CFR 173; NFPA 1989; NIOSH 1987].

2. Results of the regular calibrations of the test equipment recommended by the manufacturer.

3. Results of regularly conducted performance tests, repairs made during routine preventive maintenance and necessary maintenance on SCBAs taken out of service.

4. A tracking system for SCBA cylinders to ensure that they are hydrostatically retested and recertified (every 3 or 5 years, depending on cylinder specification) as required by the Department of Transportation (DOT) [49 CFR 173.34] and NIOSH [30 CFR 11.80(a)].

- SCBA service and maintenance procedures are rigidly enforced to provide respirators that are dependable and are constantly evaluated, tested, and maintained in a NIOSH/MSHA-approved condition so that they are the equivalent of devices that have received a certificate of approval [30 CFR 11.2(a)].

- Members of the fire party (may also be referred to as the Damage Control Team) are trained in the use, care, and maintenance of respiratory equipment.

- Safety footwear in accordance with ANSI Z41.91 shall be worn at all times by persons working on deck and in the machinery spaces (see ROS crew attire).

- General-purpose gloves for the purpose of keeping hands and fingers warm and clean are available to the ship's crew.

- All individuals have protective eyewear readily available for shipboard activities. Special arrangements shall be made for individuals that are required to have corrective lenses to properly perform their duties.

- All individuals have hearing protection readily available for shipboard activities to keep noise exposure within required levels. Special arrangements shall be made for individuals that are required to have special hearing aids to properly perform their duties.

- Workers have work clothing that conforms to safety standards for the tasks being performed.

The following basic standards are provided as guidelines for acceptable work clothing.

- Clothes should be comfortable but sufficiently close fitting to not catch on projections or machinery parts.

- Gaping pockets, trailing straps, sweat rags, watch straps, loose clothing, gloves, and rings or jewelry that can be caught when working with or near moving machinery shall not be worn.

- Synthetic fabric clothing should not be worn in enginerooms because of the tendency for the material to melt leading to a concentrated heat source that causes severe burns. A blend of 65% polyester and 35% cotton is acceptable.

Clothing should be regularly laundered. If coveralls are severely damaged, they should be replaced. Disposable coveralls may be necessary when working in an environment where special harmful contaminants can adhere to the surface of the coverall and then be carried to a clean area where contamination could occur.

Exhibit A of this section shows a matrix (table1) of the Personal Protective Equipment (PPE) allowance for each PPE ship group within the RRF. It provides direction on the item's use, quantity of items to be provided, and their location. The allowance list is based on ship surveys of one ship in each PPE ship group. If changes to the safety items list are desired, contact the COTR with suggestions.

Replacement PPE items are obtained through normal requisitioning. The COTR through the Logistics Management Officer (LMO) is able to obtain the items listed through the Federal Supply System.

The Ship Manager shall provide training to all crewmembers with respect to the availability and use of PPE. This includes procedures for issuing, maintaining, and using the equipment. Training shall be completed at least once in every three-month period and be recorded in the Deck Logbook.

18.2.5.1 Safety Equipment on Board

RRF vessels without ROS crews have some of their safety equipment and supplies on board. This equipment shall be checked semi-annually by the ship manager during the required periodic ship checks. Non-ROS crewed RRF vessels shall, at all times, be fully stocked with a full allowance of required PPE items (see table 1), which have an indefinite shelf life. These items and equipment shall be maintained in satisfactory condition. The Ship Manager shall specifically inquire on the status of safety equipment and check on the condition of the safety equipment, particularly if personnel at the MARAD Fleet anchorage sites are responsible for Phase M inspections.

When a non-ROS crewed vessel is deactivated, PPE items with an expiration date shall be discarded in accordance with the applicable environmental requirements and safety practices. These items shall only be replaced if a vessel is scheduled for an extended activation, or as individual circumstances warrant in the judgment of the ship manager.

ROS crews are to inspect the safety equipment at least once every three months for material condition and shortage. The ship manager shall ensure that deficiencies are corrected at the earliest opportunity.

18.2.5.2 Safety Equipment in Warehouse

Ships without ROS crews may not have all their safety equipment and supplies on board. The Ship Manager shall make an inquiry to the COTR to understand if the full complement of safety equipment is on board the vessel or partially stored elsewhere.

A minimal number of safety equipment sets are set aside in MARAD Chesapeake, VA warehouse to be utilized for some ships upon activation. In this case, the Ship Manager shall include, in the ship's activation plan, the method and timing of retrieving safety equipment from the warehouse and installing it aboard the vessel so that it is operational for the crew. In the event that warehoused items are not available, the Ship Manager shall order the items needed and ensure delivery to the ship as soon as possible.

18.3 INDOCTRINATION TRAINING

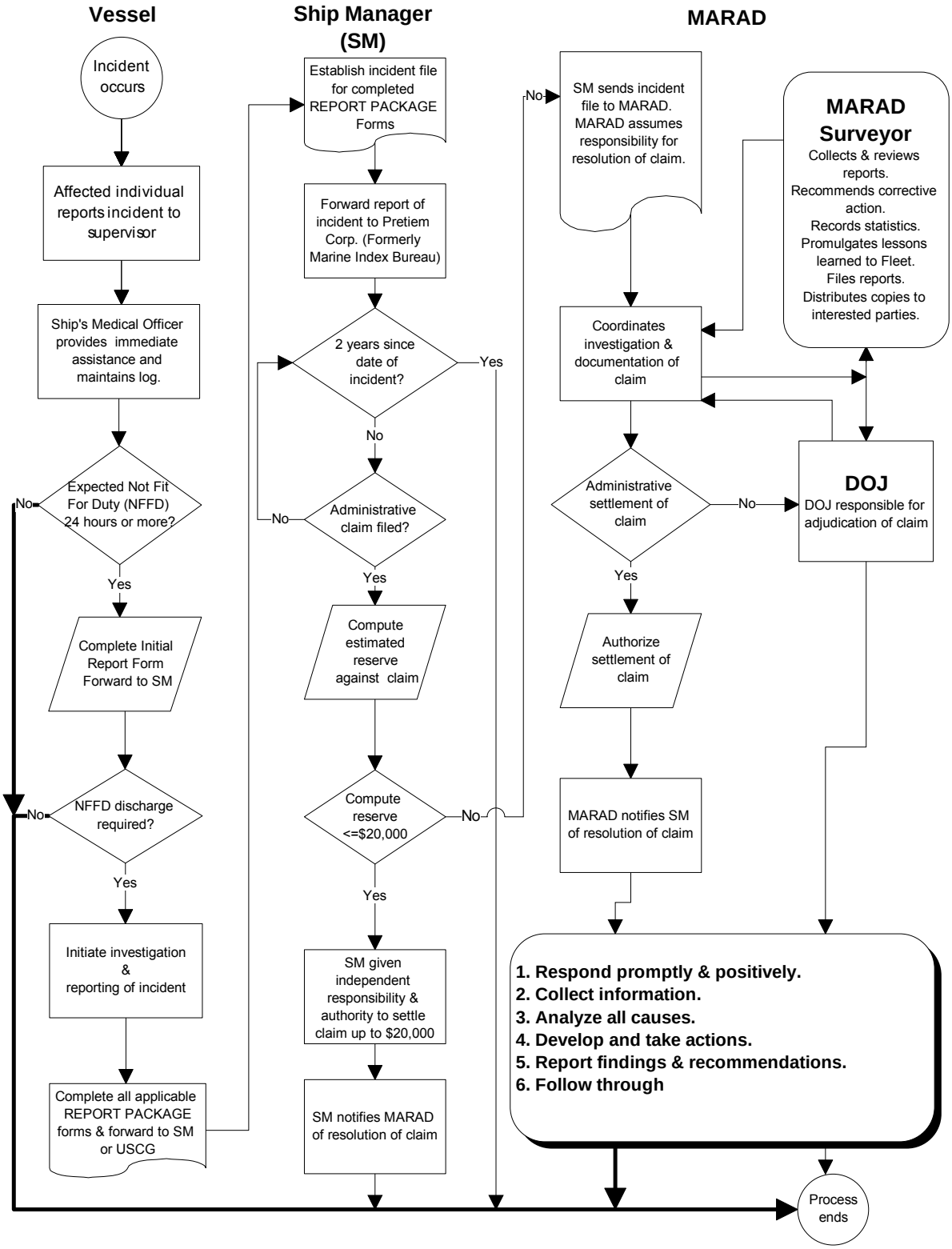
The purpose of indoctrination training is to ensure that all personnel are familiar with the location, operation and maintenance of lifesaving and general safety equipment provided on the vessel and the procedures associated with standard safety practices. As a result of indoctrination training, personnel shall be able to perform their duties without endangering the health and safety of either themselves or other crewmembers.

In addition to regulatory requirements found in 46 CFR 15.1105, all crewmembers shall view the MARAD Safety Training Awareness videotapes (see Sec. 18.1.1) that are provided. These videos will be found in the standard administrative documents filing cabinet. **All crewmembers, including returning crewmembers, shall watch these tapes within fourteen days of joining the ship as part of their orientation**. Personnel continuously employed on a ship shall review the safety tapes annually. MARAD may periodically add or delete individual Safety Awareness videotapes as required viewing, as circumstances dictate. The Ship Manager shall be notified accordingly of any changes. A record of the names of the crewmembers and the dates when each tape was viewed in its entirety shall be made. This record shall be kept on the ship for at least five years in a dedicated file labeled "Safety Training". The following information shall be typed or printed legibly in a free form style in a Safety Training Video Tape Log. Include: Crewmember's name, Crewmembers Rating (i.e. 3rd A/E, A/B, etc), Name of Tape, and Date the video was observed. Sufficient space shall be provided for the individual crewmember's signature. In the event that the individual is unable to sign, a witness shall sign in the appropriate location. An officer shall sign the training log at the bottom of each page. The Ship Manager shall semi-annually provide MARAD (MAR-612) with the information contained in the Safety Training Videotape Log of each assigned RRF vessel. The information may be provided either in written or electronic format.

18.4 PERSONAL INJURY.

Attachment J-3, Supplement A to the Ship Manager Contract provides the reporting requirements for personal injury claims. See the flow chart titled "Investigation and Resolution of Personal Injury/ Illness Claims for a conceptual diagram of the reporting and action process. Supplement B provides instructions and forms for processing third party personal injury and property damage/loss claims and reports.

INVESTIGATION AND RESOLUTION OF PERSONAL INJURY/ILLNESS CLAIMS



Claim for personal injury from incident becomes time-barred after 2 years from date of incident

18.5 HAZARD PREVENTION

The prevention of accidents and the reduction of risks can be achieved by training, the use of risk-management strategies, and job hazard analysis for vessel operation practices.

The Ship Manager shall develop and maintain formal hazard prevention practices, including reporting procedures, to identify and eliminate or safely control unsafe acts or conditions. This system shall also include a methodology for investigation of injury-causing accidents and recommendations for possible safety improvements. The Ship Manager shall review and, if necessary, act upon safety deficiencies reported by the ship's crew.

Unsafe conditions cover the immediate environment surrounding those personnel doing the work. These conditions can be identified before beginning work by a thorough assessment of the work to be performed and examining any possible factors affecting the work environment. This applies to a wide range of situations including faulty equipment, hazardous atmosphere, improper PPE, and working on energized systems.

The following conditions shall be monitored to control general shipboard hazards. Maintain:

- good sanitation and hygiene,
- walkways free of trip and slip hazards,
- safety chains across openings in life lines and rails,
- non-skid deck paint on decks ladders and walkways,
- non-skid tape on decks ladders and walkways,
- ladder treads,
- guard rails installed around openings in decks and walkways,
- securing of removable deck plates and gratings,
- cushioning material with yellow and black stripes on piping and conduits that protrude less than 77 inches above walkway decks and ladder steps,
- safe stowage of flammable materials away from heat sources,
- seaworthy stowage racks for portable tools, supplies and equipment,
- segregated seaworthy stowage racks for compressed gas bottles,
- decks and gratings free from oil,
- tools in good repair,
- insulation and guards on hot (125^0F or higher) pipes and surfaces,
- guards on rotating machinery and shafting.

Unsafe acts are human errors that result from individuals being unaware of the potential dangers, ignoring instructions or procedures, following improper procedures, or becoming complacent as a result of over-familiarity with the task at hand. Unsafe acts should be identified and communicated in the monthly safety meetings.

18.6 MONTHLY SAFETY MEETINGS

A safety meeting shall be held at least monthly on all RRF vessels that have ROS crews or are in extended FOS status. The first meeting shall be held within 15 days after the activation date for those vessels in extended FOS status. The Ship Manager shall specify requirements for Safety Meeting attendance as well as the designation of a chairman.

Each Safety Meeting shall include a review of the minutes from the previous Safety Meeting, a discussion of new concerns that emerge during day to day operations, and the approval of a list of items to be included in the meeting's minutes. The topics covered shall include:

- unsafe conditions;
- unsafe acts;
- increasing crew safety, health, and environmental awareness;
- improvements to the Safety Management Plan;
- near misses (close call missed injuries); and
- lessons learned.

Minutes of the meeting shall be kept in a file on the ship marked "Safety Meeting" for at least five years. Deficiencies identified shall be corrected directly by the ship's crew, and by entering a RMS item, or by updating the Safety Management Plan whichever is appropraite.

The findings of Safety Meetings shall be communicated to the crew through training sessions where lessons learned from operations and previous accidents are discussed. Training shall be completed at least once in every three-month period and be recorded in the Deck Logbook. The date and time of each Monthly Safety Meeting shall be recorded in the Deck Logbook.

Nothing in this section is to be construed as preventing the Ship Manager from action consistent with existing labor relations contracts or bargaining agreements.

18.7 ANNUAL SAFETY INSPECTION

The ship manager shall conduct a comprehensive annual safety inspection each calendar year, utilizing the Safety Checklist in Exhibit B of this section. One of the primary purposes of this inspection is to ensure that safety equipment is maintained in a fully operational status. This inspection shall be conducted in conjunction with a scheduled Sea Trial, Dock Trial, or Full Notice Activation whenever possible. Safety inspections may not be conducted less than six (6) months apart and not more than eighteen (18) months apart. The completed annual safety inspection shall be submitted to MARAD Division of Operational Support (MAR-612) within thirty (30) days after the inspection is completed.

The Safety Checklist, in Exhibit B of this section, shall serve as the minimum inspection criteria. This checklist may be periodically updated during the course of the ship manager contract in order to maintain relevancy, including the addition, deletion, or modification of individual checklist items. Safety deficiencies that cannot be corrected on board shall be entered into RMS. A report describing the result of the inspection with a copy of the completed checklist shall be developed. Include comments on the status of actions to satisfy deficiencies. A copy of the report shall be kept in the "Safety Meeting" file on the ship for at least five years.

MARAD reserves the right to conduct periodic Quality Assurance (QA) inspections. The Safety Checklist, previously mentioned in this paragraph, will serve as the primary inspection document. The purpose of these inspections is to assure compliance with MARAD safety policy throughout the RRF and to evaluate the effectiveness of the

individual MARAD Regions in carrying out the task. MARAD reserves the right to utilize qualified contract personnel to conduct this inspection in lieu of MARAD personnel.

18.8 OUTSIDE SAFETY AUDITS

There are a number of occasions when the vessel may be subject to audits and inspections by external authorities. These range from inspections by regulatory bodies, or their contracted agents to surveys and audits by local, state and federal authorities. In all instances, the authority of the inspector is to be checked before the audit begins by contacting the COTR. Once satisfied that the inspection is valid, the inspectors are to be given full cooperation from the crew. Deficiencies shall be rectified as soon as possible after discovery. If a task is beyond the capability of the crew it shall be entered in RMS.

18.9 PERMIT TO WORK

The Ship Manager shall develop procedures for establishing working permits for work of a non-routine nature. The permits shall identify the hazards involved in the work tasks and ensure that appropriate safety measures and precautions are taken. Controlling the safety aspects of work processes includes the wearing of proper clothing, using proper PPE, and ensuring that equipment and power systems involved are rendered harmless through a lock out and tag out procedure.

The Ship Manager shall develop and use work permit forms for the following evolutions: electrical maintenance; enclosed space entry; hot work; lockout/tagout; working aloft/outboard/over the side; working on the condenser and seawater systems; and under water work. Sample forms are provided in Exhibit C of this section (Permits to Work) for electrical maintenance; enclosed space entry; hot work; lockout/tagout; working aloft/outboard/over the side; working on the condenser and seawater systems; and under water work. The forms provided may be used or modified at the Ship Manager's option. A task requiring multiple permits shall have all approved secondary permits attached to the principal task permit.

Executed work permits shall be kept on the ship in a file maintained onboard each RRF under the ship manager's stewardship for a period of four years, unless otherwise directed, and shall be readily available to authorized personnel.
An Equipment Tagout/Lockout Log for each RRF Vessel shall be maintained and kept current. Except as noted in this contract, Tagout/Lockout physical procedures shall be conducted in accordance with individual ship manager safety requirements.

18.10 SAFETY PROCEDURES

The Ship Manager's Safety Management Plan shall contain written safety procedures for:

- maintaining safety signs[3] and labels;

[3] Including evacuation signs: These signs are required by SOLAS II 28 & 41 for passenger vessels, but are used by most commercial tankers and cargo ships. MARAD desires to follow this practice on RRF vessels as well, because escape and evacuation routes and muster stations have to be clearly marked and maintained to ensure the orderly and safe evacuation of the ship. This purchase is best handled at the local

- enclosed space entry;
- flammable and combustible material storage and use;
- hazardous material storage and use;
- crane and boom operations;
- working over the side or aloft;
- bulk fuels transfer;
- abrasive (grit) blasting;
- painting;
- underway replenishment[4];
- small boat operations;
- housekeeping;
- proper care of personal protective equipment;
- proper care of work clothing;
- proper lifting procedures;
- use of pesticides;
- helicopter operations[5]
- towing operations;
- underwater work;
- anchoring and mooring;
- heavy weather;
- food preparation;
- machinery space safety;
- fixed firefighting system maintenance and repair;
- electrical and electronic safety procedures;
- tool handling;
- Marine Sanitary Device maintenance and repair;
- hot work; and
- sea water systems repair work.
- vessel pre-fire plans (see below)

The Ship Manager's Safety Management Plan may utilize and refer to existing safety procedures outlined in U.S. Navy publications for underway replenishment (UNREP), which includes both connected replenishment (CONREP) and vertical replenishment (VERTREP). The Safety Management Plan may also refer to either U.S. Coast Guard (USCG) or International Maritime Organization (IMO) publications for maritime helicopter rescue and evacuation procedures.

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level, because the number and type of signs will vary to the vessel type and class. Security arrangements must not compromise escape capability.

[4] Applies to MCDS equipped ships only.
[5] All ship managers must address procedures for helicopter rescue and medical evacuation, however vertical replenishment (VERTREP) procedures are applicable only to RRF vessels with NAVAIR certified helicopter platforms.

- **VESSEL PRE-FIRE PLANS:**

The pre-fire plan is a document addressing a specific fire scenario onboard a ship (An engine room fire for example). The plan identifies the strategies and tactics necessary to confine and/or extinguish a fire in a particular area. At a minimum, individual pre-fire plans should be created for high threat areas such as the main engine room (know in the Navy as the "Main Space Doctrine"), auxiliary machinery spaces, pump rooms, cargo areas and the ship's galley. The plan should (in part) include information regarding:

- Fire boundaries (exposures)
- Special hazards (such as acetylene cylinders)
- Fire stations used to effect boundary cooling
- Closures (doors, hatches, scuttles, vents and fans)
- Emergency shot down procedures and options
- Paths of ingress and egress
- Primary and back up staging areas
- Availability and procedures for using fixed suppression systems
- Hose line attack options including which fire stations to use and from where to enter.
- Personnel extrication options
- Crew evacuation from specific spaces, such as the engineroom
- Chain of command
- Details as to personnel assignments to affect overall plan.
- A standard identification system that can rapidly account for each crewmember at the scene.

Critical to the effectiveness of any pre-fire plan is that the ship's crew drill with the plan; making sure that what's been put to paper is realistic and feasible. Practical application of a pre-fire plan generally lends to corrective adjustments to the plan to make it more effective. Having a volume of proven pre-fire plans readily available to the ship's officer or shore side fire department incident commander will greatly enhance the speed and effectiveness of firefighting efforts and further reduce the possibility of chaos and confusion. Fire fighters must always be fully aware of standard operating procedures and of their roles and responsibilities.

Ship Managers may utilize compressors either individually or within a group of ships (whenever practical), cascade systems, or additional air bottles in support of more realistic use of the SCBA during fire fighting drills. This equipment shall be maintained and sevice in accordance with the manufacturers instructions. Location of compressors or cascade systems and desired number of spare SCBA bottles shall be determined by vessel class. The Ship Manager shall include these items as part of a proposed fire fighting doctrine.

The ship manager shall develop and complete a pre-fire plan for each vessel class awarded (includes each individual vessel within the class) within 90 days after contract award. Existing pre-fire plans shall be reviewed by the ship manager during the aforementioned 90 day time period, including any initial changes that the ship manager desires to make.

The following vessels currently have prefire plans in place: Cape Henry, Cape Horn, Cape Hudson, Cape Inscription, Cape Intrepid, Cape Island, Cape Isabel, Curtiss, Cape Mohican, Cape Fear, Green Mountain State, Mount Washington and Beaver State.

18.11 SAFETY RULES AT RESERVE FLEET ANCHORAGE SITES

All Ship Manager employees, their contractors and vendors working at Reserve Fleet Sites shall follow safe working practices and abide by MARAD safety and health rules. Each of the Fleet Anchorage sites (James River Reserve Fleet, Beaumont Reserve Fleet, and Suisun Bay Reserve Fleet) establish their own specific safety rules under the general guidance of MARAD policy.

EXHIBIT A

PERSONAL PROTECTIVE EQUIPMENT BY SHIP CLASS

TABLE 1

The first column of Table 1 lists ship names alphabetically. NOTE that changes in the Ship Manager's contract may add or remove individual ships. The second column is called PPE Group. This grouping depends on similar crew requirements and space configurations. The second column is called PPE Group. This grouping depends on similar crew requirements and space configurations.

TABLE 2

Table 2 provides the allowance of safety equipment that is to be retained on RRF vessels. Equivalent equipment certified for the same type of use as that in the table may be substituted. Example: Multi-purpose respirator cartridges may be substituted ffor individual respirator cartridges.

If the column labeled ROQ (Reorder Quantity) has a "Y" in the space, it indicates the number of unopened or unused items at which point a restock order shall be made.

Those items having an ROQ of "N" are, generally, non-consumable equipment and indicate the number of items that are to be on board, in good repair, clean, and ready for use.

The numbers are based on ship surveys made of one ship of a particular ship group. For example, the DIAMOND STATE, TACS-7 survey was used as the basis for the EQUALITY STATE, GEM STATE, GRAND CANYON STATE, KEYSTONE STATE and GREEN MOUNTAIN STATE allowance.

TABLE 3

Table 4 provides guidance for storing and installation of PPE.

TABLE 4

Table 5 provides guidance on the use of PPE.

Suggestions for changes to these tables are encouraged and should be provided to the MARAD COTR through the Ship Manager.

TABLE 1: RRF PPE SHIP GROUPS

SHIP NAME	PPE GROUP	SHIP TYPE
ADM WM M. CALLAGHAN	ADM WM M. CALLAGHAN	RO/RO
CAPE DECISION	CAPE D	RO/RO
CAPE DIAMOND	CAPE D	RO/RO
CAPE DOMINGO	CAPE D	RO/RO
CAPE DOUGLASS	CAPE D	RO/RO
CAPE DUCATO	CAPE D	RO/RO
CAPE EDMONT	CAPE E	RO/RO
CAPE FAREWELL	CAPE F	BARGE CARRIER
CAPE FLATTERY	CAPE F	BARGE CARRIER
CAPE GIBSON	CAPE J	BREAKBULK
CAPE GIRARDEAU	CAPE J	BREAKBULK
CAPE HENRY	CAPE H	RO/RO
CAPE HORN	CAPE H	RO/RO
CAPE HUDSON	CAPE H	RO/RO
CAPE INSCRIPTION	CAPE I	RO/RO
CAPE INTREPID	CAPE I	RO/RO
CAPE ISABEL	CAPE I	RO/RO
CAPE ISLAND	CAPE I	RO/RO
CAPE JACOB	CAPE J	BREAKBULK
CAPE KENNEDY	CAPE W	RO/RO
CAPE KNOX	CAPE W	RO/RO

TABLE 1: RRF PPE SHIP GROUPS (cont.)

SHIP NAME	PPE GROUP	SHIP TYPE
CAPE MAY	CAPE M	HEAVY LIFT
CAPE MOHICAN	CAPE M	HEAVY LIFT
CAPE ORLANDO	CAPE D	RO/RO
CAPE RACE	CAPE R	RO/RO
CAPE RAY	CAPE R	RO/RO
CAPE RISE	CAPE R	RO/RO
CAPE TAYLOR	CAPE T	RO/RO
CAPE TEXAS	CAPE T	RO/RO
CAPE TRINITY	CAPE T	RO/RO
CAPE VICTORY	CAPE V	RO/RO
CAPE VINCENT	CAPE V	RO/RO
CAPE WASHINGTON	CAPE W	RO/RO
CAPE WRATH	CAPE W	RO/RO
CHESAPEAKE	OPDS	PRODUCT TANKER
CORNHUSKER STATE	T-ACS4	CRANE
CURTISS	T-AVB	RO/RO
FLICKERTAIL STATE	T-ACS4	CRANE
GEM STATE	T-ACS7	CRANE
GOPHER STATE	T-ACS4	CRANE
GRAND CANYON STATE	T-ACS7	CRANE
KEYSTONE STATE	T-ACS7	CRANE
PETERSBURG	OPDS	PRODUCT TANKER
WRIGHT	T-AVB	RO/RO

TABLE 2
SHIP GROUP PPE
ALLOWANCE LIST

Quantity of Safety Equipment per Ship Class	ROQ	ACDAMLLAGHAN	TAVB	CAPED	CAPEE	CAPEF	CAPEH	CAPEI	CAPEJ	CAPEL	CAPEM
Safety Line, ea.	N	2	2	2	2	2	2	2	2	2	2
Safety Harness, ea.	N	1	1	1	1	1	1	1	1	1	1
Hearing Protectors Soft plug Type (Box of 200)	Y	2	2	2	2	2	2	2	2	2	2
Hearing Protectors Ear Muff Type, ea.	Y	4	4	4	4	4	4	4	4	4	4
Respirator cartridges Dust or HEPA (Red) (Bx 10)	Y	1	1	1	1	1	1	1	1	1	1
Respirator Cartridges Acid/Organic vapors (Yellow) (Bx 10)	Y	1	1	1	1	1	1	1	1	1	1
Air Purifying Respirator Face Mask (Nose & Mouth), ea.	Y	2	2	2	2	2	2	2	2	2	2
Emergency Breathing Device, ea.	N	2	2	2	2	2	2	2	2	2	2
Respirator Cartridges Organic Vapor (Black) (Bx 10)	Y	1	1	1	1	1	2	1	1	1	1
Welding Goggles, ea.	N	2	2	2	2	2	4	2	2	2	2
Welding Helmet, ea.	N	2	2	2	2	2	2	2	2	2	2
Safety Glasses w/ Side shield, ea.	Y	6	6	6	6	6	6	6	6	6	6
Particle Goggles w/ vents, ea.	Y	6	6	6	6	6	2	6	6	6	6
Chipping Goggles, ea.	Y	2	2	2	2	2	4	2	2	2	2
Eye wash Stations - Portable, ea.	N	2	2	2	2	5	3	2	2	2	2
Bacteriostatic Agent For Eyewash Stations, boxes of 4 bottles	Y	1	1	1	1	2	1	1	1	1	1
Face Shield, ea.	N	4	4	4	4	4	4	4	4	4	4

Chemical Splash Goggles w/ Covered vents, ea.	N	2	2	2	2	2	2	2	2	2	2
Rubber Chemical Gloves, each	Y	3	3	3	3	3	3	3	3	3	3
Vinyl and PVC Chemical Gloves, each	Y	4	4	4	4	4	4	4	4	4	4
Kevlar Diver's Gloves, each	Y	2	2	2	2	2	2	2	2	2	2
Leather Welder's Gloves, each	Y	3	3	3	3	3	3	3	3	3	3
Noise Hazard Area-Hearing Protection Required, Signs ea.	N	5	8	2	1	5	5	6	10	4	3
CAUTION-Eye Protection Required in this Area, Signs ea.	N	2	1	4	5	4	3	4	3	2	3
CAUTION-Hearing Protection Required in this Area, Signs ea.	N	6	6	2	8	4	4	6	3	4	1
Eye Hazard Warning Tape, roll	Y	4	3	4	5	3	5	6	3	4	3
Non-Skid Tape Strips, ea.	N	135	100	42	84	168	110	138	78	118	22

TABLE 2 (cont.)
SHIP GROUP PPE
ALLOWANCE LIST

Quantity of Safety Equipment per Ship Class	ROQ	CAPER	CAPET	CAPEV	CAPEW	T-ACS7	T-ACS4		OPDS	T-1
Safety Line, ea.	N	2	2	2	2	2	2		2	2
Safety Harness, ea.	N	1	1	1	1	1	1		1	1
Hearing Protectors Soft plug Type (Bx 200)	Y	2	2	2	2	2	2		2	2
Hearing Protectors Ear Muff Type, ea.	Y	4	4	4	4	4	4		4	4
Respirator cartridges Dust or HEPA (red) (Bx 10)	Y	1	1	1	1	1	1		1	1
Respirator Cartridges Acid/Organic vapors (Yellow) (Bx 10)	Y	1	1	1	1	1	1		1	1
Air Purifying Respirator Face Mask (Nose & Mouth), ea.	Y	2	2	2	2	2	2		2	2
Emergency Breathing Device, ea.	N	2	2	2	2	2	2		4	4
Respirator Cartridges Organic Vapor (Black) (Bx	Y	1	1	1	2	1	1		1	1

10)										
Welding Goggles, ea.	N	2	2	2	2	2	2		2	2
Welding Helmet, ea.	N	2	2	2	2	2	2		2	2
Safety Glasses w/ Side shield, ea.	Y	6	6	6	6	6	6		6	6
Particle Goggles w/ vents, ea.	Y	6	6	6	6	6	6		6	6
Chipping Goggles, ea.	Y	2	2	2	2	2	2		2	2
Eye wash Stations – Portable, ea.	N	2	2	2	1	2	2		3	2
Bacteriostatic Agent For Eyewash Stations, Boxes of 4 bottles	Y	1	1	1	1	1	1		1	1
Face Shield, ea.	N	4	4	4	4	4	4		4	4
Chemical Splash Goggles w/ Covered vents, ea.	N	2	2	2	2	2	2		2	2
Rubber Chemical Gloves, each	Y	3	3	3	3	3	3		3	3
Vinyl and PVC Chemical Gloves, each	Y	4	4	4	4	4	4		4	4
Kevlar Diver’s Gloves, each	Y	2	2	2	2	2	2		2	2
Leather Welder’s Gloves, each	Y	3	3	3	3	3	3		3	3
Noise Hazard Area-Hearing Protection Required, Signs ea.	N	7	6	12	5	11	10		23	2
CAUTION-Eye Protection Required in this Area, Signs ea.	N	2	3	2	3	3	3		2	3
CAUTION-Hearing Protection Required in this Area, Signs ea.	N	2	2	6	4	3	4		6	2
Eye Hazard Warning Tape, roll	Y	2	3	5	5	3	3		3	4
Non-Skid Tape Strips, ea.	N	106	82	88	116	154	56		120	40

TABLE 3

PPE LOCATION AND INSTALLATION GUIDANCE

Safety Harness and Safety Line. Stow in deck gear locker for use by personnel going aloft or working over the side.

Hearing Protectors. One box of soft hearing protectors shall be mounted at each entrance to the machinery casing. Two pairs of ear muffs shall be placed in the emergency diesel generator room. The reorder quantity amount shall be stowed in the original packaging so they can be readily used.

Respirators and cartridges. One air purifying respirator and five of each cartridge shall be placed in the electric shop in a locker. One air purifying respirator and five of each cartridge shall be placed in the machine shop in a locker. The reorder quantity amount shall be stowed in the original packaging so they can be readily used.

Emergency Breathing Devices. Two shall be placed in the MSD spaces on all ships and an additional two shall be placed in the pumproom on tankers. They shall be mounted on a permanent structure at about chest height so they are ready for immediate use.

Welding Goggles and Helmets. The welding goggles and helmets shall be stowed in the machine shop in a locker or hung on hooks on the bulkhead.

Safety Glasses w/side shields, Particle goggles w/vents, Chipping Goggles. Three pairs of safety glasses, three pairs of particle goggles, and one pair of chipping goggles shall be stowed in the electrical shop. Three pairs of safety glasses, three pairs of particle goggles, and one pair of chipping goggles shall be stowed in the machine shop. The reorder quantity amount shall be stowed in the original packaging so they can be readily used.

Portable Eye Wash Station. One eye wash station shall be installed, in accordance with the manufacturer's instructions, in each separate electric shop and machine shop. Bactericide water additive (HYDROSEP ® or equivalent) must be added to portable eyewash stations to control organic growth in the water.

Face Shield. Two face shields shall be stowed in the electric shop and two shall be stowed in the machine shop.

Chemical Splash Goggles w/Covered Vents. One pair of chemical splash goggles shall be stowed in the paint locker, and one pair at the engine room distiller.

Gloves. The reorder quantity amount shall be stowed in the original packaging so they can be readily used. These gloves are to be used as the work requires.

TABLE 3 (cont.)
PPE LOCATION AND INSTALLATION GUIDANCE

NOISE HAZARD AREA Signs. A NOISE HAZARD warning sign shall be posted, at eye height, outside each entrance to the engine casing, the emergency diesel generator room, and the electric shop.

HEARING PROTECTION CAUTION Signs. AHEARING PROTECTION sign shall be located, outside each entrance to the engine casing, the emergency diesel generator room, and the electric shop.

EYE PROTECTION CAUTION Signs. An EYE PROTECTION CAUTION sign shall be posted, at eye height, outside each entrance to the electric shop and the machine shop.

EYE HAZARD AREA DECK MARKING TAPE. Eye Hazard Area Deck Marking Tape shall be placed on the deck to identify the eye hazard area adjacent to the lathe, drill press, and grinder.

NON-SKID STRIPS. Non-skid strips shall be installed on clean walking surfaces:

- at the top and bottom of vertical and inclined ladders exposed to the weather,
- at the inside and outside of doors opening to the weather,
- at the bottom of vertical ladders to the mast and king posts,
- in the laundry rooms,
- in the galley,
- around the emergency diesel generator and inside the entrance to the space,
- in the electrical shop,
- at the operator area of all boom and windlass operating stations,
- at the inside and outside of all entrances to the steering gear room, and
- at the top and bottom of all ladders within the engine casing where the decking is neither diamond tread nor grating.

TABLE 4USE OF PPE

- **Red Respirator Cartridges:** High Efficiency Particulate Arresting (HEPA) cartridges for dust, fume, mist, and asbestos containing dust and mist.
- **Yellow Respirator Cartridges:** Acid gases and Organic vapors
- **Black Respirator Cartridges:** Organic vapors
- **Air Purifying Respirator Face Masks:** To hold respirator cartridges.
- **Emergency Escape Breathing Devices:** These are portable sources of oxygen that can be worn to make an emergency exit from a contaminated space.
- **Rubber Chemical Gloves.** These provide some abrasion resistance and are typically are used when handling chemicals and corrosives.
- **Vinyl and PVC Chemical Gloves.** These are particularly effective when petroleum products are handled.
- **Kevlar Diver's Gloves.** These are used when working with knives or other sharp implements to prevent cuts and abrasion. They also provide protection against heat and cold.
- **Leather Welder's Gloves.** These resist sparks, moderate heat, chips and rough objects encountered when welding and torch cutting. They provide some cushioning against blows.
- **Safety Glasses with Eye Shields.** Wear these when performing eye hazardous activities that produce dust and for small particle producing operations.
- **Particle Goggles with vents.** Wear these when performing the eye hazardous activities of drilling, grinding, and milling.
- **Chipping Goggles.** Wear these when performing the eye hazardous activities of chipping paint and rusted areas.
- **Face Shields.** Wear these when performing the eye hazardous activities of sand blasting, or other severe dust and particle producing operations that could impact facial skin.
- **Chemical Splash Goggles with Covered Vents.** Wear these when performing the eye hazardous activities of pouring or handling corrosive liquids and solids.
- **Welding Goggles.** Wear these when performing eye hazardous activity of welding and torch cutting.
- **Welding Helmets**. Wear these when performing the eye hazardous activity of welding.
- **Eye Protection Caution Signs.** These signs are used to identify areas that require protection for the eyes against hazards.
- **Portable Emergency Eyewash Facilities.** These are used to flush out eyes in the event of damaging material entering eyes.
- **Hearing Protectors Soft Plug Type.** These are partially inserted into the ear canal.
- **Hearing Protectors Ear Muff Type.** These are worn over the ears and can be used in conjunction with the soft plug type.
- **Noise Hazard Area Signs.** These signs are used to identify areas that normally have noise levels above regulated levels.
- **Noise Caution Signs.** These signs are used to warn that activities in the locality may be generating noise levels that are above regulated levels. These signs can be carried to the location of activities where high noise levels are expected.
- **Safety Harnesses.** Full Body Harnesses with Shock Absorbers are provided for working aloft, outboard, over the side of the bulwarks/railings, and in other cases where a risk of falling is present. Safety lines (lifelines) are also provided for use with the

safety harnesses. These lines shall be dedicated for use with the harness, stored in a cool dry place, and kept in good condition.

EXHIBIT B

Department of Transportation
Maritime Administration

SHIPBOARD SAFETY CHECKLISTS

Department of Transportation
Maritime Administration

IN-HOUSE SHIPBOARD SAFETY CHECKLISTS

(MAY 2003)

VESSEL:

SURVEYOR:

DATE:

LOCATION:

OCCASION:

POC:

SHIPBOARD SAFETY CHECKLISTS

ADMINISTRATIVE

#	Question	Yes	No
1.	Is a current copy of the Safety Management Plan in the standard administrative document filing cabinet? (All RRF vessels) (TE-1, Section 18 Introduction) Comments:_____		
2.	Does the Safety Management Plan contain the currently required Ship Manager Contract items? (All RRF vessels) (TE-1, Sect.18.8/18.9) Comments:_____		
3.	Are the current MARAD Safety Videos onboard? (All RRF vessels) (TE-1, Section 18.1.1/18.1.2.1) Comments:_____		
4.	Is the complete Maritime Medical Emergency (MME) videotape series on board and current? (All RRF vessels) (TE-1, Section 18.1.1) Comments:_____		
5.	Is the Safety Training Videotape Log up to date in the "Safety Training" file? (check against crew list) (ROS/FOS) (TE-1, Section 18.2) Comments:_____		
6.	Are required reference documents available and current? (All RRF vessels) (TE-1, Section 18.1.2/18.1.2.1) (Marine Fire Prevention, Firefighting, and Fire Safety) Comments:_____		
7.	Are current MARAD Safety Posters displayed? (ROS/FOS) (TE-1, Section 18.1.4) Comments:_____		
8.	Are copies of the Monthly Safety Committee Meeting Minutes maintained in the "Safety Records" file? (ROS/FOS) (TE-1, Section 18.5) Comments:_____		
9.	Are copies of the Headquarters/Regional Annual Safety Inspection in the "Safety Meeting" file? (ROS/FOS) (TE-1, Section 18.5/18.6) Comments:_____		
10.	Is there a notation on Safety Meeting Findings training in the Deck Log book within the last three months? (ROS/FOS) (TE-1, Section 18.5) Comments:_____		
11.	Are safety equipment manuals maintained in the "Safety Equipment" file? (All RRF vessels) (TE-1, 18.1.5.1) Comments:_____		

SHIPBOARD SAFETY CHECKLISTS

ADMINISTRATIVE (CONT.)

#	Question	Yes	No
12.			
13.	Are applicable Material Safety Data Sheets available when hazardous exposure situations exist and when hazardous cargo is being carried? (All RRF Vessels) (TE-1, 18.1.3) Comments:_____		
14.	Are copies of MSDS sheets for hazardous material used on the ship in the "Safety: MSDS" file? (check against hazardous material inventory) (All RRF vessels) (TE-1, 18.1.3) Comments:_____		
15.	Is there a notation on the completion of MSDS and warning label training in the Deck Logbook within the last three months? (ROS/FOS) (TE-1,18.1.3) Comments:_____		
16.	Are hearing and sight hazard warning signs posted as required by Exhibit A of the MARAD Safety Reference folder? (All RRF vessels) (TE-1, 18.1.5) Comments:_____		
17.	Is all Personal Protective Equipment in good condition and above the re-order quantities as required by Exhibit A of the MARAD Safety Reference folder? (ROS/FOS) (TE-1, 18.1.5) Comments:_____		
18.	Is there a notation on the completion of PPE training in the Deck Log book within the last three months? (ROS/FOS) (TE-1, 18.1.5) Comments:_____		
19.	Is the crew using work clothing that is suitably intact, clean, and safe? (ROS/FOS) (TE-1, 18.1.5) Comments:_____		
20.	Are work permits (hotwork, confined space entry, working over the side, working aloft, diving operations) kept on file for at least four years? (ROS/FOS) (TE-1, 18.8) Comments:_____		

SHIPBOARD SAFETY CHECKLISTS

LIFE LINES AND RAILS, LADDERS, AND WALKWAYS

#	Question	Yes	No
21.	Are safety chains installed for use across openings in lifelines and rails? Comments:_____		
22.	Is non-skid deck paint in good repair? Comments:_____		
23.	Is non-skid tape applied in required areas? Comments:_____		
24.	Are guardrails installed around all openings in the deck? Comments:_____		
25.	Are all walkways free of trip hazards and free of slip hazards? Comments:_____		
26.	Are all head knocking hazards (fittings, piping, angle irons, conduit, etc. less than 77 inches above walkways) fitted with cushioning material and marked with yellow and black stripes? Comments:_____		
27.	Are all ladder treads in good repair? Comments:_____		
28.	Are all removable deck plates and gratings secured in place? Comments:_____		

TAG-OUT / LOCKOUT

29.	Is Deck Tag-out / Lockout Log maintained current? Comments: _____		
30.	Is Engineering Tag-out / Lockout Log maintained current? Comments: _____		
31.	Does random sampling (from log to tag and from tag to log) indicate adherence to procedures? Comments: _____		

SHIPBOARD SAFETY CHECKLISTS

STOWAGE

#	Question	Yes	No
32.	Are flammable materials properly stowed in safe areas away from all heat sources? Comments:_____		
33.	Are portable tools, supplies and equipment properly set up for stowage at sea? Comments:_____		
34.	Are compressed gas bottles properly segregated and properly stowed in racks? Comments:_____		
35.	Is hazardous material properly stowed and marked? Comments:_____		
36.	Is hazardous waste properly stowed and marked? Comments:_____		
37.	Is all trash, garbage and food waste placed in proper receptacles in interior spaces and are these receptacles kept from overflowing? (ROS/FOS only) Comments:_____		

EGL STOWAGE

38. Has SCBA allowance been brought up to new standards?
Comments:

39. Has FFE allowance been brought up to new standards?
Comments:

40. Has EEBD allowance been brought up to new standards?
Comments:

41. Has Gas Analyzer allowance been brought up to new standards?
Comments:

SHIPBOARD SAFETY CHECKLISTS

ELECTRICAL

#	Question	Yes	No
42.	Are all live-back switchboards caged and secured? Comments:_____		
43.	Are electrical receptacles in good working order? (by random sample) Comments:_____		
44.	Are portable electrical tools and equipment in good repair and ready for service? (by random sample) Comments:_____		
45.	Are extension cords of the 3 wire, 3 prong grounded type and in good repair? (by random sample) Comments:_____		
46.	Are lighting fixtures in good working order with lamp covers in place? (by random sample) Comments:_____		

MECHANICAL

#	Question	Yes	No
47.	Are all oil leaks kept wiped up and not allowed to puddle? Comments:_____		
48.	Are all grinders, drill presses and lathes in good repair with guards and steady rests in place? Comments:_____		
49.	Are all hot (125^{0}F or higher) pipes and surfaces properly insulated or guarded? Comments:_____		
50.	Are all rotating machinery and shafting fitted with proper guards? Comments:_____		
51.	Are fuel systems tight, without any leaks? Comments:_____		

SHIPBOARD SAFETY CHECKLIST GENERAL COMMENTS

Abstract of Relevant Ship Manager Contract Sections and Laws

46 USC 3202 (c) Public vessels are excepted from Chapter 32 that requires compliance with International Safety Management Code for vessels.

46 USC 3204 (a) Safety Management Plans shall be submitted to Sec. Trans.

46 USC 3204 (c) A Safety Management Plan shall be submitted to Sec. Trans. for approval.

46 USC 3203 (a) Regulatory authority is given to Sec. Trans.

46 CFR 175.540 (d) Alternative compliance for ISM is allowed.

1983 MOU between USCG & OSHA established USCG as the agency to prescribe and enforce occupational safety and health regulations on USCG certificated vessels.

SM Contract H.19 The Ship Manager shall maintain ISM DOC current throughout the life of the contract.

SM Contract TE-1 18 A copy of the Safety Management Plan shall be placed in the ship's standard administrative document cabinet.

TE-1 18.1 MARAD provides specific safety items.

TE-1 18.1.5 The Ship Manager shall provide and ensure use of Personal Protective Equipment.

TE-1 18.2 Crewmembers shall view safety tapes and the Ship Manager shall provide a log semi-annually to MAR-612.

TE-1 18.3 Reporting requirements for personal injuries.

TE-1 18.4 The Ship Manager shall develop and maintain hazard prevention practices.

TE-1 18.5 Safety meetings shall be held on ROS & FOS and safety training shall be completed once every 3 months.

TE-1 18.6 The Ship Manager shall conduct annual safety inspections each calendar year using the checklist, submit reports to MAR-612 within 30 days, and keep the report in the "Safety Meeting" file.

TE-1 18.7 Only the COTR can approve outside inspections.

TE-1 18.8 the Ship Manager shall develop permit to work procedures.

TE-1 18.9 The Ship Manager's Safety Management Plan shall contain 29 items.

TE-1 18.10 The Ship Manager shall abide by the Fleet Safety rules when working in the Fleet anchorages.

Department of Transportation

Maritime Administration

SAMPLE
PERMIT TO WORK FORMS
AND
LOCKOUT/TAGOUT FORMS

PERMITS TO WORK

See the RRF Ship Operations Manual (Contract TE-1 Section 18) for an explanation on the optional use of these forms.

File Name	Permit Title
PTW_EMW.DOC	Electrical Maintenance Work Permit
PTW_ESEP.DOC	Enclosed Space Entry Work Permit
PTW_HWP.DOC	Hot Work Permit
PTW_LOTO.DOC	Lockout/Tag Out Permit
PTW_OTS.DOC	Working Aloft, Outboard, and Over The Side
PTW_SWS.DOC	Inspection/repair Permit Condenser/Seawater System
PTW_UWP.DOC	Underwater Work Permit

PERMIT TO WORK ELECTRICAL MAINTENANCE WORK PERMIT	Form: PTW_EMW Date: Prep'd by: Apprv'd by: Page 1 of 2

This checklist must be completed prior to starting any electrical maintenance. If any of the listed conditions change, then this Permit is invalid and a new permit shall be issued before work continues.

VESSEL	DATE & TIME (MAX 12 HRS)	WORK TO START (TIME)

Location and Description of Work to be Done

ALL QUESTIONS MUST BE ANSWERED TO PROCEED	YES	NO	N/A
1. Is the location of the electrical maintenance work an enclosed space? NOTE: If YES, the proper Enclosed Space Entry Permit must also be completed, authorized and attached.			
2. Does the electrical maintenance work involve working aloft, outboard or over the side? NOTE: If YES, the proper Working Aloft, Outboard and Over the Side Permit must also be completed, authorized and attached.			
3. Does the electrical maintenance work involve any form of hot work? NOTE: If YES, the proper Hot Work Permit must also be completed, authorized and attached.			
4. Has the proper electrical tagout/lockout procedure for the work detailed been carried out? NOTE: If YES the proper lockout/tagout permit must also be completed, authorized and attached			
5. Can electrical maintenance work be done safely in accordance with NFPA requirements?			
6. Have all electrical supplies to the work area been isolated, fuses pulled, circuit breakers tripped and switches set to "OFF"?			
7. Have voltmeter confirmation checks been carried out at the work position while remote and local power-on switching is carried out?			
8. Have ship's electrical drawings been referenced to ensure all power supply routes to the work area are isolated?			
9. Have appropriate warning signs been placed on equipment switches, circuit breakers and fuses?			
10. If working on or near live electrical equipment, is a second man present who is competent in the treatment of electric shock and is trained in fighting electrical fires and proper medical response?			
11. Have personnel been provided with the proper Personnel Protective Equipment (PPE)? SEE NEXT PAGE			
12. Have all items of metallic personal jewelry such as watches, rings and identity bracelets been			

removed?			
13. Have the correct tools and equipment required for electrical maintenance work been provided?			
14. Have the tools and equipment been inspected prior to starting work and found to be in good condition?			
15. Is required electrical testing equipment certified accurate and within its calibration period?			
16. Have the workers done a Job Hazard Analysis in which clear instructions been given on how to minimize or circumvent these hazards?			
17. Have instructions and plans been discussed in case of emergency?			

IF ANY CHECK MARKS MUST BE PLACED IN THE SHADED AREAS ABOVE, THEN THIS ITEM MUST BE RECTIFIED BEFORE PROCEEDING

PERMIT TO WORK **ENCLOSED SPACE ENTRY** **WORK PERMIT**	Form: PTW_ESEP Date: Prep'd by: Apprv'd by: Page 1 of 2

This checklist must be completed prior to entering any enclosed spaces. If any of the listed conditions change, then this Permit is invalid and a new permit shall be issued before work continues.

_____ **VESSEL**	_____ **DATE & TIME (MAX. 12 HRS)**	_____ **WORK TO START (TIME)**

Location and Description of Work to be Done

ALL QUESTIONS MUST BE ANSWERED TO PROCEED	**YES**	**NO**	**N/A**
1. Is the enclosed space the location for electrical maintenance work? NOTE: If YES, the proper Electrical Maintenance Work Permit must also be completed, authorized and attached.			
2. Is the enclosed space the location for hot work? NOTE: If YES, the proper Hot Work Permit must also be completed, authorized and attached..			
3. Has work space been ventilated?			
4. Has atmosphere been gas tested and found "Safe for Men" and safe for work to be done?			
5. Have all pipeline openings into the work space been tested and found free of combustible liquids or gases?			
6. Have all valves on piping/interconnected with piping in the work space been blanked or closed, locked and tagged to prevent accidental opening and appropriate signs been posted?			
7. Has forced ventilation been provided for use during job?			
8. Have all the appropriate PPE items, rescue harness and lifelines been provided?			
9. Do the workers have the tools required?			
10. Has a man been assigned to stand by the workers?			

11. Have approved communications been established and tested via walkie-talkies or other means between the workers, the man standing by and the Officer on Watch?			
12. Has the standby been instructed what to do in case the worker(s) get into difficulties?			
13. Have adequate approved lights been provided?			
14. Has continuous monitoring of the work space been provided for, with approved testing equipment?			
15. Have emergency procedures been reviewed and understood?			
16. Is a self-contained breathing apparatus on standby for rescue?			

IF ANY CHECK MARKS MUST BE PLACED IN THE SHADED AREAS ABOVE, THEN THIS ITEM MUST BE RECTIFIED BEFORE PROCEEDING

PERMIT TO WORK ENCLOSED SPACE ENTRY WORK PERMIT	Form: PTW_ESEP Date: Prep'd by: Apprv'd by: Page 2 of 2

TYPES OF GAS TESTS			
Combustible Gas Test % LEL	Oxygen Reading %	H_2S PPM	Benzene PPM
IGS Vessels only - CO %		Other Gases _____. PPM	

PROTECTIVE EQUIPMENT Boxes marked with checks denote PPE to be used. This section must be filled out by Officer in Charge of Safety.			
Clothing	Fire Extinguisher	Gloves	Boots
Safety Harness	Flashlight	Hard Hat	Hearing Protection
Safety Line	Gas Tester	Respirator(s)	SCBA/ELSA
Eye Protection			Other

Special Instructions:

I HAVE READ THE ABOVE PERMIT AND WILL CARRY OUT THE WORK REQUIRED IN A SAFE MANNER.

SIGNATURE OF WORKER SIGNATURE OF WORKER

SIGNATURE OF WORKER SIGNATURE OF WORKER

SIGNATURE OF WORKER SIGNATURE OF WORKER

I inspected the enclosed area described on the top of this form and state that the work can be done and in compliance with rules of the US Coast Guard, ABS, and other authority whose rules I am bound to enforce.

OFFICER IN CHARGE OF SAFETY OFFICER IN CHARGE OF WORK

MASTER_____.

OFFICE USE ONLY

PERMIT REVIEWED BY: _____. DATE: _____.

Original: Master's File

Copy 1: Posted

Copy 2: Office Copy (Mail)

PERMIT TO WORK HOT WORK PERMIT	Form: PTW_HWP Date: Prep'd by: Apprv'd by: Page 1 of 2

This checklist must be completed prior to starting any hotwork. If any of the listed conditions change, then this permit is invalid and a new permit shall be issued before work continues.

_____	_____	_____
VESSEL	DATE & TIME (MAX. 12 HRS)	WORK TO START (TIME)

Location and Description of Work to be Done:

ALL QUESTIONS MUST BE ANSWERED TO PROCEED	**YES**	**NO**	**N/A**
1. Is the location of the hot work an enclosed space? NOTE: If YES, the proper Enclosed Space Entry Permit must also be completed, authorized and attached.			
2. Does the hot work involve any form of electrical maintenance work? NOTE: If YES, the proper Electrical Maintenance Work Permit must also be completed, authorized and attached.			
3. Is the location of the hot work aloft, outboard or over the side? NOTE: If YES, the proper Working Aloft, Outboard and Over the Side Permit must also be completed, authorized and attached.			
4. Has the meter used to sample monitor the welding area been calibrated in the last 24 hrs. (If not, do so.)			
5. Has the area to be worked on been thoroughly purged of hydrocarbons and inert gas?			
6. Has the area to be worked on been thoroughly ventilated?			
7. Has the work area been cleaned by machine washed and are gas free?			
8a. If not, are the surrounding areas fully ballasted?			
8b. Are the surrounding areas inerted?			
9. Can hot work be done safely in accordance with NFPA-306?			
10. If the work area if a pipe, has it been thoroughly flushed with water and disconnected from the surrounding piping?			
11. Is the area free of all flammable debris and scale?			
12. Have all potential source of flammable vapors that could reach the site of the hot work been prevented from doing so?			
13. Have ships drawings been referenced to ensure the area is safe for hot work?			
14. To assure combustible gases will not reach the work site, have winds and air currents been			

considered?			
15. Have bilges within the hot work been inspected to assure that hot work can be done safely?			
16. Have precautions been taken to ensure the personnel near the area are protected from such hazards as fumes and ultra-violet light?			
17. Have personnel been provided with the proper Personnel Protective Equipment (PPE)?			
18. Has a fire watch been set up with appropriate fire fighting equipment?			
19. Can the fire watch continually see the worker? (If not, a safety watch must be set for this purpose.)			
20. Have the workers done a Job Hazard Analysis in which clear instructions have been given on how to minimize or circumvent these hazards?			
21. Have instructions and contingency plans been discussed in the event of an emergency?			
22. If welding, has the ground wire been properly connected to the ship's structure?			
23. Has the equipment to be used been inspected prior to starting work and found to be in good condition?			
24. If the firemain charged, hoses let out, monitors pointed out and all in good condition?			

Original: Master's File

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IF ANY CHECK MARKS MUST BE PLACED IN THE SHADED AREAS, THEN THIS ITEM MUST BE RECTIFIED BEFORE PROCEEDING.

PERMIT TO WORK HOT WORK PERMIT	Form: PTW_HWP Date: Prep'd by: Apprv'd by: Page 2 of 2

TYPE, MAKE AND MODEL OF ALL GAS DETECTION EQUIPMENT USED:

REQUIRED PERIODIC ATMOSPHERE TEST RESULTS

	DATE/TIME	LEL	O_2	H_2S	BENZENE	TOXIC A NAME:	TOXIC B NAME:
1st Hr.	/ .	%	%	PPM	PPM	.	.
2nd Hr.	/ .	%	%	PPM	PPM	.	.
3rd Hr.	/ .	%	%	PPM	PPM	.	.
4th Hr.	/ .	%	%	PPM	PPM	.	.
New Shift	/ .	%	%	PPM	PPM	.	.
New Shift	/ .	%	%	PPM	PPM	.	.
New Shift	/ .	%	%	PPM	PPM	.	.
Break	/ .	%	%	PPM	PPM	.	.
Break	/ .	%	%	PPM	PPM	.	.
Break	/ .	%	%	PPM	PPM	.	.

PROTECTIVE EQUIPMENT

Boxes marked with checks denote PPE to be used. This section must be filled out be Officer in Charge of Safety.

Clothing	Fire Extinguisher	Gloves	Boots
Safety Harness	Flashlight	Hard Hat	Hearing Protection
Safety Line	Gas Tester	Respirator(s)	SCBA/ELSA
Eye Protection		Other	

I HAVE READ THE ABOVE PREMIT AND WILL CARRY OUT THE WORK REQUIRED IN A SAFE MANNER.

SIGNATURE OF WORKER: SIGNATURE OF WORKER: .

SIGNATURE OF WORKER: . SIGNATURE OF WORKER: .

SIGNATURE OF WORKER:	SIGNATURE OF WORKER:

I have inspected the enclosed area described on the top of this form and state that the work can be done safely and in compliance with rules of the US Coast Guard, ABS, and any other authority whose rules I am bound to enforce.

OFFICER IN CHARGE OF SAFETY:	OFFICER IN CHARGE OF WORK:

MASTER:

WORK COMPLETED OR PERMIT VOIDED: DATE:

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PERMIT REVIEWED BY: DATE:

Original: Master's File

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PERMIT TO WORK ***LOCKOUT/TAGOUT*** **PERMIT**	Form: PTW_LOTO Date: Prep'd by: Apprv'd by: Page 1 of 1

This checklist must be completed prior to starting any _____. If any of the listed conditions change, then this permit is invalid and a new permit shall be issued before work continues.

VESSEL	**DATE & TIME**	**WORK TO START (TIME)**

Location and description of work to be done:

ALL QUESTIONS MUST BE ANSWERED TO PROCEED	YES	NO	N/A
1. Is the location of the maintenance work an enclosed space? NOTE: If YES, the proper Enclosed Space Entry permit must also be completed, authorized and attached.			
2. Does the maintenance work involve working aloft, outboard, or over the side? NOTE: if YES, the proper Working Aloft, Outboard and Over the Side Permit must also be completed, authorized and attached.			
3. Does the maintenance work involve any form of hotwork? NOTE: If YES, the proper Hot Work Permit also be completed, authorized and attached.			
4. Has the proper tagout/lockout procedure for the work detailed been carried out?			
5. Can maintenance work be done safely IAW NFPA requirements?			
6. Have all power supplies to the work area been isolated, fuses pulled, circuit breakers tripped and switches set to "OFF"?			
7. Have confirmation checks been carried out at the work position while remote and local power-on switching is carried out?			
8. Have ship's drawings been referenced to ensure all power supply routes to the work area are isolated?			
9. Have appropriate warning signs been placed on equipment switches and valves?			
10. If working on or near live electrical equipment, is a second man present who is competent in the treatment of electrical shock and is trained in fighting electrical fires and proper medical response?			
11. Have the tools and equipment been inspected prior to starting work and found to be in good condition?			
12. Have the workers done a Job Hazard Analysis in which clear instructions have been given on how to			

minimize or circumvent these hazards?			
13. Have the instructions and plans been discussed in case of an emergency?			

IF ANY CHECK MARKS MUST BE PLACED IN THE SHADED AREAS ABOVE, THEN THIS ITEM MUST BE RECTIFIED BEFORE PROCEEDING.

I HAVE READ THE ABOVE PERMIT AND WILL CARRY OUT THE WORK REQUIRED IN A SAFE MANNER.

SIGNATURE OF WORKER _____.
SIGNATURE OF WORKER _____.

SIGNATURE OF WORKER _____.
SIGNATURE OF WORKER _____.

SIGNATURE OF WORKER _____.
SIGNATURE OF WORKER _____.

I have inspected the area described on the top of this form and state that the work can be done safely and in compliance with rules of the US Coast Guard, ABS, and any other authority whose rules I am bound to enforce.

OFFICER IN CHARGE _____. MASTER _____.

OFFICE USE ONLY

PERMIT REVIEWED BY: _____.
DATE: _____.

Original: Master's File

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PERMIT TO WORK **WORKING ALOFT, OUTBOARD AND OVER THE SIDE PERMIT**	Form: PTW_OTS Date: Prep'd by: Apprv'd by: Page 1 of 2

This checklist must be completed prior to starting any work aloft, outboard or over the side. If any of the listed conditions change, then this Permit is invalid and a new permit shall be issued before work continues.

VESSEL	**DATE & TIME (MAX. 12 HRS)**	**WORK TO START (TIME)**

Location and Description of Work to be Done:

ALL QUESTIONS MUST BE ANSWERED TO PROCEED	YES	NO	N/A
1. Does the work involve any form of hot work? NOTE: If YES, the proper Hot Work Permit must also be completed, authorized and attached.			
2. Does the work involve any electrical maintenance work? NOTE: If YES, the proper Electrical Maintenance Work Permit also be completed, authorized and attached.			
3. If work is to be done on electrical equipment or any other energy sources, is the source locked out and tagged out and have all other lockout/tagout requirements been satisfied? NOTE: If YES the proper Lockout/Tagout Permit must also be completed, authorized and attached			
4. Have a safety harness and lifeline been provided, inspected and found in good order?			
5. If a safety net is rigged, has it been inspected and found in good order?			
6. If staging or ladders provided, have they been inspected and found in good order?			
7. If the work is overside, is the vessel stopped?			
8. If working near the ship's whistle, radio/radar antennae or other potentially hazardous equipment, are warning notices in place, lockout/tagout procedures carried out and the crew informed of work in progress?			
9. If working in the funnel area, has the Duty Engineer been notified to reduce the emission of steam, harmful gases and fumes as far as is practicable?			
10. Have ship's drawings been referenced to ensure the area is safe for working in?			
11. Has a safety man been provided?			
12. Have personnel been provided with the proper Personnel Protective Equipment (PPE)?			
13. If working outboard of the railings or over the side, are life vests provided?			
13a. Is a lifebuoy with sufficient line ready for immediate use?			
14. Have the correct tools and equipment required been provided?			
15. Have the tools and equipment been inspected prior to starting work and found to be in good condition?			

16. Has a tool belt or other tool storage device been provided?			
17. Are ropes available to raise/lower tools and equipment?			
18. If the work involves using a bosun's chair, are the workers trained in its use and has the equipment been tested prior to use?			
19. Have the workers done a Job Hazard Analysis in which clear instructions have been given on how to minimize or circumvent these targets?			
20. Have instructions and plans been discussed in case of an emergency?			

IF ANY CHECK MARKS MUST BE PLACED IN THE SHADED AREAS ABOVE, THEN THIS ITEM MUST BE RECTIFIED BEFORE PROCEEDING

CONTINUED NEXT PAGE

PERMIT TO WORK **WORKING ALOFT, OUTBOARD AND OVER THE SIDE PERMIT**	Form: PTW_OTS Date: Prep'd by: Apprv'd by: Page 2 of 2

PROTECTIVE EQUIPMENT

Boxes marked with checks denote PPE to be used. This section must be filled out by Officer in Charge of Safety.

Clothing	Fire Extinguisher	Gloves	Boots
Safety Harness	Flashlight	Hard Hat	Hearing Protection
Safety Line	Gas Tester	Respirator(s)	SCBA/ELSA
Eye Protection			Other

I HAVE READ THE ABOVE PERMIT AND WILL CARRY OUT THE WORK REQUIRED IN A SAFE MANNER.

SIGNATURE OF WORKER _____ SIGNATURE OF WORKER _____

SIGNATURE OF WORKER _____ SIGNATURE OF WORKER _____

SIGNATURE OF WORKER SIGNATURE OF WORKER

I inspected the enclosed area described on the top of this form and state that the work can be done and in compliance with rules of the US Coast Guard, ABS, and other authority whose rules I am bound to enforce.

OFFICER IN CHARGE OF SAFETY MASTER

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PERMIT REVIEWED BY: DATE:

Original: Master's File

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PERMIT TO WORK INSPECTION/REPAIR PERMIT CONDENSER/SEAWATER SYSTEM	Form: PTW_SWS Date: Prep'd by: Apprv'd by: Page 1 of 1

This checklist must be completed before beginning inspections or repairs to condensers or sea water systems where dismantling of the system is required, and watertight integrity depends on a single sea valve. Work shall not begin if any of the following precautions cannot be met. If any conditions listed in this permit change, then this Permit is invalid and a new permit shall be issued based on the new conditions before work continues.

IMPORTANT: Once valves are closed and tagged, all lock-out/tag-out procedures shall be followed. Condenser to be tested for leaks and closed up ASAP. Report any problems or deviations from the work plan to the Master, Chief Engineer and the Fleet Manager.

_____	_____	_____
VESSEL	**DATE & TIME (MAX. 12 HRS)**	**WORK TO START (TIME)**

Work Location	**Work Description**

To be Checked by the Master	**To be Checked by the Chief Engineer**	**To be Checked by the Officer in Charge**
o Conference held to review scope and technology aspects of the work. Emergency response plan made up o Communication established between job site and bridge (cargo control room if in port). o Emergency squad drill held using the damage control plan. All necessary emergency tools available o Weather forecast and sea conditions	o Isolation plans and procedures reviewed with emergency squad leaders and persons involved with the work. Schematic diagrams used to pinpoint all valves. o "Splash Zones" defined and electrical equipment protected as necessary. Electrical actuators including remote stations to be locked/tagged out. o Water-tight integrity proven with drain valves, and/or carefully loosening flange bolts. Condensers and piping can be pumped down to expedite the work, but pups cannot be used to maintain low water level. o All valves closed to isolate the system. Lock-out/tag-out procedures conducted as per Sec. 8. 10 of the Health & Safety Manual.	o Safe access or suitable work platform provided. o Only one door removed from each end of condenser at any time. o All other waterbox door openings are to remain in position (may be loosely bolted). o Responsible person (with walkie-talkie radio) in attendance at entrance of waterbox. o Condenser waterbox

checked for period of work. o Fleet Manager notified of work plan and schedule as appropriate.	o Normal emergency bilge pumps and valves tested and strainers cleaned for immediate use o Sufficient staff present on site for duration of work to immediately deal with any emergency situation.	ventilated and well lighted. o Rags and debris removed from waterbox promptly

I HAVE READ THE ABOVE PERMIT AND WILL CARRY OUT THE WORK REQUIRED IN A SAFE MANNER.

SIGNATURE OF WORKER _____ SIGNATURE OF WORKER_____

SIGNATURE OF WORKER _____ SIGNATURE OF WORKER

Master	Chief Engineer	Officer in Charge

Work Started Date/Time	Work Completed Date/Time

OFFICE USE ONLY

PERMIT REVIEWED BY:_____

DATE:_____

Original:	Master's File
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PERMIT TO WORK UNDERWATER WORK PERMIT	Form: PTW_EMW Date: Prep'd by: Apprv'd by: Page 1 of 1

Complete this permit before beginning diver operations. Work shall not begin if any of the following precautions cannot be met. If any conditions listed change, then this Permit is invalid and a new permit shall be issued before work continues.

_____	_____	_____
VESSEL	**DATE & TIME (MAX. 12 HRS)**	**WORK TO START (TIME)**

Work Location	**Work Description**

General Precautions (Always read and initial.)

Master's Initials

_____Master has determined that the diver assisted work plan/procedure is safe.
_____Precautions have been explained to all personnel involved.
_____Deck/engine watch have been notified when work is to begin and when expected to be completed.
_____Other vessels or bunker barges not alongside during diving operations.
____No other operations such as cargo, ballast movement, storing, etc. while the diver is in the water.
_____Engine room notified not to start up or stop any machinery which would change the status of the overboard discharges and intakes.
_____Terminal, Port Authority and Government approvals obtained as necessary.
_____All personnel advised of "Tagged-out" or "Locked-out" valves and proper procedures followed.

To Be Confirmed By Master	**To Be Confirmed By Chief Engineer**

☐ Fleet Manager required concurrence obtained ☐ Emergency Response Plan discussed & agreed. ☐ Safety Meeting held & job scope/technical aspects clarified. ☐ Diver's additional safety request/or instruction agreed. ☐ Diver constantly available and ready to dive on short notice. ☐ Deck officer in way of diving location has adequate personnel to handle diving boat mooring lines, etc.	☐ Propeller status agreed. ☐ Code flag "A" hoisted. ☐ Walkie-talkie radios and communication between dive boat, deck, bridge watch officer and watch engineer tested. ☐ Weather forecast obtained and suitable for the work period. ☐ Sea condition checked and found acceptable for the work.	☐ Work plan made. ☐ Diver advised of sea intakes or overboard discharges actually in use. ☐ Diver properly instructed/informed about intakes and overboard discharges in use and shown location of same on drawings. ☐ Main engine isolated or turning gear tagged-out or locked out. ☐ Bilge pumps are lined up and valves have been test operated. ☐ Diver instructed as to location of HFO, DO & LO tanks.	☐ All sea intakes/or overboard discharge lines not in use secured by double valve protection to reduce risk of siphon effect and locked / tagged out. ☐ Method of sea chest/piping blanking agreed. ☐ Inboard blank flanges prepared and ready for installation. ☐ Cathodic protection off. ☐ Senior Engineer to be at the repair site to verify the inboard blank flange is secured. ☐ All applicable emergency tools, materials, equipment checked and ready for use.

Master:	**Chief Engineer:**	**Diver:**

Start Date/Time	**Completed Date/Time**	**Overside Blank Installed Date/Time**	**Overside Blank Removed Date/Time**

OFFICE USE ONLY

PERMIT REVIEWED BY:_____

DATE:

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19 ENVIRONMENTAL CONCERNS

This section describes policies, procedures, and responsibilities regarding protection of the environment.

19.1 GENERAL

Environmental protection is a continuing concern at all levels of Government and to the public in general. The pollution of air, water, and land has resulted in the enactment of strict pollution control laws. It is imperative that MARAD RRF personnel, Ship Manager and Ship Manager employees be aware of the laws and programs for abating and controlling the release of harmful pollutants.

Note: MARAD has revised and update the Non-tank Vessel Response Plan (NTVRP) and SOPEP for RRF vessels into one document referred to as the NTVRP/SOPEP. Normally MARAD NTVRP/SOPEP applies during Phase O. MSC instructions apply only when specifically order in the activation order.

19.1.1 Directives

NOTE: Whenever a Change (CH) to an instruction is cited, the Ship Manager shall use the latest CH available. MARAD will cite the change at the time the contract is issued. MSC can provide the latest CH is requested.

MARAD maintains different response plans for oil or hazardous material spills from RRF vessels as follows:

- VRP "Vessel Response Plan" Required by 33 CFR 155 and OPA-90 for tank vessels. MARAD's plans have been approved by the USCG. For tankers: the VRP and SOPEP are combined into one plan.
- SOPEP ..."Shipboard Oil Pollution Emergency Plan" required by 33 CFR 151 and MARPOL 73/78 Regulation 26 for all vessels. MARAD's plans have been approved by the USCG. The non-tank vessel response plan (NTVRP) and the SOPEP are combined into one document called the Non-Tank Vessel Reponse Plan./Shipboard Oil Pollution Emergency Plan (NTVRPSOPEP).
- COMSCINST 5090.1B Ch-1 Military Sealift Command's "Environmental Protection Program" (all RRF)
  COMSCINST 5090.5 Ch-1 (Tankers) - VRP
  COMSCINST 5090.6 Ch-1 (Non-tankers) SOPEP are to be complied with by all vessels under MSC OPCON.
- ERP "Emergency Response Plan for Oil or Hazardous Material Spills" at the National Defense Reserve Fleets, issued by MARAD. RRF ships do not have this plan on board in the NDRF.
- Section 29 of this Manual -- RESERVED

The following description contains the situation and applicable plan:

SITUATION	APPLICABLE PLAN
RRF Tankers operating under MARAD OPCON in waters under USCG jurisdiction	VRP
RRF Dry cargo vessels operating under MARAD OPCON in waters under USCG jurisdiction	SOPEP
All RRF vessels operating under MARAD OPCON other than waters	SOPEP

under USCG jurisdiction.	
All ROS crewed vessels laid up at outport berths	SOPEP
All unmanned vessels laid up at NDRF locations, temporary berths, ship repair facilities, or under tow.	ERP
WHEN SPECIFICALLY ORDERED IN THE MSC ACTIVATION ORDER:	
RRF Tankers operating under MSC OPCON in any waters	**COMSCINST 5090.1B CH-1 and COMSCINST 5090.5 CH-1.**
RRF non-tankers in any waters under MSC OPCON	**COMSCINST 5090.1B CH-1 and 5090.6 CH-1.**

19.1.1.1 Location of Each Directive

RRF tankers will have their own VRP with USCG letter of approval or current document reference, and COMSCINST 5090.1B CH-1 and COMSCINST 5090.5 CH-1in the standard administrative file.

RRF dry cargo vessels will have their own SOPEP with USCG letter of approval or current approval reference and COMSCINST 5090.1B CH-1 and COMSC 5090.6 CH-1 in the standard administrative file.

Each MARAD region SOMO, as the Qualified Individual (QI), will have a copy of the VRP and NTVRP/SOPEP, with USCG letter of approval for each vessel under the region, and a copy of their fleet ERP and COMSCINST 5090.1B CH-1, COMSCINST 5090.5 CH-1 and COMSCINST 5090.6 CH-1. These documents are readily available to Region Alternate QI's (AQI's).

Each MARAD Fleet Superintendent has a facility and fleet ERP. The documents are readily available to Alternate QIs at the fleets.

Ship Managers will familiarize themselves with the VRP and SOPEP copies aoard RRF vessels in the standard administrative cabinet usually found in the Master's office and COMSCINST 50090.1B CH-1 (All RRF Ships), COMSCINST 5090.5 CH-1 (Tankers) and COMSCINST 5090.6 CH-1 (Non-Tankers) copies of which are also contained in the aforesaid standard administrative cabinet. Ship Managers desiring copies for corporate office retention must reproduce them at their expense.

Each RRF cargo vessel will have its SOPEP with current USCG approval reference, COMSCINST 5090.1B CH-1 and COMSCINST 5090,6 CH-1 in the standard administrative cabinet.

Each RRF tanker will have its VRP with current USCG approval reference, COMSCINST 5090.1B CH-1 and COMSCINST 5090.5 CH-1 in the standard administrative cabinet.

Each MARAD region SOMO, as the Qualified Individual (QI), will have a copy of the VRP and SOPEP, with USCG letter of approval for each vessel under the region, and copies of the ERP and COMSCINST 5090.1B CH-1 , 5090.5 CH-1 and 5090.6 CH-1. These documents are readily available to the region Alternate QIs. (AQIs)

Questions regarding the VRP, SOPEP, ERP, and COMSCINST 5090.1B CH-1, 5090.5 CH-1, 5090.6 CH-1 should be addressed to MAR-612.

19.1.1.2 Responsibilities Regarding Directives

The Ship Manager is responsible for being familiar with these documents and carrying out the procedures contained therein. Ship Managers shall use the MARAD SOPEP/VRPs for MARAD vessels in lieu of corporate SOPEP/VRPs.

Questions regarding the VRP, SOPEP, ERP, or COMSCINSTR 5090.1B should be addressed to MAR-612.

19.1.2 Pertinent Environmental Regulations

MARPOL Annex I: Regulations for the Prevention of Pollution by Oil (implemented in 33 CFR 151 et seq.)

MARPOL Annex II: Regulations for the Control of Pollution by Noxious Substances (implemented in 33 CFR 151 et seq.)

MARPOL Annex IV: Regulations for the Prevention of Pollution by Sewage from Ships.

MARPOL Annex V" Regulations for the Prevention of Pollution by Garbage from Ships

(implemented in 33 CFR 151 et seq., includes ballast water management.)
MARPOL Annex VI: Prevention of Air Pollution from Ships.
APPS: Act to Prevent Pollution from Ships implements MARPOL.
RCRA: Resource Conservation and Recovery Act (40 CFR 260 et seq.) pertains to the handling, storage, and disposal of solid and hazardous wastes.
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act includes long-term liability associated with generators or owners of disposed/discarded hazardous wastes.
CAA: Clean Air Act (40 CFR 50 et seq.) includes the regulation of asbestos activities, ozone depleting substances, VOCs, stack emissions and incinerator emissions at port facilities.
CWA: Clean Water Act (40 CFR 112 et seq.) pertains to the discharge activities of ship repair and port facilities.

19.1.2.1 Location of These Environmental Regulations

CFRs are available via the Internet at the EPA website www.epa.gov/**.**

19.1.2.2 Responsibility Regarding Regulations

Ship Managers must be knowledgeable in the regulations that pertain to vessel operations and shipyard/repair activities and ensure that these regulations are complied with. Questions regarding this section shall be forwarded to MAR-611 who will coordinate with MAR-820 and provide guidance.

19.2 HAZARDOUS MATERIALS POLICY

The term "hazardous material", as used in this section, is as defined for hazardous chemicals in 29 CFR 1910.1200, the U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, and the Emergency Planning and Community's Right-To-Know Act.
All RRF ships will comply to the maximum extent practicable with all federal, state, local, and foreign hazardous material and hazardous waste regulations. In foreign ports, Masters of RRF ships will conform with USCG, OSHA and EPA laws and regulations where foreign regulations are less stringent.

19.2.1 Ordering, Transfer, and Use of Hazardous Materials

Ship Managers should screen all consumable requisitions to identify hazardous materials. If a requisition for a hazardous material does not appear valid, based on common sense and shipboard experience, it should be determined if there is a valid requirement prior to placing the order.
No RRF ship shall transfer (donate) hazardous materials or hazardous waste to any private sector, state or local/city agency.

19.2.1.1 Labeling of Shipboard Hazardous Materials (All Phases)

The Department of Transportation (DOT) regulates hazardous materials marking and labeling for all modes of shipment. The Department of Labor (OSHA) Hazardous Communications Standard applies to the occupational use of hazardous material The labeling requirements of OSHA standards require that containers of hazardous materials be labeled, tagged, or marked with the identify of the hazardous material, appropriate hazardous warning, and the name and address of the manufacturer, importer, or other

responsible party. The intent is to allow the users to make an informed decision on how to use and store hazardous material in a safe manner.
Ship Managers ordering hazardous material are responsible for complying with safety precautions from procurement through disposal, (life cycle management.) Marking, labeling, stowing should be accomplished by use of information contained in Material Safety Data Sheets (MSDS.)
Ship Manager procurement of hazardous materials will require that an MSDS accompany the material and that safety precautions and directions for use and stowage be clearly stated on all hazardous material containers. Ship Managers and RRF ship Masters will ensure that proper labels or markings are placed on containers when hazardous materials are transferred to other containers from shipping containers.
Ship Managers will ensure that procedures are in place onboard assigned RRF ships to:

(1) limit issuance of hazardous materials to essential needs,
(2) require workers to follow MSDS instructions when using hazardous materials, and
(3) ensure that such materials are returned to appropriate stowage upon completion of use or at the end of the work day, whichever is sooner. I.

Ship Managers will comply with the requirements for disposal of hazardous materials as required by 40 CFR 260et. seq.,, state and local regulations.

19.2.1.2 Special Hazardous Materials requirements for Phase O
RRF ships shall not dispose of any paint, solvent, chemical, acid or any other potentially toxic or hazardous material over the side. Such materials must be retained onboard for discharge ashore. Hazardous materials may be jettisoned only if the Master believes this action will prevent or substantially reduce hazards to life and property.
Throughout Phase O, RRF ship crews should attempt to minimize the generation of hazardous waste.

- Near the end of an RRF ship's operational period (on its return voyage), Ship Manager shall make every effort to have HAZMAT especially in partially filled containers, be fully consumed so as to minimize disposal requirements during lay-up. This will also keep onboard inventories at a minimum while the vessel is in retention status check to see if this is moved to another section.

19.2.2 Handling Hazardous Materials and Hazardous Cargo (All Phases).
The Ship Manager is responsible for the proper handling of hazardous material and cargo for the assigned ship(s) in all Phases. These materials may include, but not be limited to, corrosives, oxidizers, compressed gasses, petroleum products, solvents, paints, and other chemicals. All such materials shall be handled and secured IAW Titles 29, 46, and 49 of the Code of Federal Regulations, applicable USCG directives, and applicable COMSCINSTs .
A MSDS must accompany all hazardous materials IAW 29 CFR 1910.120.
The Ship Manager is responsible for the handling of hazardous cargo in all phases, although this is most likely to occur in Phase O Operations. Hazardous cargoes include materials such as explosives, ammunition, and certain grades of petroleum products. Additional costs for handling hazardous cargoes, including extra crew wages, are reimbursable to the extent that the cost exceeds basic compensation already provided for in this contract. It is the Ship Manager's responsibility to provide any required training in the handling of hazardous materials for his direct staff.

19.2.3 Hazardous Materials Inventory

A minimum level of hazardous material may be retained onboard ROS vessels as well as RRF-10, and RRF-20 vessels. However, those materials may be left onboard only if their containers are in good condition and they have a shelf life (or expiration date) of greater than 2 years (from the time the vessel is deactivated.) No hazardous materials shall be retained aboard RRF-30 vessels.

The Ship Manager must develop and maintain an inventory of all hazardous materials onboard. This inventory must include:

- Name of material and manufacturer
- Quantity and size of containers
- Storage location,
- Condition of Containers
- Shelf life information (if available)

19.2.3.1 Development and Verification of the Hazardous Materials Inventory

The inventory shall be provided to MARAD by the Ship Manager at the end of a vessel's deactivation and/or completion of a repair availability. If neither have occurred, the inventory will be verified and updated on an annual basis. If no changes have occurred, the date of the existing inventory shall be updated and the Ship Manager shall provide written notification to the COTR (and if the ship is at a Fleet site, to the Fleet Occupational Health and Safety Specialist) that no changes have occurred.

As part of the inventory process, the Ship Manager shall conduct a joint survey with the MARAD COTR to:

- Determine/verify the physical inventory of all hazardous materials, solvents, chemicals, and waste products of known and unknown classification, and
- an assessment of their containers.

For ships that will be returning to a Reserve Fleet site, the Ship Manager will notify the reserve fleet or region environmental representative of the plan for a joint survey. Based upon the results of the survey, the MARAD representative will make a determination as to the retention or removal of any hazardous materials.. Waste shall be removed as required.

19.2.3.2 Distribution of the Hazardous Material Inventory

Four (4) bright yellow folders will be prepared and labeled "SHIP'S NAME -- INVENTORY OF HAZARDOUS MATERIALS ABOARD" Each folder will contain a copy of the inventory and copies of the complete set of all appropriate MSDS for the inventoried materials. Distribution of the folders and their contents shall be as follows:

- Ship's records in the vessel Chief Engineer's office
- Ship Manager's corporate office
- MARAD Region Office (COTR) files
- Reserve Fleet Occupational Safety and Health Officer (specialist's) Office when the vessel is retained at an NDRF site.

19.2.3.3 Hazardous Material Retention -- General

The stowage locations of hazardous materials, solvents and chemicals aboard the vessel will be as directed by the MARAD Marine Surveyor. The physical containment and stowage

of these materials aboard the vessel must comply with applicable Federal regulations, in general shall consider the following:

- preventing deterioration of containers from moisture or other environmental insult
- preventing spillage/turnover of any container in a moderate sea.
- inhibiting or eliminating leakage and breakage of the containers which could produce poisonous gases, flammable atmospheres, chemical corrosion, or spontaneous chemical combustion.
- Presenting incompatible storage or co-mingling that could procedure poisonous gasses, flammable atmospheres, chemical corrosion, or spontaneous chemical combustion.

Storage of packaged fuels, lubricants, solvents, paints, chemical and other hazardous materials will be in authorized and protected spaces. A portable fire extinguisher of a type suitable for the material stowed therein will be installed outside the door to those authorized spaces not equipped with an installed fire suppressant.

The door to each stowage location will be posted with appropriate signs, e.g., "WARNING -- FLAMMABLE MATERIALS STOWED INSIDE". If the door is not marked, it is the Ship manager's responsibility to mark it and keep the marking current.

All refrigeration and air conditioning equipment receivers, halon, and refrigerant storage cylinders will be labeled or stenciled with appropriate lettering/numerals identifying the specific type of fluorocarbons stored therein. (See section on "ozone depleting compounds".

All retained chemicals onboard vessels shall be documented by the Ship Manager in the shipboard hazardous materials inventory.

19.2.4 Hazardous Materials Retention Policy for Ships at NDRF Sites

No ship will be allowed to enter a Reserve Fleet Site until it has been inspected by a MARAD region or Reserve Fleet Environmental Representative for hazardous materials. Those hazardous materials which are retained onboard must be properly contained, covered, labeled, inventoried, and stowed. MSDS must be included as part of the inventory.. In no case will ships enter Reserve Fleet Sites with unlabeled hazardous materials or wastes onboard. The inventory must be provided to the Fleet Occupational Health and Safety Officer (specialist) at the time the vessel arrives at the fleet or on an annual basis if the vessel remains in the fleet.

Normally hazardous materials are retained onboard to the extent they are required for preservation or activation of the vessel. Only those hazardous materials in unopened, proper and structurally sound containers, having a shelf-life in excess of two years may be retained onboard. Any exceptions to this must be approved by the Fleet Superintendent. The decision to retain hazardous material onboard must be coordinated with the Fleet Superintendent and should include factors such as, but not limited to, climate, retention maintenance, readiness status, fire fighting and spill response capabilities. Fuel, bulk lube/hydraulic oils stored in double bottoms, deep tanks, settlers, sumps, machinery crankcases, power assembly receivers, designated storage tanks, day tanks, etc., materials and containers with fluorocarbons, greases, oils, solvents, rust inhibitors, slushing compounds, preservatives, etc., used for Phase M maintenance may be retained with permission of the Fleet Superintendent.

For vessels maintained in Reserve Fleet sites, Ship Managers shall coordinate their hazardous materials procedures with the Fleet Superintendent

19.2.5 Hazardous Materials Retention Policy for Ships at ROS Layberths

In addition to hazardous materials required to activate the vessel to full operating status, ROS Ship Managers shall maintain the minimal amount of properly identified hazardous materials required for Phase M Maintenance Procedures and general ROS operations aboard ROS vessels. Material to be retained aboard the ROS vessel includes:

- Bulk lubricating/hydraulic oils and fuel oils. This includes lubricating/hydraulic oils stored in designated settlers, storage and head tanks, equipment sumps, machinery crankcases, power assembly receivers, etc.
- Fuels oils stored in double bottoms, deep tanks, settlers, designated storage tanks, etc.
- Fluorocarbons stored in the receivers of refrigeration and air conditioning systems.
- Maintenance related items, in easily resealable, properly labeled and structurally sound containers, barrels, drums, cans, etc. Examples include: greases and grease removers and cleaners; cleaning solvents; aerosol type solvents, rust inhibitors, electrical dryers/cleaners and the like; lubricants and hydraulic oils; paint, paint thinners and solvents; wire slushing compounds; preservatives; etc.

ROS Ship Managers shall maintain the minimal amount of properly identified hazardous materials required for Phase M Maintenance Procedures, general ROS operations aboard ROS vessels, and potential transition to full operating status.

Analysis of unknown substances for identification purposes is reimbursable. Hazardous waste disposal utilizing properly permitted transporters and treatment/storage/disposal facilities, is reimbursable. No disposal shall occur without prior approval of the Marine Surveyor.

Normally, only those hazardous materials, solvents, and chemicals in unopened, legibly labeled packages and containers and in structurally sound containers, having a shelf life in excess of two years may be selected for retention onboard. Exceptions may be made as appropriate such as broached containers of lubricants, hydraulic oil, gear and slushing grease, etc.

Note: if the shelf life is greater than two years but there is doubt about the ability of the container to withstand a two year storage period, the item should be disposed of appropriately.

19.2.6 Hazardous Materials Retention Policy For RRF Ships at Ship Repair Facilities

The Ship Manager is responsible for disposal of used or unidentifiable hazardous materials and hazardous materials with an expired shelf life.. These items should be identified prior to a repair availability, and their removal appropriately arranged for.

Disposal costs for these shipboard wastes are reimbursable provided proper analytical data and disposal documentation are supplied with the invoice. Proper analytical data are those analyses required by the disposal facility to characterize the waste. This requirement is sometimes satisfied with an MSDS, but in many situations a laboratory analysis is required. The Ship Manager shall document the disposal facility's analytical requirements for a given waste. Disposal documentation may consist of a hazardous waste manifest, a trip ticket to a waste oil recycling facility, or sufficient paperwork to document that the proper, legal method was used and the ultimate disposition of the waste.

The industrial facility has the responsibility for the removal and disposal of materials and wastes generated in the course of performing the requirements under its contract, whether

for repair, overhaul or activation/deactivation. In this case, the industrial facility shall be considered "Generator" of the wastes. The Ship Manager shall insure at the completion of the contract that a copy of all proper disposal-related documents for wastes generated by the industrial facility aboard the vessel are provided to the MARAD COTR. These documents shall be provided to the COTR no later than 60 days after the completion of the contract.

19.3 HAZARDOUS WASTE POLICY

Upon direction by the MARAD COTR, the Ship Manager shall obtain EPA identification numbers on behalf of MARAD. See Section 11 of this Manual. No disposal paperwork requiring EPA Identification numbers shall be initiated by the Ship Manager without prior approval by the COTR. In many states, EPA Identification numbers are not required where hazardous waste generation does not exceed 100 kg in a one-month period. Ship Managers must ensure that organizations and facilities used for both the transportation and disposal have current and valid permits and EPA Identification numbers. All paperwork associated with the disposal of a hazardous or solid waste must be provided to the COTR at the completion of a disposal activity, no later than 60 days after the event.

The term "hazardous waste" is any discarded material, liquid, solid, or gaseous, which meets the definition of a hazardous material and/or is designated a hazardous waste by 40 CFR 261.3, et seq.

A "generator" of a hazardous waste (per 40 CFR 260.10) is any person, by site, whose act or process produces a hazardous waste... or whose act first causes a hazardous waste to become subject to regulation.

The Federal Facilities Compliance Act clarifies the regulations concerning military ships and other public vessels for the generation and storage of hazardous waste. The law specifies that the vessel shall not be subject to the storage, manifest, inspection, or recordkeeping requirements of the Resource Conservation and Recovery Act (RCRA) until the waste is transferred to a shore facility. However, the RCRA rules would apply if:

- The waste is stored on the vessel for more than 90 days after the vessel is placed "in reserve or otherwise is not longer in service," or
- The waste is transferred to another vessel, within the territorial waters of the United States, and the waste is stored for 90 days after the date of transfer.

The inventory, storage and/or disposal procedures for hazardous waste are governed by voluminous sets of Federal, State, and in most cases, local rules and regulations which address classification, labeling, handling, transportation, disposal and recordkeeping requirements. It is impossible to abbreviate these rules and regulations, however, both MARAD and the Ship Manager have hazardous waste, hazardous regulation compliance responsibilities.

If at any time there is doubt in the Ship Manager's mind with respect to compliance, the Ship Manager shall consult the MARAD COTR or MARAD regional environmental representative. If HQ input is required, the MARAD COTR will coordinate agency response via MAR-611.

19.3.1 Hazardous Waste Disposal Guidance for Ships at NDRF Sites

Hazardous wastes are defined in 40 CFR 261.3. Also included are all hazardous materials whose containers have deteriorated and anything in an unmarked container.

All materials that are in opened or partially filled packages/containers, or in containers/packages in which it is not possible to identify the contents, or in packages/containers of questionable structural integrity and durability must be removed from the vessel and properly disposed of in accordance with Federal, state, and local regulations.
No hazardous waste generation activities shall occur at the NDRF sites.
Preparation for hazardous waste disposal includes identification of the material to be disposed of (see TE-5 Logistics Management Manual). If a Ship Manager requires a chemical analysis in order to identify the disposition of an onboard unmarked material, the analysis is reimbursable. However, Ship Managers shall instruct personnel to take care in retaining labels on materials.
All materials that are:

- in opened or partially filled packages/containers, or
- in packages/containers in which it is not possible to identify the contents, or
- in packages/containers of questionable structural integrity and durability must be removed from the vessel and properly disposed of in accordance with federal, state and local regulations. The Ship Manager shall remove all questionable material from the vessel at the time of repair availabilities to prevent the situation of having to dispose of hazardous wastes from reserve fleet sites.

19.3.2 Hazardous Waste Disposal Procedures

Disposal of hazardous waste, in some cases, will require the Ship Manger to determine who the generator of the waste is. When wastes are generated during the course of vessel operations, the vessel is the generating entity; the Ship Manager must begin the process of disposing of a potential hazardous waste from the generator's point of view. When wastes are generated during the course of a contract (and the actions of the Contractor cause the waste to be generated), the Ship Manager must insure that the Contractor begins and completes the process of disposing of the waste as the generator.

Is the waste hazardous?

Once an item has been designated for disposal, the generator must make the determination as to waste type. This is typically accomplished via laboratory analysis. A solid waste is considered a hazardous waste, per 40 CFR 261.3, if it is not excluded from the regulations or if it meets any of the following criteria: exhibits the characteristic of ignitability, corrosivity, reactivity or toxicity, or is a listed waste. It is important to understand that many states have the authority to regulate the disposition of hazardous wastes; the appropriate state agencies must be contacted for disposal guidance as well. The Ship Manager must be aware of the need to verify the requirements of state environmental agencies to insure proper disposal is arranged for.

What is the generator classification?

Per 40 CFR 261.5 and in many states, entities generating less than 100 kg per month of hazardous waste are considered Conditionally Exempt Small Quantity Generators (CESQG) and are not as strictly regulated as larger generators. The Ship Manager shall make every attempt to keep the generation of shipboard hazardous wastes to a minimum and shall contact the cognizant state authorities to determine the generator requirements for that state. No hazardous wastes shall be co-mingled with non-hazardous wastes. The

Ship Manager shall make every attempt to insure that Contractor-generated wastes are not disposed of as ship-generated wastes. The Ship Manager, based on the waste generation level, may have to acquire an EPA Identification number on behalf of MARAD. No disposal paperwork requiring EPA Identification numbers shall be initiated by the Ship Manager without prior approval by the COTR.

The disposal manifest

Disposal of hazardous waste requires the use of a multicopy shipping manifest to track the movement of the waste as it moves through the disposal process. Each time the custody of the hazardous waste changes, the manifest must be signed by the accepting party. Although a CESQG may not be required to acquire an EPA Identification number, the waste transporter or disposal facility may require the use of a manifest. If a manifest is used and the Ship Manager is the generator of the waste, a completed copy of the manifest will be provided back to the generator. A copy of the completed manifest must be provided to the COTR. If a Contractor is the generator of the waste, the Ship Manager shall get a copy of the completed manifest and provide it to the COTR. At the time the completed manifests are provided to the COTR, copies of applicable test results, waste analyses or other determinations relating to the disposition of the waste shall also be provided. All documents shall be provided no later than 60 days after the completion of the contract. If the disposal activity is not associated with a repair contract, then all paperwork must be provided to the COTR no later than 60 days after the waste is transported from the site.

Generally, completed copies of manifests are provided back to generators within 45 days of the removal of the wastes from the site.

Hazardous materials and wastes cannot leave the vessel for disposal or be transported without being in approved containers, properly labeled, and with an MSDS available for attachment to the manifest. In the event a MSDS is not available, the applicable laboratory analysis must be available for waste identification purposes. In addition, DOT placards must also be available or provided by the transporter.

Disposal Sites

Disposal shall be accomplished by properly certified disposal companies at EPA (or State, when applicable) certified (permitted) disposal sites.

19.4 OZONE DEPLETING COMPOUNDS

In accordance with section 608 of the Clean Air Act of 1990, all Ship Managers will ensure that anyone servicing refrigeration or air conditioning equipment is certified with EPA and that a record is kept of any handling of or maintenance to chloroflurocarbon (CFC) and hydrochloroflurocarbon (HCFC) refrigeration systems. MARAD regional offices will issue detailed instructions on procedures and format of the log. This log will be maintained on the ship.

THE DELIBERATE DISCHARGE OF OZONE DEPLETING COMPOUNDS TO THE ATMOSPHERE DURING THE SERVICING, DISCHARGE, OR DISPOSAL OF REFRIGERATION OR AIR CONDITIONING EQUIPMENT IS ILLEGAL. ANYONE SERVICING THIS EQUIPMENT MUST BE CERTIFIED WITH THE EPA. A RECORD MUST BE KEPT OF ANY HANDLING OF OR MAINTENANCE TO CHLOROFLUROCARGON (CFC) AND HYDROCHLOROFLUROCARBON (HCFC)

REFRIGERATION SYSTEMS. ALL RECORDS SHOULD BE MAINTAINED ONBOARD THE VESSEL AND BE READY FOR REVIEW.
The Ship Manager shall report each occurrence using the following format:
REFRIGERATION MAINTENANCE RECORD DATE:
Vessel Name: _____ Location
Status: (circle one) Activation Deactivation ROS Laid-up Operational
System/Location"
Reason for Maintenance:
Corrective Action:
Refrigeration Added: _____ LBS. Bottle No(s):
Refrigeration Removed: _____ LBS Bottle No(s)
Oil Added: QTY ..... Brand:
Refrigeration Supplied to Vessel: _____ LBS Bottle No(s)
Refrigeration Removed fr Vessel_____ LBS Bottle No(s)
Serviced By:
Name: Position:
Comments:
_____
_____
_____

19.5 POLLUTION PREVENTION -- GENERAL
All RRF ships will comply to the maximum extent practicable with all federal, state, local, and foreign pollution abatement and control regulations. Ship Managers and Masters of RRF ships will take all appropriate actions within their authority to minimize shipboard activities that could lead to polluting the environment. When under MSC operational control, RRF ships must also comply with applicable MSC Instructions.

19.6 OIL POLLUTION (ALL PHASES)
As Public Vessels, the RRF is exempt from most requirements of the Oil Pollution Act of 1990 (OPA-90) and the subsequent regulatory requirements of the USCG in 33 CFR. Since it is MARAD's stated environmental policy to comply with as many requirements as is feasible and practical, RRF vessels will conform as outlined below:

a. MARAD requires compliance with the following requirements as normal operation standards and will continue to do so without further specific action.
(1) Reporting of Marine Casualties (33 CFR 151.15);
(2) Autopilot/Unattended Engineroom (33 CFR 164);
(3) Manning Standards (46 CFR 33);
(4) Second Licensed Officer (46 CFR 35).

b. MARAD has complied with the requirements for a Vessel Response Plan (VRP) (33 CFR 155.1010) and a Non-Tank Vessel Response Plan/Shipboard Oil Pollution Emergency Plan (NTVRP/SOPEP) (33 CFR 151). ROS vessels will use these plans vis-à-vis response actions to oil or hazardous material spills.

c. As funding, and individual ship repair cycles permit, MARAD will procure, install, and maintain Tank Overfill Devices (33 CFR 155); Tank Outflow Protection (33 CFR 156); Discharge Removal Equipment (33 CFR 155.205); **Emergency Towing** Capability (33

CFR 155.235); Damage Stability Information (33 CFR 155.240); and Containment of Oil (33 CFR 155.310).

19.6.1 Regulations Governing the Discharge of Oil and Oily Mixtures (All Phases)

The regulations that prohibit and/or restrict the discharge of oil and oily mixtures are dependent on a ship's geographic location. Ship Managers shall know the regulations and their applicability and shall comply with these regulations.

In the Navigable Waters and Contiguous Zone of the U.S.

The Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), as implemented by 40 CFR Part 110, governs the discharge of oil and oily mixtures in the navigable waters and contiguous zone of the United States. The FWPCA prohibits any oil or oily mixture discharge into or upon the navigable waters and contiguous zone of the U.S. The "contiguous zone" extends to 12 nautical miles from the nearest U.S. land.

Outside the Navigable Waters and Contiguous Zone of the U. S. The Act to Prevent Pollution from Ships, as amended, and MARPOL 73/78, as implemented by 33 CFR 151 et seq (Subchapter O Pollution,) prohibits and/or restricts the discharge of oil or oily mixtures outside the navigable waters and contiguous zone of the U.S.

(1) Refer to 33 CFR Subchapter O for specific prohibitions and conditions that must be satisfied before discharging any oil and oily mixtures. Regulations for dry cargo ships are provided in Parts 151.10 through 151.13. Regulations for tankers are provided in Parts 151.10 through 151.13 and 157.37.

(2) If the restrictions cannot be satisfied, oil or oily mixtures must be retained onboard or discharged to a reception facility ashore. Emergencies are the only exception.

(3) 33 CFR Subchapter O establishes three geographic areas, each with its own discharge prohibitions/restrictions:

• Special areas (i.e., Mediterranean, Baltic, Black and Red Sea areas and the Gulf area as defined in 33 CFR 151.13).

• Outside special areas and within 12 nautical miles from the nearest land.

• Outside special areas and more than 12 nautical miles from the nearest land.

(4) 33 CFR Subchapter O also establishes requirements for maintaining an Oil Record Book and the requirement for certain tankers and other ships to have valid International Oil Pollution Prevention (IOPP) Certificates.

19.6.2 MARAD and MSC Directives Governing the Discharge of Oil and Oily Mixtures (All Phases)

MARAD Emergency Response Plan for Oil and Hazardous Materials Spills). MARAD Headquarters, Office of Ship Operations promulgated an Emergency Response Plan for Oil and Hazardous Materials Spills to implement the requirements of 33 CFR Part 153, 40 CFR Part 300, and the FWPCA. The Emergency Response Plan applies to all MARAD personnel, Ship Managers, General Agents, Ship Repair Contractors, and Layberth Operators in the event of an oil or hazardous material spill involving:

(1) RRF/NDRF vessels at Reserve Fleet Sites,

(2) outported RRF vessels at layberths,

(3) RRF/NDRF vessels undergoing repairs at commercial facilities (including activation and lay-up),

(4) RRF/NDRF vessels under tow.

MARAD Shipboard Oil Pollution Emergency Plan (SOPEP)/ Vessel Response Plan (VRP)
These plans have been developed by MARAD Headquarters, Office of Ship Operations, to implement 33 CFR Parts 151 and 155. The SOPEP is to be used for dry cargo vessels under MARAD operational control in waters under USCG jurisdiction, and for all vessels under MARAD operational control in waters other than under USCG jurisdiction. The VRP is to be used for tankers under MARAD operational control in waters under USCG jurisdiction. The Ship Manager shall use the MARAD plans versus corporate plans.

19.6.3 Reporting Oil Spills/Discharges (All Phases)

Reporting procedures for oil pollution incidents vary based on RRF Program phase.
Phases IV, V. Reporting procedures are provided in the MARAD Emergency Response Plan (ERP) for Oil and Hazardous Materials Spills. The ERP applies to all MARAD personnel, Ship Managers, General Agents, Ship Repair Contractors, and Layberth Operators. If a vessel is in Phase M and underway under its own power, reporting procedures to be followed are found in the Shipboard Oil Pollution Emergency Plan (SOPEP) for dry cargo vessels and the Vessel Response Plan (VRP) for tankers.
MARAD's QI's and Alternate QI's have limited authority to obligate funds required to order emergency spill clean-up services under USCG Basic Ordering Agreements (BOAs) in place with various commercial oil spill response organizations. Instructions for utilizing BOAs are contained in the Department of Transportation -- Maritime Administration Headquarters and Regional Offices: How to Order for Clean-up of Oil/Hazardous Material Spills from RRF/NDRF Vessels at Reserve Fleets, Outports, Layberths, or vessels undergoing repairs at commercial facilities or under tow.
Notification procedures for oil pollution events are consistent across al MARAD response plans (ERP, VRP, and SOPEP).
A complete list of USCG BOA's by geographic areas and their phone numbers are contained in MARAD's VRP and SOPEP. It is recommended that choosing of an appropriate OSRO with USCG BOA be discussed with the QI or AQI before contacting OSRO for oil spill clean-up and removal assistance.
Phase O. COMSCINST 5090.1B, applies to all RRF ships when operating and 5090.5 CH applies to RRF tankers when operating, and 5090.6 CH-1 applies to all RRF non-tankers when operating under MSC OPCON. When directed by the activation order, the Ship Manager shall comply with these requirements while under MSC OPCON if a spill occurs.

19.6.4 Maintenance of Oil Record Books (All Phases)

Throughout all RRF Program phases, Ship Managers must maintain Oil Record Books (ORB) for each assigned ship as required by 33 CFR 151.25 and COMSCINST 6240.4C. The following is an overview of Oil Record Book related information and procedures.
The purpose of the ORB is to record all shipboard oil transfer and discharge operations. An improperly maintained ORB may be used as evidence against a ship suspected of an illegal oil discharge, while an accurately kept ORB could establish a successful defense to an alleged violation.
Oil Record Books printed by the U.S. Government are available to Ship Managers from any Coast Guard Marine Safety Office or Captain of the Port Office. Detailed instructions are contained within each book. Oil Record Books remain the property of the U.S. Government and shall be maintained onboard RRF ships for not less than three years.
Ship Managers of RRF tankers of 150 gross tons and above and each RRF ship of 400 gross tons and above must maintain an Oil Record Book, Part I (Machinery Space

Operations). Ship Managers of RRF tankers of 150 gross tons and above must also maintain an Oil Record Book, Part II (Cargo/Ballast Operations).
In the event of discharge or escape of oil from an RRF ship in a prohibited zone, a signed statement shall be made in the Oil Record Book by the officer in charge of the operation and by the Master of the ship, stating the circumstances and the reason(s) for the discharge or escape.
Oil Record Book entries shall be completed on each occasion, on a tank to tank basis if appropriate, whenever any of the following operations occur in RRF ships:

(1) For machinery space operations (all ships):
• ballasting or cleaning of fuel oil tanks;
• discharge of dirty ballast or cleaning water from fuel oil tanks;
• disposal of oily residues (sludge);
• discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces.

(2) For cargo/ballast operations (oil tankers):
• loading of oil cargo;
• internal transfer of oil cargo during voyage;
• unloading of oil cargo;
• ballasting of cargo tanks and dedicated clean ballast tanks;
• cleaning of cargo tanks including crude oil washing;
• discharge of ballast except from segregated ballast tanks;
• discharge of water from slop tanks;
• closing of all applicable valves or similar devices after slop tank discharge operations;
• closing of valves necessary for isolation of dedicated clean ballast tanks from cargo and stripping lines after slop tank discharge operations;
• disposal of residues.

19.7 GARBAGE AND SOLID WASTE POLLUTION (ALL PHASES)

19.7.1 Regulations Governing the Discharge of Garbage and Solid Waste

Appendix V of MARPOL 73/78, as ratified by The Marine Plastic Pollution Research and Control Act of 1987, and as implemented in 33 CFR 151.51 through 151.77, prohibits and/or restricts ship discharge of garbage and solid waste including plastics. Definitions given in 33 CFR 151.05 are applicable. The regulations address the following topics: special areas, waste management plans (to implement 151.51 to 151.77), placards, reporting requirements, and various discharge restrictions. Refer to 33 CFR 151.51 through 151.77 for detailed information and requirements. . These regulations apply when ships are *operating* in the marine environment but should be complied with as applicable.
Figure 19.1 summarizes requirements defined in 33 CFR 151.66 through 151.75. Exceptions to these requirements in the event of emergency are given in 33 CFR 151.77.

Garbage Type	Outside Special Areas (33 CFR 151.69)	In Special Areas (33 CRF 151.71)
Plastic (bags, synthetic ropes, fishing nets)	Disposal prohibited (33 CFR 151/67)	Disposal prohibited (33 CFR 151.67)
Dunnage, lining and packing materials that	Disposal prohibited less than 25 mi. from nearest	Disposal prohibited (33 CFR 151.67)

float	land and in navigable U.S. waters	
Paper, rags, metal bottles, glass, crockery and other refuse	Disposal prohibited less than 12 mi. from nearest land and in navigable U.S. waters	Disposal prohibited (33 CFR 151.71)
Paper, rags, glass, etc. comminuted or ground[2]	Disposal prohibited less than 3 mi. from nearest land and in navigable U.S. waters	Disposal prohibited (33 CFR 151.71)
Food waste not comminuted or ground[2]	Disposal prohibited less than 12 mi. from nearest land and in navigable U.S. waters	Disposal prohibited less than 12 miles from nearest land
Food waste comminuted or ground[3]	Disposal prohibited less than 3 mi. from nearest land and in navigable U.S. waters	Disposal prohibited less than 12 miles from nearest land
Mixed garbage types	See Note 3	See Note 3
Note 1: Special areas include the Mediterranean, Baltic, Red, and Black Sea areas and Persian (Arabian) Gulf areas defined in 33 CFR 151.53. Note 2: Comminuted (pulverized) or ground garbage must be able to pass through a screen with a mesh size no larger than 25 mm (1 inch approximately). (33 CFR 151.75) Note 3: When garbage is mixed with other harmful substances having different disposal or discharge requirements, the more stringent disposal restrictions shall apply (e.g., medical waste).		

Figure 19.1 Summary of Garbage Discharge Restrictions

19.7.2 Discharges of Garbage and Solid Waste (All Phases)

The following briefly describes the problem of disposal of plastics in the oceans, relevant legislation and requirements, actions taken by MARAD, actions required by each ship, and actions required by each crewmember when RRF ships are operational.

Definitions

Plastic waste includes styrofoam, nylon, vinyl, polypropylene and other synthetic materials, made from one or more synthetic organic high polymers that normally float when thrown overboard.

Garbage includes non-plastic waste such as food (victual) waste, paper, cardboard, metal, glass, rags, crockery and other similar types that normally sink when thrown overboard.

Garbage includes non-plastic waste such as food (victual) waste, paper, cardboard, metal, glass, rags, crockery and other similar types that normally sink when thrown overboard.

Floating garbage includes non-plastic waste such as dunnage, lining and packing materials that float when thrown overboard.

For more comprehensive definitions of wastes, refer to 33 CFR 151.05.

MARAD RRF vessels shall not discharge overboard into any waters plastics or garbage mixed with plastic, including but not limited to synthetic ropes, nets, and plastic garbage bags. All plastics shall be retained onboard for discharge at a port reception facility.
When MARAD vessels are operating outside of Special Areas (Mediterranean, Baltic, Red and Black Seas, and Persian Gulf North Sea area, Antarctic and the Wider Caribbean region) garbage that has been separated from plastic may be discharged overboard if the distance from the nearest land is more than:

(1) 25 nautical miles for dunnage, lining and packing materials that float; or
(2) 12 nautical miles for victual (food) wastes and all other garbage including paper products, rags, glass, metal, bottles, crockery, and similar refuse, except that) such garbage may be discharged outside of 3 nautical miles after it has been passed through a grinder or communiter to be able to pass through a screen with a mesh size no lager than 25mm.

Mixtures of garbage having different discharge requirements must be discharged in accordance with the more stringent requirement applicable.
When MARAD vessels are operating in Special Areas, all garbage must be retained aboard except victual waste, which can be discharged beyond 12 nautical miles from the nearest land.

19.7.2.1 Ship Manager Waste Management Plan Requirements

There are three type of plastic materials typically taken onboard: plastic items, plastic packaging, and plastic packing materials. Ship Managers must take the initiative to reduce the supply of plastic materials aboard MARAD ships. Plastic packaging should be avoided, particularly for items likely to contain food residues after use, such as milk and juice containers, condiment containers, prepared food containers, etc. . Ship Managers shall incorporate procurement policies for the use of non-plastic substitutes into their commercial procurement procedures. Department Heads shall order non-plastic substitutes where possible for consumable items such as garbage bags, coffee cups and stirrers, etc. Department Heads shall ensure that plastic wrapping and shipping materials are removed to the maximum extent possible from stores and spares prior to receipt onboard. Plastics need not be removed if degradation or damage to the items will result.
Ship Managers shall ensure crew orientation in marine plastic pollution policies and requirements. Placards and notices are to be posted and periodic training conducted. Training must be documented. All crewmembers shall be educated on plastic segregation and collection procedures. All crewmembers shall separate plastic waste from other solid waste and dispose of plastics in appropriately marked containers.
Ship Managers shall incorporate quality assurance controls for waste management into their Quality Management Procedures.

<u>Waste Management Plans</u>

Individual ship Waste Management Plans shall be developed by the Ship Manager and be placed on each vessel when it is activated . Instructions for crewmembers should be an integral part of these plans MARAD will provide and update training videotapes and information plaques for distribution to each vessels.
Ship Managers shall develop a Shipboard Solid Waste Management Plan for each voyage. Each Plan must be in writing and:

(1) provide for the discharge of garbage in accordance with Annex V of MARPOL 73/78 and 33 CFR 151.51 through 151.77;
(2) describe procedures for collecting, processing, storing and discharging garbage; and
(3) designate the Master of the vessel as responsible for carrying out the plan.

Ensure crew support through the chain of command for the Shipboard Solid Waste Management Plan.

Recordkeeping

The Ship Manager will ensure that vessels maintain a Solid Waste Disposal Record in accordance with 33 CFR 151.55. This must remain aboard the ship at all times and for a period of not less than two years.

Placards

The Ship Manager shall ensure that placards are properly displayed aboard the vessel, are in sufficient number, and provide the reader with the information delineated in 33 CFR 151.59. This information includes:

(1) The discharge of plastic or garbage mixed with plastic into any waters is prohibited.
(2) The discharge of all garbage is prohibited in the navigable waters of the United States and, in all other waters, within 3 nautical miles of the nearest land.
(3) The discharge of dunnage, lining and packing materials that float is prohibited within 25 nautical miles of the nearest land.
(4) Other unground garbage may be discharged beyond 12 nautical miles from the nearest land.
(5) Other garbage ground to less than one inch may be discharged beyond 3 nautical miles of the nearest land.
(6) A person who violates these requirements is liable for a civil penalty for each violation, and the criminal penalties of a Class D felony.

Notifications

The Master of a vessel shall notify the port or terminal at least 24 hours prior to arrival, of the name of the ship and the estimated volume of garbage requiring disposal, if any of the following types of garbage are to be discharged:

(1) garbage regulated by the Animal and Plant Health Inspection service
(2) medical wastes
(3) hazardous wastes

Other Considerations for Controlling Garbage

The Ship Manager shall ensure that all garbage is handled and disposed of in accordance with the promulgated regulations. Records must be maintained for discharges of garbage to the sea as well as (receipts) for garbage discharges to port reception facilities. All crewmembers shall ensure that no plastic trash bags are disposed of overboard. Any trash disposed of over the side shall meet Annex V requirements and be in paper trash bags. In the case of discharges to port facilities where the garbage is transported by shipboard personnel, the Ship Manager must ensure that the garbage is properly deposited into the port or terminal's reception facility. Ship Managers shall use shoreside dumpster service when available. Timing of the pickup schedule will vary depending upon the amount of food-contaminated waste generated and weather conditions. When returning from a foreign port a special handling may be required because of Department of Agriculture rules.

Shipboard equipment required for treatment of ship-generated garbage must be operable; this equipment includes incinerators, grinders and comminuters. Ship Managers shall issue instructions on the use and maintenance of comminuters, garbage grinders, pulpers, trash compactors and/or incinerators. The Chief Engineer shall ensure that all solid waste management equipment is properly maintained and in working order. Particular attention should be given to all food service grinders/pulpers and trash compactors.
Designate a ship's officer as the Plastics Waste Control Coordinator in charge of managing plastics waste. The name of the officer and designation shall be in writing with a copy to the officer and a copy to the ship's file.
Adequate facilities shall be provided for segregation and retention of plastics. The best approach to ensure compliance with segregation requirements is to provide separate containers (trash cans) for plastic and non-plastic waste at the source (where the waste is generated, such as work spaces, berthing areas, galley, etc.).

- Mark the cans clearly.
- Line cans appropriately, with plastic liners for plastic only, with paper liners for non-plastics.
- For plastics contaminated with food, have a separate container. Remove all liquids and collect daily. Remove as much food as possible from plastics before mixing with other plastics.

Determine the best storage locations for plastic waste, and document how long it takes to fill each location with plastic refuse. Issue instructions in the shipboard solid waste management plan for the collection of refuse from each location.
The type and amount of onboard storage space dedicated to plastic waste will vary depending upon whether or not the ship has a trash compactor or incinerator, and the ships operational area. Ships on short-term operations shall address waste management BEFORE departure. Vessels without a trash compactor or incinerator may use a refrigeration container. Vessels with trash compactors/incinerators shall use them (but dispose of the ash in accordance with the applicable regulations).
While most vessels will store non-food plastics in an easily accessible area, near the ships fantail for later disposal in port, special storage precautions shall be taken on ships with VERTREP capability.

19.7.3.1 Ship Manager Medical Waste Requirements within Waste Management Plans
The U.S. Public Vessel Medical Waste Anti-Dumping Act prohibits public vessels from dumping medical waste into oceans during peacetime, except under emergency conditions. Medical waste, although not generated in large quantities, is considered shipboard waste and must be included as part of the vessel's Waste Management Plan.
For the purposes of this section, medical waste can be divided into two broad categories: potentially infectious waste and "other" medical waste. Either type may contain plastic. Potentially infectious waste is waste exposure to which could result in an infectious disease. Examples of potentially infectious waste generated aboard RRF ships includes:

- Isolation wastes -- generated by patients placed in isolation to protect others from communicable diseases.
- Sharps -- includes hypodermic needles, syringes, scalpels, pipettes, broken glass and other medical instruments that have come into contact with infectious agents during patient care or laboratory research.

- Blood -- includes waste blood, serum, plasma and the products and components of blood.

Other medical waste is defined as disposable medical equipment and material which do not fall into the categories listed above, such as medication dispensing containers, packing materials, etc.

Waste Management Plan Requirements

Potentially infectious waste shall be suitably packaged, stored separately from other wastes, and disposed of ashore in a manner that meets with local regulations and does not pose a potential risk to public health and welfare. State regulations govern the disposal of medical wastes.

Before entering a port, Ship Managers shall prepare a message to the ship's agent detailing the type of potentially infectious waste intended for disposal so that proper arrangements shall be made in advance. Other medical wastes shall be segregated into plastic and non-plastic and disposed of properly.

Dispose of controlled substances such as narcotics IAW TE-5.

Notifications

The Master of a vessel (per 33 CFR 151.65) shall notify the port or terminal at least 24 hours prior to arrival, of the name of the ship and the estimated volume of garbage requiring disposal, if any of the following types of garbage are to be discharged:

(1) garbage regulated by the Animal and Plant Health Inspection service
(2) medical wastes
(3) hazardous wastes

19.7.3.2 Reporting Requirements for Phase O -- MSC OPCON

The applicable directive for Phase O is COMSCINST 6240.4C Military Sealift Command Environmental Protection Program (Phase O). This basic instruction as well as enclosures (1) and (4) apply to RRF ships when operating under MSC OPCON. Enclosure (1), paragraph 1.e. "Other Ship Wastes" applies to RRF ships.

Note: COMSCINST 5090.2, Disposal of Plastic, Medical and Other Waste in a Marine Environment (which implements MARPOL 73/78 requirements) only applies to USNS civil service manned ships and not RRF ships.

19.8 AIR POLLUTION (ALL PHASES)

19.8.1 Regulations Governing Air Pollution (All Phases)

Air pollution regulations vary from state to state. The Ship Manager shall be knowledgeable in the applicable air pollution requirements. The more common local in-port ordinances require:

Air pollution regulations vary from state to state. The Ship Manager shall be knowledgeable in the applicable air pollution requirements. The more common local in-port ordinances require:

(1) the prohibition of smoke emission that has a darker shade than Number 1 on the Ringelmann Smoke Chart for a period greater than three minutes in a consecutive 30-minute period, or an opacity greater than 20 percent, exclusive of water vapor; and,

(2) the prohibition of blowing boiler tubes that would result in excessive quantities of soot being deposited on the local harbor and shore area;

(3) restrictions on liquid bulk-fuel transfer operations that result in hydrocarbon emissions.

(4) restrictions on the use of shipboard incinerators, or the need for a permit to operate the incinerator in port.

The Ship Manager shall be aware of the port requirements as they apply to air pollution sources aboard ships.

Asbestos has been determined to be a hazardous air pollutant. The Ship Manager shall insure that asbestos abatement activities are carried out in accordance with applicable laws and regulations. This includes insuring that abatement contractors use properly trained personnel and that the contractor utilizes techniques for controlling the emission of asbestos fibers to the atmosphere during the abatement activity as well as during the storage for disposal process. The Ship Manager shall provide to the COTR a copy of laboratory analyses that documents that asbestos was found during a repair activity. A copy of completed disposal manifests shall be provided as well.

All persons are cautioned that asbestos may be found on pipes, ducts, boilers, tanks, reactors, turbine furnaces, structural members, etc., or in holds or compartments of RRF ships.

19.8.2 Directives Governing Air Pollution (All Phases)

No separate air pollution directive has been promulgated by MARAD Headquarters. However, the following shall be considered:

(1) Ship Managers, Masters and Chief Engineers will familiarize themselves with pertinent local and state regulations governing air pollution and will comply with these requirements.

(2) MARAD Region COTRs and Marine Surveyors will be familiar with pertinent local and state air pollution ordinances, and will periodically monitor RRF ship conformance to these regulations.

COMSCINST 6240.4C, Subj: Military Sealift Command Environmental Protection Program (Phase O). The basic instruction as well as enclosures (1) and (4) apply to RRF ships when operating under MSC OPCON. Enclosure (1), paragraph 2. Air Pollution Control applies to RRF ships when under MSC OPCON.

19.9 NOISE POLLUTION CONTROL (ALL PHASES)

19.9.1 Regulations Governing Noise Pollution (All Phases)

Local area noise pollution laws vary from one port to another. Though not a visible environmental pollutant, noise is irritating and may have a harmful effect physical effect on personnel.

19.9.2 Directives Governing Noise Pollution (All Phases)

No separate noise pollution directive has been promulgated by MARAD Headquarters. However, the following shall be considered:

(1) Ship Managers and Masters and Chief Engineers will familiarize themselves with pertinent local and state regulations governing noise pollution and will comply with this these requirements.

(2) MARAD Region COTRs and Marine Surveyors will be familiar with pertinent local noise pollution ordinances and will periodically monitor RRF ship conformance to these regulations.

(3) Crewmembers shall use protective equipment to prevent injury when exposed to noise pollution..

There are no applicable MSC noise control directives that apply to RRF ships under MSC OPCON.

19.10 BALLAST WATER AND SEDIMENT DISCHARGES

MARAD vessel Masters will comply with IMO's "International Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of harmful Aquatic Organisms and Pathogens adopted November 1997. " . Ballast water management guidelines can be found in 33 CFR 151 Subpart D: Ballast Water Management for Control of Nonindigenous Species in Waters of the United States.

The ballast water management guidelines provide voluntary precautions for ballast water uptake and discharge for the purpose of avoiding the transfer of harmful aquatic organisms from waterway to another. Subpart D also provides mandatory ballast water management requirements that include notifications, recordkeeping and ballast water management alternatives. Alternatives include retention of ballast water, exchange of ballast water at sea, management of sediments and discharge of ballast water to reception facilities ashore.

19.11 The Ship Manager shall also insure that applicable state regulations pertaining to the management of ballast water are complied with.*BUNKERING REQUIREMENT*

MARAD has developed a bunkering video and bunkering checklist that will be included in the Standard Administrative Cabinet ("Yellow Cabinet") aboard all RRF vessels.

Ship Managers will be required to instruct all crew members participating in the bunkering of an RRF vessel or internal fuel oil transfer for purposes of stability, trim or ballasting to view the bunkering video prior to initiating these processes and to use the checklist to substantiate that all steps therein that apply to the bunkering/internal transfer are executed and checked off.

The bunkering checklist is laminated to allow for continuous use with an accompanying grease pencil. The viewing of the bunkering video and use of the bunkering checklist must be logged.

Maritime Administration **RRF Program**

BUNKERING CHECKLIST

These preparations do not exclude procedures and contingency plans contained in MARAD Response Plans and the SOPEP.

Date Bunkered _____ Port Bunkered _____

Bunker Supplier _____ Type/Quantity _____/_____

Max, Pumping Pressure _____Max Flow Rate _____

Initial Preparation

 Ensure all personnel are aware of intention to bunker and are familiar with emergency response procedures. Warn personnel not to conduct burning or hot work during bunkering.

 Discuss bunkering plan and tank sequence with ship's personnel.

 Close and lock all associated overboard discharge valves.

 Close and blank all unnecessary manifold valves/connections.

 Ensure overflow tank is empty. Pump down if necessary.
 Deploy oil spill containment boom. Record and report existing oil slicks near the ship.
 Ensure all bunker tank air pipes are open and unblocked.
 Plug deck scuppers. Make sure drip pans are empty and plugged.
 Check bunker stations for integrity. Equip with new gaskets. Ensure there is a bolt in every hole.
 Stage wrenches at bunkering stations. Prepare emergency wrench kit (crescent, allen, spline wrench)
 Check operation of deck crane, if applicable.
 Display Bravo flag during day operations or all round red mast light by night. Avoid night operations if possible.
 Check that all high-level alarms are operational.
 Post minimum ullage readings for bunkering at each sounding tube.
 Place diesel cans, rags, tapes at sounding tubes. Pour diesel down sounding tubes.
 Check valve meters, indicators or automated valve system, if applicable.
 Stage portable fire extinguishers/sorbents/oil spill clean-up equipment at key stations.
 Port warning signs, particularly "No Smoking" sign and "No Burning or Welding During Bunkering" sign.
 Prepare sample bottles supplied by oil Analysis Company. (2 bottles for each type of fuel).
 Test and distribute communications equipment.
 Ground cable for bunkering hoses.
 Conduct pre-bunkering soundings.

Prior to Bunkering

 Inspect condition of hoses and couplings. Ensure hose is of sufficient length.
 Ensure hose weight does not exceed SWL of lifting gear. Ensure correct number and specifications of delivery hose(s).
 Conduct pre-bunkering conference with bunkering crew and vendor representative. Discuss and agree on:
____Bunkering Plan ____Emergency response procedures ___Emergency shutdown procedures.
____Quantity, quality & type of fuel to be delivered _____Maximum pumping pressure
____Measurement units (metric tons, cubic meters, barrels, etc.)
 Establish communication link between ship and supplier Agree on signaling system with supplier:
_____Commence pumping. _____Reduce pumping rate. ____Cease pumping.
____Emergency Stop.
 Ensure paper work is in order. Declaration of Inspection signed.
 Place drip containers under hose couplings, flanges and vents.

During Bunkering

 Commence bunkering at minimum pressure.
 Monitor supply line pressure (where applicable ____ Examine hose connections for leakage.
 Reduce pumping rate and/or open next tank before topping up. ___ Close valves as each tank completed.
 Witness date, jointly countersign and retain sealed bunker samples.
 Ensure sufficient ullage in final tank for hose draining/line blowing.

 Notify supplier when final tank is reached.
 Give supplier timely warning prior to finish of fuel loading so they can reduce pumping rate and stop pumping.
 On completion of bunkering drain hoses and close all filling valves.

On Completion of Bunkering

 Take tank ullage/soundings and calculate amount received.
 Ensure all hoses are fully drained.
 Close and blank off manifold connection. Blank off disconnected hose couplings.
 Re-confirm all bunker line and tank filling valves are secured.
 Re-confirm all bunker tank ullages/soundings. Verify all bunker receipt details are correct.
 If discrepancy exists between delivering and receiving figures, file Protest letter.

Note: Hiring an independent cargo surveyor/inspector can help avoid disputes and ensure specified fuel delivery.

 Make appropriate entries in engine room and Official Log Books. Make entries in oil Record Book.

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22. SEA TRIAL GUIDELINES

(REV 10/96)

INTRODUCTION

The requirement to maintain the RRF in a high state of readiness creates an on-going need to sea trial RRF vessels in order to confirm their material condition and readiness for activation and sustained operation. This makes the Sea Trial Program critical to the continued success of the RRF program.

To the extent possible, and subject to the availability of funds, sea trials will be conducted annually on all ROS-4 vessels; biennially on ROS-5 and RRF-10 vessels; every 5 years on RRF-20 vessels; and on vessels returning from operational missions.

The Headquarters sea trial team will be reduced to a single participant, to the extent possible being the Type Desk individual assigned to the specific RRF vessel to be trialed. A list of qualified alternates has been developed to provide substitutes when the type desk is unavailable. Concurrently, efforts to reduce data collection requirements, utilize current computer technology, and improve the report format to expedite completion of the Sea Trial Report are continuing.

SEA TRIAL COORDINATOR

Sea Trial scheduling is the responsibility of MAR-612. The Sea Trial Coordinator is also responsible for assisting the Type Desk with finding a substitute when necessary, and the distribution and archiving of Sea Trial reports.

The Sea Trial Coordinator will distribute a schedule of upcoming sea trials and Type Desk assignments weekly to participants. In addition, when the schedule is confirmed, points of contact, vessel location, Ship Manager/General Agent information and previous trial reports, will be provided to the respective Type Desk or substitute.

TYPE DESKS

Type Desk assignees are tasked as the sole Headquarters sea trial participants for their assigned ships. Type Desk administration will be the responsibility of MAR-611. Occasionally, due to other work or personal commitments it will be necessary to find a replacement for the Type Desk designee, and a list of qualified alternates has been provided. The Type Desk as single participant approach makes it necessary for the participating Region Surveyor and Ship Manager/General Agent s Port Engineer to play a more active roll in the sea trial than in the past.

Commander, Military Sealift Command s reorganization has tasked their local representatives with becoming familiar with each RRF vessel and to participate in sea trials. Region Surveyors will coordinate such MSC participation. In addition, observers

from TRANSCOM, N-42, or other RRF-interest organizations will be permitted if accommodations allow. Requests will be coordinated with the Region Surveyor.

Travel arrangements, orders, and related matters are the responsibility of the individual trial team member. Travel orders will use RRF accounting codes.

Type Desks are responsible for finding a replacement when their assigned trial conflicts with other work assignments or personal plans. In the event a Type Desk is unable to find a replacement, the assistance of the Sea Trial Coordinator should be requested.

ADVANCE PREPARATION

The Type Desk or alternate will arrange with the Region Surveyor to collect as much data for the sea trial report forms prior to the commencement of the trial as practical. Standard administrative items, such as the various manuals and instructions, should be collected at one location to facilitate check-off lists.

The Region Surveyor will prepare a draft schedule showing the proposed timetable and sequence of the various tests for approval by the Type Desk.

SEA TRIAL REPORTS

Sea Trial Reports are due as soon as possible, but no later than four weeks, after the sea trial is completed. The Sea Trial Coordinator is to be informed of any delays that prevent complying with this requirement. In view of the reduction of the sea trial team, data collection will be shared between the Type Desk, or alternate, and the Region Surveyor, with the Port Engineer, vessel s crew, and MSC representative utilized as much as possible.

Sea Trial Reports will consist of the standardized Sea Trial Report Microsoft Word format, with a "narrative" section summarizing the trial events; a conclusion section providing an opinion as to the vessel s status; a trial finding summary and remarks section providing comments on major ship systems and inspected areas; the forms containing data collected during the trial; the technical vibration, thermography and engine analysis reports; plus other reports pertinent to the condition of the vessel.

The various technical data collection forms and associated supporting material may be submitted in legible handwritten form.

The completed report with original attachments will be delivered to the Sea Trial Coordinator, who will check it for completeness, and then forward it to MAR-611. After review and annotation of any specific concerns, MAR-611 will forward the report to MAR-610 who will return it to the Sea Trial Coordinator for copying, distribution and follow-up action as required. The original report will become the official file copy. The Sea Trial Coordinator will forward copies of the Sea Trial Report to the Region Surveyor via the SOMO, the Port Engineer via the Ship Manager.

TECHNICAL SUPPORT

Methods and procedures for conducting engineering tests will be provided by MAR-611.

SEA TRIAL SCHEDULING

Sea trial schedules evolve from MAR-611's annual work plan and will be finalized by the attending Region Surveyor, who will communicate the proposed date of trials to the Sea Trial Coordinator.

The Sea Trial Team Leader should be in direct contact with the attending Region Surveyor a week prior to the scheduled trial date and based on the most probable sailing time to decide when the Trial Type Desk/Alternate should arrive.

The Region Surveyor and the Ship Manager's Port Engineer will arrange for ROS personnel to be part of the sea trial operating crew. This continuity of key personnel will make a significant contribution to the success of trials and subsequent activation and operation. When there is no ROS crew, the Ship Manager/General Agent should carefully screen the senior licensed individuals provided by the unions before accepting them as crew members.

PRE-TRIAL CONFERENCE

The Type Desk/Alternate will hold a pretrial conference with the key trial attendees, including the Master and Chief Mate, Chief and First Assistant Engineers, Ship Manager's Port Engineer, Region Ship Surveyor, plus the vibration, thermography and engine analysis technicians, and other Trial participants as appropriate.
The conference will establish an agenda for trial events and the plan for the schedule sequence. It also will provide time to air any concerns and discuss any constraints. The conference should present a clear picture of scheduled tests, inspections and other requirements, and each participant's specific role in the process. All key personnel will be requested to maintain a deficiency list and other notes and provide input at the post-trial conference.

Trial Team will schedule as many tests as possible prior to sailing. Although limited due to the vessel's activity immediately prior to sailing, accomplish such tests as the simultaneous lifting of the anchors when served by a single motor, cargo gear testing (cargo gear not tested prior to sailing is to be tested upon return from sea trial), and observation of watertight door and ramp operation.

POST-TRIAL CONFERENCE

A post-trial conference will be scheduled with the same attendees as at the pre-trial conference. A round table format, including input from the vibration, engine analysis and thermography technicians, works best.

NOTEBOOK COMPUTERS

There are six notebook computers available to take on sea trials to expedite compiling the sea trial reports.

DATA COLLECTION

Forms will be provided to the Type Desk/Alternate by MAR-612 (John Wiegand) for the collection and recording of trial data and test results. In many cases, items will be listed in a simple "sat/unsat" check-list format. This data may be maintained in handwritten form and will become worksheets for the Sea Trial Summary Report.

SPECIFIC TEST AND DATA COLLECTION ITEMS

(The following descriptions follow the order in which the items appear in the Sea Trial Report format for ease of cross-reference.)

1. ADMINISTRATION

A. Publications and Instructions

For ROS vessels, an overall assessment should be made of the attention to general administration given the vessel by the Ship Manager's Port Engineer, the Chief Mate and Chief Engineer.

Vessels should have the MARAD-issued RRF Operations Management.

The Shipboard Oil Pollution Emergency Plan for cargo ships, or the Vessel Response Plan for tankers, should be sighted, including the original signed USCG letter of approval, as this is now a COI item.

A checklist for other items that should be sighted, such as MARAD safety training videos and equipment, COMSC Operating Instructions, Public Vessel certificate, etc. is included in the data collections format.

(The following items are not in the checklist and deficiencies or other comments noted in the remarks section as appropriate)

B. Habitability

All crew members and supernumeraries in attendance during the sea trial should be requested to note their general assessment of the accommodations, and any problems will be noted in the report. Particular attention should be paid to toilet, shower and washing facilities, and the condition of furniture and fittings. Habitability survey forms are no longer required. Observe the condition of common spaces, lounges, messrooms, etc. and document observations. Overall impressions and specific problems will be noted in the report.

C. Preservation and Coatings

The overall condition of the hull, deck, topsides and cargo hold paint coatings will be observed and an assessment included in the sea trial report.

Proper painting of the cargo spaces should include proper safety, location, and permissible cargo size and weight information stenciling.

D. Lifesaving Equipment

The USCG lifeboat test will be observed if held, and the condition of the lifeboat motor and launching equipment noted. Proper capacities and the general condition and state of

preservation plus the test dates for renewal of falls and life-rafts should be noted and reported if at or near expiration.

E. Drawings and Technical Manuals

The library of engineering drawings, instruction books and technical manuals will be reviewed for completeness and any critical shortages noted for action.

F. Reserved.

2. AHEAD FULL POWER TRIAL

The ship is to be operated at the maximum safely obtainable speed for a continuous period of 16 hours, after steady conditions have been attained. For the full power run to be considered successful the vessel should attain at least RRF maximum speed. Upon mutual agreement of the sea trial participants the power run may be shortened but in at no time will be less than 8 hours. Particular note of elevated bearing temperatures, exhaust temperatures, vibration, or other abnormalities, should be made. Accurate collection of fuel consumption rates is important.

Ship speed shall be checked during the Full Power Run. Speed over the ground shall be averaged over approximately one (1) hour on a course that minimizes the effect of current seas and wind. The vessel shall then make a very gradual turn to minimize loss of speed and proceed over the same ground on a reciprocal course for approximately one (1) hour. Speed over ground shall again be averaged. Trial speed is the average of the two runs.

Power shall be measured by the most reliable means available. Where multiple sources are available, all shall be recorded. Suggested methods of measuring or estimating power;

Diesel Ships: Fuel rack position
Electronic diesel analysis
Firing pressures

Steam Ships: 1st stage press & vacuum (from graph in turbine instruction book)

All Ships: Shaft Horsepower meter
Shaft RPM vs Horsepower (FP propeller)
Pitch vs Horsepower (CP propeller)
Ship speed vs Horsepower

Fuel consumption shall be measured using the installed fuel oil meter(s). On diesel ships separate meters are often provided for main engine supply, return, aux engines and boilers. Fuel system diagram should be checked to determine what the meters are actually measuring. Voyage logs should be checked to determine if a correction factor has been applied to the meter in the past. As a backup or in cases where fuel meters are known to be inaccurate, tank soundings may be used. Malfunctioning meters should be re-calibrated or replaced.

3. AHEAD STEERING TEST

The ahead steering test will be conducted during the full power run. The Master will have the final word on when this test will take place. Good communications between the bridge and the steering gear room are vital and must be tested prior to the commencement of maneuvers.

With the ship proceeding ahead at full power run horsepower, the wheel will be moved at the maximum rate as follows: (1) midships to hardover right and held for 10 seconds; (2) hardover right to hardover left and held for 10 seconds; (3) hardover left to hardover right and held for 10 seconds; and (4) hardover right back to midships. Hardover rudder shall mean 35 degrees unless otherwise indicated by the Master. After the ship's speed has been restored, switch the steering power unit and repeat the tests. Times for each segment will be recorded and compared to the satisfactory standard rate of hardover-to-hardover in 26 seconds.

The auxiliary means of steering will be demonstrated from the steering engine location by moving the rudder through the above motions by use of the trick wheel but without the need for timing to meet a standard time.

There should be one trial team member on the bridge and one in the steering engine room to record data and observe general performance, and watch for hydraulic leakage and vibration.

4. QUICK REVERSAL FROM AHEAD TO ASTERN

The quick reversal from ahead to astern is designed to demonstrate the ship's ability to stop and gain stern way in an emergency. The Trial Team Leader, Region surveyor and Chief Engineer should reach agreement on propeller RPM ahead, astern, and maximum acceptable low pressure turbine casing temperature for steam vessels prior to the start of the evolution. General guidelines are as follows:

a. When agreed safe by the Master and Chief Engineer, the ship will come to full ahead (maneuvering turns).

b. The Master will confirm that the ships speed approximates the RPM ordered and that it is safe to commence the test.

c. The Chief Engineer will verify readiness to conduct the test.

d. The bridge will order full astern and record the time of order, time at zero RPM, time at full astern, and time to stop the vessel.

e. The engine room will come to full astern (maneuvering) when ordered and maintain propeller RPM for 15 minutes or until the test is terminated by the Chief Engineer.

f. The ship will then be returned to full ahead (maneuvering).

Engine room observers will take note of boiler water levels, excessive stack smoke, LP turbine casing temperature and the ability to maintain vacuum in the main condenser.

The quick reversal from ahead to astern should be closely followed by the astern endurance and astern steering tests, assuming an absence of navigational constraints.

This provides continuity and is more efficient than segmenting the three tests. These tests also require close coordination between the bridge, engine room and steering gear room.

5. ASTERN ENDURANCE TRIAL

There is always concern with possible damage to the LP turbine, bearings and gears. If the temperature exceeds 400 F at the low pressure casing, the stern endurance test can be terminated at the discretion of the Chief Engineer.

6. ANCHOR WINDLASS TEST

The anchor windlass test will substantiate the capability of each windlass motor to lower, hoist and hold the anchor and chain as follows. First, each anchor is to be lowered under power to just below the water's surface to test the brake and then raised until clear of the water. Second, each anchor and one shot (90 feet) of chain is to be dropped under the control of the hand brake and then raised to the hawse pipe.

The time should be recorded and compared to the satisfactory standard for hoist speed of 30 feet per minute, which can be measured as three minutes to raise the anchor from the time the one-shot marker breaks the surface to the point when the anchor swivel breaks the surface.

Note should be made of any tendency for the chain to jump whelps on the wildcats during braking, signs of excessive vibration at the foundations, loosening of any holding bolts, steam-line leaks, condition of levers and brake wheels, painting and marking of the chain, etc.

The simultaneous hauling of both anchors is not required if the vessel is equipped with separate windlass drives or motors. It is prudent to conduct the simultaneous anchor lift at the berth prior to sailing whenever possible.

7. BOW AND STERN THRUSTERS

Bow and stern thrusters shall be operationally tested. If lack of submersion prevents the test, request the Region Surveyor provide information concerning the most recent operation of the thrusters and their repair history for inclusion in the sea trial report.

The thruster tests consist of moving the bow/stern without engine or rudder assistance. The test should be conducted with the vessel stopped and headed into the wind. The thruster control is to be positioned for maximum thrust to swing the bow/stern to the left/right of the ship's heading.

The satisfactory standard will be 30 degrees within 10 minutes. If less than satisfactory the test should be terminated at the ten minute mark and the degree of swing within the interval recorded.

8. AUXILIARY SYSTEMS

The condition of the galley equipment, steward's stores spaces, and refrigeration system in operation will be noted. This may not be possible if the sea trial is catered, but a thorough inspection is still required.

The condition of the HVAC system is very important. In many cases the A/C systems have been enhanced or replaced to provide better living conditions for the crew. The cargo ventilation systems will be verified, in particular for RO/ROs. Freight and passenger elevators will be proven operational. The balance of pumps and systems will be checked and proved operational. MSD system operation and oily water separators are also significant items to be checked.

The electrical generating system, including SSG's auxiliary engines, switchboards, wiring, parallel operation and emergency generators will be proven operational. Ship's lighting, including house internal/external, main deck cargo working areas, cargo spaces, engine room spaces, storerooms and lockers will be checked for adequacy. Sound powered phone systems will also be tested.

Where auxiliary machinery has port/starboard or other backup system, the units should be switched over midway through the ahead full power run.

9. LOGISTICS

The adequacy and condition of stowage of the spare parts onboard and the date of the most recent inventory (including the inventory accuracy percentage) will be noted. In addition to the comments in the sea trial report, all discrepancies should be brought to the attention of MAR-614.

10. OIL ANALYSIS PROGRAM

This check-off determines if the fleet wide oil analysis program is being properly conducted. Determine if it being conducted by a commercial oil supplier or the MARAD fleet wide contractor if a regular schedule is observed for sampling and testing.

11. WATER TREATMENT PROGRAM

This check-off determines if the fleet wide water treatment program is being properly conducted. Determine if it is being conducted by a commercial supplier or the crew and if a regular schedule is observed for sampling and testing.

12. DISTILLING PLANT

Comparison of actual fresh water production to the manufacturer's stated capacity provides the standard for analysis. Trial team will observe water production under normal steaming conditions for a long enough period to determine the reliability and output capacity of all of the distillers on board. Distiller test should be of at least 6 hours duration and is normally conducted during the full power run. (The power may be required to achieve capacity on jacket water heated distillers.)

13. NAVIGATION EQUIPMENT

Test each piece of navigation and bridge equipment aboard and note findings in the checklist. The most common deficiencies are with radar tuning and clarity, malfunctioning weatherfax, inoperative bridge alarms, and rudder angle and RPM indicators.

Obsolete and non-operative/non-required equipment should be noted for removal.

14. COMMUNICATIONS EQUIPMENT

The condition of communication equipment will be assessed by requiring that the radio operator or a service technician test all equipment and then having a follow-up discussion regarding deficiencies and any recommended upgrades or other changes to enhance the ship's communications capability in accordance with MSC opcon requirements.

The vessel should have the new 1996 FCC form Cargo Ship Safety Radio Certificate validated and posted. The validity date of the Ship Radio Station License should be noted, however under the revised 1996 FCC rules, renewal licenses will not be issued to public vessels. EPIRB registration and battery life expiration dates should be checked.

15. MOORING EQUIPMENT

Operation and condition of the mooring equipment, including winches and lines, will be observed and any deficiencies noted.

16. CARGO GEAR

Satisfactory operation of the cargo gear is indicative of the vessel s mission readiness. Time permitting, trial teams are encouraged to witness the operation of cargo gear prior to the vessel embarking on the sea trial. There is a specific section in the format for each ship type as follows:

A. RO/RO

All hydraulic watertight cargo doors, external and internal ramps, side ports, and stern doors will be operated. Note any problems with dogging and locking. Close inspection should be made of the hydraulic cylinders, hoses and rams for indications of leaking.

All cargo hold fans and ventilation systems should be run. The complement of forklift trucks and other mechanized equipment will be inventoried and the Chief Mate requested to provide operational testing. The cleanliness and lighting of the holds, and an inventory and condition of securing and lashing gear will be noted. The dates of ramp weight tests and certifications should be noted.

B. Breakbulk

All booms (with the exception of the heavy lift, as generally there is insufficient time to rig and test), will be swung to substantiate that they are operational. Careful attention to the condition of the wire rope running rigging, stays and vangs is of paramount importance, and any deterioration should be noted.

All hydraulic hatch covers will be opened and closed and careful attention should be given to hydraulic leaks, warped hatch covers and functioning of safety hooks.

The condition of the holds will be noted with regard to cleanliness, presence of water, steel deterioration, and safety items such as lighting, and access ladders.

C. SEABEE

Transporters/Elevators on the SEABEE vessels are a major area of concern due to the complicated nature of this equipment and its related power system. Both port and starboard transporters will be demonstrated and run the full length of a deck and back to stowed position. The port and starboard dollie jacks will be raised and observed in an empty barge space to verify operation. Periodically, the barges will be moved to the elevator and floated-off, reloaded and restowed. The Region Surveyor should be consulted regarding the last time this was done and the test scheduled if due.

The elevator will be lowered and raised to securing position. The make-up rails will also be exercised. Witness/inspect guillotine door operation and physical condition.

D. LASH

The gantry cranes will be operated along with peripheral devices such as limit switches, controls, and stowage/securing devices. The barge handling and positioning systems will also be proven operational. All hydraulic hatch covers will be exercised.

E. OPDS Tanker and point-to-point Tanker

All pumps will be operated and all suction and filling valves will be exercised whenever possible to ensure they are not frozen. Manifold valves in particular will be tested. HPU will be operated and all conduit reels tested.

F. Crane Ship (TACS)

T-ACS 1-3 vessels are outfitted with Lake Shore cranes which are electrically powered. The crane motors and winches are all electric. The analog controls were built by General Electric. For T-ACS 1-3 all crane luff wires are to be inspected for wear by observing the internal pay-out/pay-in of the luff wires on then winch drums during crane boom exercising through an entire arc.

T-ACS vessels 4 through 10 are outfitted with Hagglund cranes which are electro-hydraulically powered. Certain crane components were manufactured by Intercontinental Engineering Manufacturing Co. The crane motors and winches are hydraulic which are in turn powered by pumps driven by electric motors.

All cranes are to be proven operational. The cranes are to be rotated to the maximum possible extent and crane booms are also to be exercised to maximum practical extent. During the exercising of the cranes the operator cab controls and the rider block tagline system (RBTS) are to be proven operational. For T-ACS 4-10 all analog motor controllers are to be proven operational.

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23. COMSC INSTRUCTION 4626.

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DEPARTMENT OF THE NAVY
COMMANDER MILITARY SEALIFT COMMAND
WASHINGTON NAVY YARD BLDG 210
901 M STREET SE
WASHINGTON DC 20398-5540

COMSCINST 4626.1B
PM5
3 JANUARY 1997

COMSC INSTRUCTION 4626.1B

Subj: ACTIVATION AND OPERATIONAL TEST OF READY RESERVE FORCE (RRF) SHIPS

Ref: (a) Memorandum of Agreement, Department of Defense and Department of Transportation for Administration of the Ready Reserve Force

Encl: (1) Sample Transfer of OPCON message
(2) RRF Test Activation Quick Look

1. Purpose. To provide guidance and procedures to be implemented following notice of activation of RRF ships for contingencies or for tests in accordance with reference (a).

2. Cancellation. COMSCINST 4626.1A

3. Background. RRF ship activations are conducted as follows:

a. Contingencies and Exercises. Initiated by MSC to meet surge lift requirements,

b. Test Activations. MSC initiated with no prior notice (*no-notice*) in order to test the ability of the ships to meet established activation time frames, and

c. Maintenance Activations. Maritime Administration (*MARAD*) initiated as part of routine maintenance and scheduled upkeep periods.

4. Responsibilities.

a. For Contingencies or Exercises

(1) MARAD will provide a RRF ship ready for sea (*RFS*) in the applicable time frame of 4-, 5-, 10- or 20-days. This activation time frame may be extended by DOD to minimize costs and when the load date allows for the extension.

(2) The appropriate MSC Area Commander will accept operational control of an RRF ship when MARAD determines the ship is RFS and will provide sailing orders and conduct briefings for key shipboard personnel similar to that provided for new time charters. Enclosure (1) provides a sample message from MARAD completing the transfer of OPCON.

(3) When possible, the MSC RRF Surge representative will observe sea trials for those ships that require trials as follows:

(a) ROS4 ships: no sea trial required.

(b) ROS5 ships: a sea trial is required when the interval since the last sea trial exceeds 12 months.

(c) RRF10/20 ships: a sea trial is required unless waived by MSC. A waiver may be granted if the ship has undergone a successful sea trial observed by MSC within the last 12 months.

b. For Test Activations

(1) The MSC RRF Surge representatives (*Atlantic Region, Gulf Region or Pacific Region*) or the MSC Far East (*MSCFE*) for those ships layberthed in Japan will observe and evaluate RRF test activations and sea trials. A grade of Satisfactory will be awarded when a RRF ship completes the test activation on or before the readiness time frame and is declared ready for sea.

(2) Following the activation, the Surge representatives or MSCFE will submit to COMSC (PM5) via cc:Mail or fax:

(a) within five (5) days after the ship is accepted as RFS, a "*quick look*" report in the format provided as enclosure (2), and

(b) within fifteen (15) days after completion of the activation, a narrative report on the ship's operations and redelivery.

c. For Maintenance Activations

(1) The MSC RRF Surge representatives or MSCFE will observe maintenance activations and sea trials when practicable. These observations are for familiarization with the ship status and not for the purpose of evaluation.

5. Forms. MARAD documentation will be used for all activations, sea trials and inspections. Liaison with MARAD is paramount to ensure observations are thorough and to avoid redundant testing.

C.R. BURCHELL
Deputy Commander

Distribution
COMSCINST 5000.19
List I *(Case A, B)*
SNDL 41B *(Area Commanders)*

SAMPLE

FM MARITIME ADMIN WASHINGTON DC//MAR 612//
TO COMSC WASHINGTON DC//PM5//
COMSCPAC OAKLAND CA//N3//
COMSCFE YOKOHAMA JA//N3//

UNCLAS

MSGID/GENADMIN/ACTIVATION/001//

SUBJ/COMSC OPCON OF READY RESERVE SHIP (RRF) MV CAPE ISLAND//

REF/A/RMG/COMSC WASHINGTON DC 281833Z AUG 96

REF/B/TEL/MARAD AND COMSCPAC/ 10SEP96/0900Z//

AMPN/REF B IS PHONCON BTW MARAD MAR 612 AND COMSCPAC N3//

RMKS/1. REF A IS ACTIVATION ORDER OF MV CAPE ISLAND FOR PARTICIPATION IS EXERCISE FOAL EAGLE 97//

RMKS/2. MV CAPE ISLAND HAS SATISFACTORILY COMPLETED ACTIVATION AND IS READY FOR OPERATIONS. AS PER REF B, COMSCPAC ACCEPTED OPCON 100900Z SEP 96.

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24. SECTION 24 - RESERVED

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25. SECTION 25 - RESERVED

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26. RESERVED

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27. SECTION 27 - RESERVED

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28. SECTION 28 - RESERVED

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29. BLANKET ORDERING AGREEMENT - RESERVED

30. MEMORANDA OF UNDERSTANDING BETWEEN MARAD/USCG/ABS

Note: The ABS and USCG MOUs are still binding, however as of 2008 MARAD is undertaking to update and revise terminology such as Phase IV to Phase M.

MEMORANDUM OF UNDERSTANDING
Between

The Maritime Administration
and
The United States Coast Guard

Ready Reserve Force Inspection and Certification

I. Purpose

This Memorandum of Understanding (MOU) sets forth policies and procedures to be followed by the Maritime Administration (MARAD) and the United States Coast Guard (USCG) relative to inspection and certification of vessels of the Ready Reserve Force (RRF). RRF vessels are Public Vessels of the United States, owned by the Maritime Administration and maintained in either Reduced Operating Status (ROS) or Inactive Status, as reserve sealift assets for national defense and other purposes. The purpose of this MOU is to describe the RRF Program, and identify differences between the RRF and active commercial US flag cargo vessels as they affect USCG regulatory certification. The following Annexes are attached to this MOU:

Annex I: Glossary
Annex II: Command, Control and Communications

II. Background

The Ready Reserve Force (RRF) was established in 1976 as a surge component of MARAD's National Defense Reserve Fleet (NDRF). Today, the RRF is a key element of the Department of Defense (DOD) Strategic Sealift Program, designed to provide reliable and responsive shipping to support the deployment of US military forces worldwide. Maintained in a high state of readiness, RRF vessels provide for the rapid availability of ocean shipping essential to the deployment of DOD equipment in a national emergency. MARAD is responsible for assuring that RRF vessels can be activated, i.e. transitioned to fully operational status, within their assigned Readiness Status (R-Status); i.e. 4, 5, 10, 20 or 30 days, and perform mission requirements. When operational for DOD, RRF vessels are under the Operational Control (OPCON) of the Navy's Military Sealift Command (MSC), however, MARAD retains responsibility for the inspection and maintenance of the vessels.

Vessel Legal Status: All RRF vessels are public vessels, fully documented with the USCG as evidence of ownership and nationality, and assigned official numbers and home ports. By Congressional direction RRF ships are subject to inspection (46 USC 2109) under U.S. law and regulation, but otherwise are given full status as public vessels. RRF vessels are exempt from the requirements of all international conventions, including SOLAS and MARPOL. RRF vessels do not receive convention certificates (see Voluntary Compliance below), only a USCG Certificate of Inspection. RRF vessels are maintained in class with the American Bureau of Shipping (ABS), and, in general, conform to the regulatory requirements typical of commercial, US flag cargo and tank vessels.

RRF vessels are exempt from the following international conventions:

SOLAS (including Chapter IX - ISM)
MARPOL 73/78 (excluding Annex V)
ISM (as invoked by 33 CFR Part 96)

In addition, RRF tank vessels are exempt from the double hull requirements of the Oil Pollution Act of 1990. Each RRF vessel displays a Certificate of Public Vessel Status on its bridge.

Voluntary Compliance: As a matter of policy, reflecting MARAD's decision to be a leader in the fields of marine pollution control and safety, MARAD has decided to voluntarily comply, to the maximum extent practicable, with the laws, treaties and international conventions listed above, and with all other environmental and safety laws from which MARAD is exempt, even though there is no legal requirement. This should not be construed as a waiver of the public vessel status of RRF vessels. The extent of compliance will be documented by a USCG recognized classification society, with appropriate documentation issued. Vessels which achieve full compliance may receive a Statement of Voluntary Compliance certificate.

III. RRF Program Management

Program Phases: To meet DOD program requirements established for the RRF, MARAD developed a seven (7) phase program for management of the RRF. Effective July 1, 1998, Phase VI; Sealift Enhancement Features, will be eliminated from the program. It is included here and in Annex I for reference. The seven phases are:

Phase I	Acquisition
Phase II	Upgrade (Reflag if applicable)
Phase III	Deactivation (initial only, following Acquisition/Upgrade)
Phase IV	Maintenance
Phase V	Exercise (Activation/Deactivation)
Phase O	Operation
Phase VI	Sealift Enhancement

Expanded definitions and discussion of the various phases are included in Annex I of this MOU, and also in Paragraph IV; Inspection Requirements, below.

Readiness Status: At the direction of the United States Transportation Command (USTRANSCOM), RRF vessels are maintained in one of several degrees of readiness, designated as either ROS-xx or RRF-xx; where ROS indicates Reduced Operating Status, and RRF indicates Inactive (laid-up) status. *[When using this MOU, please carefully consider the distinction between "RRF" when used to describe inactive vessels, and "RRF" when the term applies to the Ready Reserve Force as a whole].* The "xx" indicates the activation timeframe in days. ROS vessels are partially manned with hotel systems operational. ROS crews perform inspections, routine repairs, preventative maintenance and periodically operate equipment and systems. Inactive, or "RRF," vessels are unmanned and are maintained in a state of deep lay-up, generally at one of MARAD's three (3) NDRF sites. To prevent deterioration in lay-up, equipment and systems are preserved, critical spaces dehumidified and sea chests are blanked.

Activations / Deactivations: RRF vessels may be activated for a variety of purposes. Principally, activations are initiated for maintenance, readiness testing or to support a DOD mission or exercise. There are two types of activations: *"Notice"* and *"No-Notice."* "Notice" activations are scheduled and planned in advance. The pace is generally slow, and activation timeframes are often not a factor. "Notice" activations typically support a planned DOD exercise, or are strictly for maintenance purposes as shown in Table 1. Where possible, "Notice" activations will be scheduled to coincide with required regulatory surveys and inspections.

During *"No-Notice"* activations, vessels are activated as quickly as possible in order to meet assigned readiness criteria. "No-Notice" activations typically support an emergent DOD requirement, or they may be initiated to test readiness and whether a vessel, or vessels, are being maintained such that they can meet their assigned activation timeframe(s).

Following activation (and any subsequent operation), the vessel is returned to either ROS or Inactive (RRF) status through Deactivation. The deactivation process is often used as an opportunity for making repairs, and scheduling inspections and surveys. Renewal of COI's may be requested during the deactivation period (see Paragraph IV.B), in order to restore planned maintenance schedules.

USCG Notification: MARAD HQ shall notify the USCG Commandant (G-MOC)/ National Maritime Center when an activation occurs, identifying the vessel, Ship Manager, the activation shipyard or facility, and the vessel readiness status. Notification on the local level will be made as part of any request for inspection, if necessary. The scope of USCG inspection at activation is defined in Paragraph IV.C. For Notice activations, MARAD will provide advance notification (as required by 46 CFR Parts 31 & 91) to the OCMI to facilitate the scheduling of requested inspections.

Ship Management Services: The day-to-day management of RRF vessels is assigned to commercial ship management companies under either Ship Manager contracts or General Agency task orders. General Agency tasks are usually temporary; however, the responsibilities of a General Agent are generally the same as that of a Ship Manager, and for the purposes of this MOU, the terms are interchangeable. Primary oversight of Ship Managers is provided by the MARAD Region(s) in which the assigned vessel(s) is located.

Ship Managers manage all aspects of RRF vessel maintenance and operation. Ship Managers are contractually responsible for maintaining RRF vessels in class and certificated, and are responsible for their overall material condition and readiness. The Ship Manager is responsible for requesting USCG inspections, with the Port Engineer designated as the primary Point-of-Contact for requested vessel inspections (see Annex II).

RRF Maintenance Program: The level of maintenance on RRF vessels is based on readiness criteria described above. The maintenance program includes preventative maintenance, periodic maintenance, and planned activations culminating in dock or sea trials. The frequency of maintenance actions and the type of activation trial is again dependent on assigned readiness, and is summarized in Table 1.

IV. Inspection Requirements

A. General

MARAD intends that RRF vessels will proceed to sea with a valid USCG Certificate of Inspection (COI) indicating the vessel complies with the applicable USCG rules and regulations. COI's on ROS and RRF-10 vessels will be maintained current; COI's on RRF-20 and RRF-30 vessels may expire, but will be renewed at activation (see Paragraph IV.B). Inspection intervals will be in accordance with 46 CFR schedules, unless specifically modified below. National security considerations may make it necessary for a vessel to get underway without full certification. In such cases, a National Defense Waiver (NDW) is obtained by the Department of the Navy, Commander, Military Sealift Command.

RRF vessel inspection requirements vary based on their assigned program management phase. Phases I through III, are specific phases related to the acquisition and initial entry of a vessel into the RRF. Vessels in these phases will comply with all applicable federal regulations, in the same manner as commercial vessels (including reflagging, if necessary). Selected RRF vessels have been, or may be, modified for a specific military function (Phase VI). In general, such modifications are performed in accordance with all normally applicable rules and regulations, except where military equipment is installed. Military equipment inspection requirements will be developed on a case-by-case basis and are to be entered into the vessel's MSIS file.

Routine day-to-day management of the RRF is conducted with ships in Phases IV, V and O; therefore, the following discussion considers these Phases only.

Phase IV - Maintenance: RRF vessels in lay-up, whether inactive or in ROS status, are generally assigned to Phase IV. Phase IV maintenance activations and cycles are based on a vessel's assigned readiness status, and are shown on Table I. Ship Managers will arrange for USCG inspection services as appropriate (see Annex II).

Phase V - Exercise (Activation/Deactivation): Phase V is divided into two non-sequential sub phases; *Activation* during which the vessel transitions from Phase IV Maintenance to Phase O Operation, and *Deactivation* during which the vessel transitions from Phase O back to Phase IV. Vessels are activated as discussed in

Paragraph III. Any vessel which is tendered to the DOD through the Military Sealift Command (MSC), including vessels which are activated for military exercises, will transition through Phase V to Phase O. Note that vessels activated for Phase IV maintenance activations do not transition to Phase V or Phase O, and remain under MARAD's Operational Control.

Phase O - Operation: During Phase O, RRF vessels come under the operational control of MSC (independent MARAD control of RRF vessel operations - other than Phase IV - is rare). Phase O inspection intervals will be in accordance with 46 CFR requirements (except drydocking, see paragraph IV.D)

B. COI Renewal and Mid-period Inspections

In order to assure uninterrupted operation when activated, MARAD may request renewal of a COI up to 3 months before expiration. Upon deactivation, MARAD may request early renewal of a COI; at up to three months before expiration for ROS vessels, and up to one year before expiration for Inactive vessels. COI inspection policy for RRF vessels is described below.

> ROS vessels are to maintain current COI's . Biennial COI and Mid-period inspections are performed in accordance with 46 CFR requirements.
>
> Inactive vessels, include RRF-10, 20, and 30 vessels. RRF-10 vessels are to maintain current COI's at all times. Biennial COI inspections are performed in accordance with 46 CFR at scheduled maintenance activations or ship availabilities. RRF-20 vessels will renew COI's at maintenance activation (every 2-½ years) or in the event of DOD ordered activation. RRF-30 vessels will renew COI's only in the event of a DOD activation. Mid-period inspections may be deferred until activation for all non-ROS ships due to the fully inactive status of the vessels.

When a deficiency or required inspection cannot be completed due to the laid up status of the vessel, a CG-835 shall be issued. To provide MARAD flexibility to schedule needed work to coincide with vessel drydock examinations, activations or deactivations following operations, CG-835's shall be satisfied within the following timeframes:

- one year, if issued at the COI inspection; or
- one year after the completion of the next COI inspection, if issued at any inspection other than the COI inspection; or
- one year from a final appeal decision if the issue is contested. (See Paragraph VI)

OCMI's may remove RRF vessels from certificated status if CG-835's remain uncorrected beyond the allowed time period as stated above. The cognizant OCMI will retain a list of requirements for inclusion in the vessel file. OCMI's may extend the completion dates of requirements at their discretion.

Upon completion of a COI inspection, the COI and a list of outstanding CG-835's and required completion dates, will be provided to the Ship Manager for inclusion in the vessel file. Additional copies will be issued to the cognizant MARAD Region.

Certification information, permanent waivers, notations of alternative compliance or other permanent deviations granted at this time or in the future shall be entered and maintained in the USCG Marine Safety Information System (MSIS).

C. Inspections at Activation

Consistent with the general policy of maintaining valid COI's, inspections at activation will be based on the status of the COI. If COI renewal has been requested and is being performed concurrent with the activation, all normally required inspections will be conducted. Other USCG inspections of RRF vessels at activation are described below:

> On ROS vessels with current COI's, the inspection will be limited to clearing "no-sail" deficiencies (CG-835's), and the master shall be responsible for conducting a fire and boat drill before the vessel sails.
>
> On Inactive vessels with current COI's the inspection will include clearing "no-sail" CG-835's, observing a fire and boat drill and inspecting safety and other equipment removed and stowed during lay-up; however, during a Notice activation of an Inactive vessel with a current COI, renewal may be requested during the subsequent deactivation (see Paragraph IV.B).

D. Drydocking

General: RRF vessels fall into one of three drydocking intervals; a) the normal twice in five year interval typical of active commercial vessels, b) a five year interval with drydocking exams scheduled every five years and no intermediate examination, and c) a ten year interval with an intermediate exam or exams (see below). Unless otherwise requested by MARAD, the extension of drydocking intervals includes all external and internal hull exams normally conducted in conjunction with the drydocking inspection, (i.e. the Internal Structural Examination [ISE], Cargo Tank Internal Examination [CTIE], tailshafts, sea connections, and hull fittings). Those vessels which have a permanent cathodic protection system installed, will have the system inspected and serviced regularly. For vessels which are not fitted with hull blanks (typically ROS vessels); maintenance, dock and sea trial procedures must contain specific actions to assure that marine growth or foreign material is not restricting the flow of water through sea chests or salt water piping.

MARAD is responsible for tracking accumulated operating time for ROS and Inactive vessels. Note that operating time for ROS vessels is only those periods of time when the vessel is fully crewed and active. When a vessel accumulates three years of operating time during the five or ten year interval, an appropriate underwater exam will be scheduled immediately. Limited extensions of drydocking may be granted by the OCMI up to 90 days. Further extensions shall be forwarded to the COMDT (G-MOC) for action.

"Commercial" (twice in five year) Drydocking Interval: Operational RRF tank vessels (ROS, Pre-positioned, and Operating) will be drydocked in accordance with normal commercial practice, and the intermediate hull exam will be conducted on drydock.

Other operational RRF vessels will be subject to underwater hull exams in this interval if the "3 year trigger" (see above) is reached. Intermediate exams may be UWILD's, if the vessel has been previously prepared and found eligible for such an exam.

Five Year Drydocking Interval : RRF tank vessels in Inactive Status (RRF-10/20/30), and most other RRF dry cargo vessels, regardless of their readiness (ROS or Inactive, i.e. RRF 10/20/30) status, will be drydocked at five year intervals. The intermediate underwater examination will be waived for vessels in this interval (unless triggered by cumulative operating time).

Ten Year Drydocking Interval: Extended drydocking intervals for selected RRF vessels have been established, and are summarized below. Vessels selected for ten year drydocking interval must meet both the Coast Guard and ABS Rule requirements for Underwater Inspection In-Lieu-Of Drydocking (UWILD), whether or not UWILD's will be part of the underwater examination sequence. Before (or as part of) an application for ten year drydocking interval is submitted, RRF vessels will be prepared to the following minimum standards:

- have a high build, high performance anti-corrosive and anti-fouling underwater paint system, and be appropriately marked to facilitate underwater inspection by divers.
- have a permanent cathodic protection system installed or serviced/renewed as appropriate
- be fitted with arrangements to measure stern tube and rudder bearing clearances.

Vessels approved for a ten year drydocking interval must be approved in writing by the cognizant OCMI, and appropriate notations in the MSIS system must be entered. Eligibility by vessel type for ten year drydocking interval will be in accordance with applicable 46 CFR eligibility criteria (i.e. tank vessels are ineligible). Maximum age restrictions for entry into the extended drydocking intervals may be waived for RRF vessels.

Intermediate underwater examinations may be either UWILD's, or drydockings restricted to examination of the underwater hull only (see below). For vessels completing the mid-point intermediate underwater examination using UWILD (at approximately the five year mark), a second UWILD inspection within 24 - 36 months following the first UWILD will be required.

In certain circumstances, vessels which are eligible for UWILD examination may be drydocked instead. In general, this will occur when water clarity precludes the successful conduct of a UWILD exam (iaw NVIC 1-89 visibility requirements). In these circumstances, the scope of the drydock examination is limited to the same level of inspection as the UWILD (i.e. external visual inspection of the underwater hull, seachests and sea valves, and tailshaft/rudder pintle bearing clearances). However, recognizing the improved visibility afforded on the drydock, the OCMI may exercise his/her discretion and waive the second intermediate underwater exam.

E. Alternate Compliance Program / Streamlined Inspection Program

Alternate Compliance Program: RRF vessels that are in full compliance with the requirements of International Convention, ABS Class and the US Supplement to the ABS Rules may participate in the ACP. ABS issued "Statements of Voluntary Compliance" will be accepted as equivalent to convention certificates. However, such Statements of Voluntary Compliance must be free of exemptions, except for cargo stowage exemptions endorsed by the USCG. Selected RRF vessels, which meet the above criteria, will be enrolled in the ACP program, in accordance with the applicable enrollment regulations contained in 46 CFR (due to the ABS statutory monopoly on classing U.S. government-owned vessels, only ABS will be authorized by the USCG to enroll RRF vessels in ACP).

Under the ACP, the USCG will accept surveys performed by ABS as equivalent to tests and examinations required for initial and in-service inspections for certification, periodic reexamination, and drydock examinations. The USCG will conduct oversight of ABS under this program. For vessels in the ACP, the USCG shall credit all inspections performed by ABS with the same credit date as ABS.

Streamlined Inspection Program: RRF vessels may participate in the Streamlined Inspection Program (SIP), which allows onboard and shoreside vessel operating personnel (principally Ship Manager employees, including RRF vessel crews) to conduct the majority of USCG required inspections, and to have these inspections verified by USCG marine inspectors on a regular basis. The intent of this program is to develop, under USCG supervision, a process by which the inspection of the vessel is carried out by qualified ship personnel with approved test procedures in a self-perpetuating, self-correcting format.

RRF vessels selected for participation in the SIP will be enrolled in accordance with the applicable regulations contained in 46 CFR; however, unlike the ACP, MARAD (not the Ship Manager) will submit the necessary application.

V. Application for Waiver

When compliance with the applicable laws or regulations is not compatible with DOD's operational requirements, waiver of specific regulations may be requested for a vessel in the interest of national defense. Waiver requests will be initiated by DOD and submitted, in writing, to the cognizant USCG District Commander or his designated representative in accordance with 46 CFR §6.01.

During activations of RRF vessels for rapid deployment of US forces during crisis situations or upon declaration of war or national emergency, the Commandant, or cognizant District Commander shall designate that the OCMI is authorized to grant temporary waivers, at the request of MARAD, for material deficiencies that do not adversely affect the safety of the vessel or crew (e.g. pollution prevention systems). The waiver procedure contained in 46 CFR §6.01(d) shall be followed for oral waiver applications.

VI. Appeals

Any decision of the OCMI may be appealed to the Commandant in accordance with 46 CFR §2.01-70 and 46 CFR §1.03. Due to the urgent nature of defense operations, all

appeals will be acted upon within 24 hours of receipt, when vessels are being activated to support a contingency.

VII. Coordination

Meetings of OCMI's, regional MARAD staff and Ship Managers representatives are encouraged at least annually in order that this MOU be effectively implemented.

VIII. Modification / Termination

This agreement may be modified in whole or in part at any time by mutual agreement of the parties. Either party may propose modifications whenever deemed necessary or desirable. The parties agree to consider such proposed modifications promptly. Either party may terminate this agreement, upon delivery of written notification to the other party.

IX. Effective Date

This Memorandum of Understanding is effective _July 20, 1998, and supersedes the previous Memorandum of Understanding dated 25 March 1992.

UNITED STATES COAST GUARD	MARITIME ADMINISTRATION
_____SIGNED*_____	_____SIGNED*_____
_____ *(Signature/Date)*	_____ *(Signature/Date)*
Robert C. North Rear Admiral U.S. Coast Guard Assistant Commandant for Marine Safety and Environmental Protection	James E. Caponiti Associate Administrator for National Security

*** Original signed copies are on file in MAR-611.**

Table 1: RRF Maintenance Frequencies

R-Status	Outported	Crew Size	Maintenance Activation w/Dock Trial	Maintenance Activation w/Sea Trial	Phase IV Maintenance Cycle
ROS-4	Yes	10	None	1 yr	Continuous
ROS-5	Yes	9	2 yr(1)	2 yr(1)	Continuous
RRF-10	No(2)	n/a	None	2 yr	6 mo
RRF-20	No(2)	n/a	5 yr(3)	5 yr(3)	6 mo
RRF-30	No	n/a	None	none	1 yr

Notes:
(1) Sea and dock trials alternate annually (i.e. yr 1 = ST, yr 2 = DT, yr 3 = ST, etc...)
(2) generally located at an NDRF site, however, some exceptions exist. Maintenance frequencies do not differ based on lay-up site (NDRF or outport).
(3) Sea and dock trials alternate. Dock trials are carried out approximately at the mid-period of the 5 year sea trial interval.

Remarks:
The maintenance frequencies shown for each "R-Status" assignment are subject to change. Direction on the frequency of maintenance actions is provided to MARAD by USTRANSCOM. The frequencies shown reflect guidance in effect at the time of signing this MOU. Any changes to these frequencies will be disseminated by updating this page.

Phase IV Maintenance Procedures (P4P) and ROS Vessel Maintenance Actions (VMA) are designed to ensure systematic exercising, maintenance, inspection and testing of ship systems and equipment. Preventative maintenance of equipment and machinery during Phase IV is performed on a cyclical basis, at intervals shown above.

Maintenance activations are carried out to conduct operational tests of equipment and systems. Dock trials involve activation of the vessel's machinery plant, but the vessel is not taken to sea. Regulatory inspections and surveys, including COI renewal and mid-period inspections, are scheduled to coincide with dock and sea trials whenever possible. In the case of RRF-20 vessels this may result in periodic expiration of COI's.

ANNEX I to the MARAD /USCG Memorandum of Understanding; GLOSSARY

C-Rating: Alternately referred to as "C-Status" or "Readiness." Not to be confused with "R-Status." A readiness reporting system established for vessels in Phase IV (Maintenance). Developed by MARAD in coordination with the U.S. Transportation Command, C-Ratings identify and report a vessel's condition relative to its ability to meet its assigned Readiness Status (R-Status) activation timeframe. See C1, C2, C3, C4, C5, OP and PP.

C1 {C-Rating}: No Mission Degrading Deficiencies: Describes a ship having no known deficiencies which impact its mission or activation within assigned readiness period.

C2 {C-Rating}: Documented and Correctable Mission Degrading Deficiencies: Describes a ship which has mission degrading deficiencies which can be corrected within the assigned readiness period.

C3 {C-Rating}: Mission Degrading Deficiencies Exist Which Cannot be Corrected (within the assigned readiness period): Describes a ship which can be activated within its prescribed readiness time frame but has deficiencies which cannot be corrected within the readiness time frame limiting the full operational capability of the ship.

C4 {C-Rating}: Major Deficiencies Prevent the Ship Activating or Performing its Primary Mission and cannot be corrected within the assigned readiness period: Describes a ship which cannot be fully mission capable within the activation period, or a ship which has a COI that will expire within 15 days or a COI that has expired. RRF 20/30 day ships are exempt from C-Status downgrade due to COI expiration.

C5 {C-Rating}: Scheduled Major Repairs in Progress; unable to meet assigned readiness period: Describes a ship undergoing major repairs which prevent it from meeting its assigned readiness time frame.

Commandant[6]: In general, the use of the term "Commandant" denotes USCG Headquarters and the various staff elements who act on the basis of the Commandant's authority and documentation. G-MOC administers the inspection program for merchant vessels, including those in the RRF.

District Commander: For marine inspection related issues within the boundaries of each geographic district, a staff officer designated as the Chief, Marine Safety Division acts on the

[6] For further information and more detailed descriptions, the USCG Marine Safety Organization and definitions of titles and functions are contained in Title 46, Code of Federal Regulations, Subchapter A. Subpart 1.01 of Subchapter A, "Organization and General Flow of Functions," contains a thorough list of organizational titles and corresponding functions pertinent to USCG inspection of merchant vessels. In addition to titles and organization, Subchapter A provides a useful description of the decision making flow within the Coast Guard Marine Safety Program. Various subchapters within Title 46 CFR also define organizational titles (e.g., OCMI).

basis of the USCG District Commander's authority. District Commanders are subordinate to the Commandant.

General Agent: A ship operating company that represents MARAD for the maintenance and operation of RRF vessels by letter of agreement. Is empowered as MARAD's agent in all matters related to vessel maintenance, inspection, activation and operation; analogous to "Ship Manager."

MARAD Liaison: Individual on staff at USCG Headquarters as delegated by Commandant, G-MOC. Acts as the liaison to and from MARAD as the need arises.

Marine Inspector: Either an officer or civilian federal employee of the USCG, designated by the OCMI to witness all required tests and inspections on board merchant vessels. The Marine Inspector is the primary individual in the field tasked with direct physical observation and initial evaluation of a particular vessel for compliance with vessel safety regulations. The marine inspector is subordinate to the OCMI.

Marine Surveyor: MARAD employee responsible for one or more RRF ships to oversee vessel maintenance, repairs and activations. Works closely with Port Engineers and their respective Ship Managers/General Agents to ensure that vessels are kept in their assigned readiness status.

"No-Sail" CG-835: A deficiency which, as determined by the OCMI, would seriously endanger the vessel or its crew if the vessel proceeded to sea.

Officer in Charge, Marine Inspection (OCMI): Designated and delegated to give immediate direction to marine safety functions including the inspection of vessels within their zone. OCMIs are subordinate to the District Commander.

OP {C-Rating}: Operational: Describes a ship placed in operational status for the purpose of supporting military exercises or operations as required for National Defense.

Phase I - Acquisition: The acquisition of a vessel for the RRF, whether by purchase, transfer from other government entities, or upgrade from the National Defense Reserve Fleet (NDRF).

Phase II - Upgrade: The initial upgrade of an acquired vessel to RRF standards, including USCG Certification, ABS Classification, and compliance with other regulatory requirements. If the acquired vessel is of foreign registry, this Phase includes re-flagging to United States registry.

Phase III - Deactivation: The initial deactivation of a vessel following acquisition, upgrade and operational testing. The vessel is laid-up in a state of preservation consistent with its assigned readiness status, and location (outport or NDRF site).

Phase IV - Maintenance: The retention phase wherein an RRF vessel is maintained, tested, and otherwise prepared to meet its assigned readiness status. Vessels in Phase IV are either in Reduced Operating Status (ROS), or Inactive (RRF). Inactive vessels undergo periodic "Phase IV Maintenance Cycles," based on ship specific maintenance procedures. ROS vessels undergo continuous maintenance cycles performed primarily by the embarked ROS crew. The Ship Manager is

contractually responsible for assigned vessels in this phase.

Phase V - Exercise: This phase is divided into two non-sequential sub phases, Activation during which the vessel transitions from Phase IV Maintenance to Phase O Operation and Deactivation during which the vessel transitions from Phase O back to Phase IV. Any vessel which is tendered to the DOD through the Military Sealift Command (MSC), including vessels which are activated for military exercises, will transition through Phase V to Phase O

Phase O - Operation: Vessels which have been activated for exercises, or National Defense purposes are placed in Phase O once tender to the MSC has been accepted. During Phase O, RRF vessels come under the operational control of MSC, but administrative control (ADCON) is retained by MARAD and the Ship Manager.

Phase VI - Sealift Enhancement: This phase is similar to Phase II Upgrade, however, it involves the installation of equipment and facilities to support DOD mission requirements. Such features include, but are not limited to, underway replenishment at sea rigs, vertical replenishment helicopter platforms, Offshore Petroleum Discharge System equipment on selected tankers, and craneship conversions for offloading conventional, non self-sustaining cargo ships. *Note: effective July 1, 1998, Phase VI will be eliminated as a separate program phase. Sealift Enhancement Features will be accomplished in either Phase II or Phase IV.*

Planned Maintenance: A program of routine and continuous maintenance of the hull and machinery. The program should be developed in consultation with the manufacturers of the machinery and the various lubricants and coatings used to preserve the hull and machinery. In the situation of idle vessels, the long term lay up may affect the retention of oil films in bearings which could lead to brinneling of the bearings. Particular attention is to be given to prevention of brinneling.

Port Engineer: The "on site" representative of the General Agent or Ship Manager. Responsible for the daily operations required for the various Phases of RRF Management. Works closely with the Marine Surveyor during activations and inspections.

PP {C-Rating}: Pre-Position: Describes a ship placed in operational status for the purpose of pre-positioning military cargo in a designated theater of operations.

Readiness: Not to be confused with Readiness Status. See “C-Rating.”

Readiness Status {R-Status}: Readiness status is defined as the timeframe in which MARAD must activate and tender a vessel to DOD. A vessel’s R-Status is designated by the Department of Defense. The two categories of R-Status are: a) ROS and b) RRF.

Regional Director: The MARAD Regional Director administers all MARAD programs within his region, including the RRF program. The director is the regional representative for the Maritime Administrator.

ROS/# {R-Status}: Reduced Operating Status/# Days - Vessels in Reduced Operating Status have a reduced crew of key personnel living on board for maintenance purposes. Vessels in this status conduct sea trials or dock trials on an annual basis. The 4 or 5 after "ROS" indicates the number of days authorized for vessel activation and tendering to Military Sealift Command's Operational Control.

RRF/##{R-Status}: Ready Reserve Force/## Days - RRF vessels are deep lay-up, generally at one of the National Defense Reserve Fleet Sites. A vessel in this status requires towing to a repair facility for activation, crewing, storing and sea trials prior to tendering to Military Sealift Command's Operational Control. The number following "RRF" indicates the number of days authorized for vessel activation and tendering to Military Sealift Command's Operational Control.

Rules: The requirements set forth by a classification society to which a vessel is constructed and maintained. For the purposes of the RRF, the term Rules refers to the Rules of the American Bureau of Shipping.

Ship Manager: A ship management company that is contracted to represent MARAD for the maintenance and operation of RRF vessels. Is empowered as MARAD's agent in all matters related to vessel inspection, activation and operation. The Ship Manager is an independent contractor for purposes of procurement of supplies and services for maintenance, and is contractually responsible for maintaining the vessel(s) in class and certified.

Ship Operations & Maintenance Officer: Is the primary point of contact in the Regional office for RRF vessel maintenance, repair, and activation contracts. Plans, submits and administrates budgets for vessel maintenance and repairs within the RRF program.

Surveyor, Exclusive: Not to be confused with the term Marine Surveyor. An Exclusive Surveyor is a full time employee of the American Bureau of Shipping.

USCG/ABS Liaison: Individual on staff at MARAD Headquarters as delegated by the Chief, Division of Ship Maintenance and Repair in the Office of Ship Operations. Acts as the liaison to both the USCG and ABS on matters pertaining to merchant vessel inspection requirements as they relate to the RRF.

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ANNEX II to the MARAD / USCG Memorandum of Understanding; COMMAND, CONTROL & COMMUNICATIONS

I. Introduction

As in all complex operations involving inter-agency coordination, rapid and effective communications are essential. This section identifies procedures ensuring that communication is maintained between USCG, ABS and MARAD decision makers to facilitate the inspection of the RRF.

II. USCG / ABS / MARAD Organization

Figure 1 illustrates an index of decision levels of the ship inspection team and the relationships between USCG, ABS and MARAD.

III. Organizational Points of Contact

Overview - ABS / USCG / MARAD: As Figure 1 illustrates, a one to one correlation among the three organizations does not exist at all levels of RRF inspections and activations. At the headquarters level, interagency coordination is expedited by ABS/USCG/MARAD liaison officers located at ABS, USCG and MARAD Offices and Headquarters. Below the Headquarters level the organizations diverge in both geographic distribution and assignment of responsibility for completion of ABS and USCG inspections. MARAD currently has five Regional offices; the USCG has 10 districts, each with two or more OCMI zones; and ABS has three divisions (not including the ABS Corporate Office). This results in each MARAD regional office spanning several OCMI zones and at least two USCG District Commanders, and the three ABS Survey Managers and Director of Government Services. Most OCMI inspection zones lie entirely within the boundaries of a single MARAD Region.

Inspection Scheduling and Conduct: OCMIs, ABS Attending Surveyors and MARAD coordinate scheduling of RRF vessel inspections, and work to resolve deficiencies noted during inspections on board the vessel in question. As discussed in the MOU, MARAD employs Ship Managers (and/or General Agents) to manage all aspects of RRF vessel maintenance and operations. The Ship Manager, through an assigned Port Engineer, is the primary point-of-contact when requesting and conducting RRF vessel inspections and surveys. This delegation of responsibility does not, however, relieve the cognizant MARAD region from its oversight responsibilities, or from its ultimate responsibility as vessel owner.

The following procedure shall be followed when scheduling and conducting vessel inspections and surveys:

Prior to the commencement of an inspection or survey, the Ship Manager shall contact the cognizant OCMI and/or responsible ABS field office in whose zone an RRF vessel is to undergo inspection or survey. The Ship

Manager _will identify the vessel, their designated Port Engineer and the MARAD Marine Surveyor who will be available to respond to inquiries and resolve inspection issues, when requested by the OCMI, USCG marine inspector, ABS field office, or ABS Surveyor.

Prior to, or as soon as possible after the commencement of any regulatory inspection or classification survey (i.e., COI, Drydock Exam, Cargo Gear, etc.) of an RRF vessel, the attending USCG Marine Inspector(s), and/or ABS Surveyor(s) will meet with the Port Engineer and MARAD Marine Surveyor. They will agree on a schedule for maintaining contact with each other to discuss inspection and survey issues. USCG, ABS and MARAD will be readily accessible to each other throughout the course of the inspection or survey and they will designate an alternative point of contact in the event of an individual's absence.

Coordination: When inspections or surveys involve multiple OCMIs, District Commanders, ABS Offices or MARAD Ship Manager(s) and Regional offices, these individuals are encouraged to make direct contact with each other when coordination is required to resolve inspection issues involving an RRF vessel. This should occur as early as possible.

For issues requiring headquarters level policy interpretation, or requiring a national defense waiver, either agency, at any level, may contact the ABS/USCG/MARAD liaison officers. The liaison officers will assist by contacting the appropriate headquarters staff at each agency and coordinate a response to the issue/inquiry. Each agency will then be responsible for rapidly transmitting its decision to the subordinate offices and commands involved.

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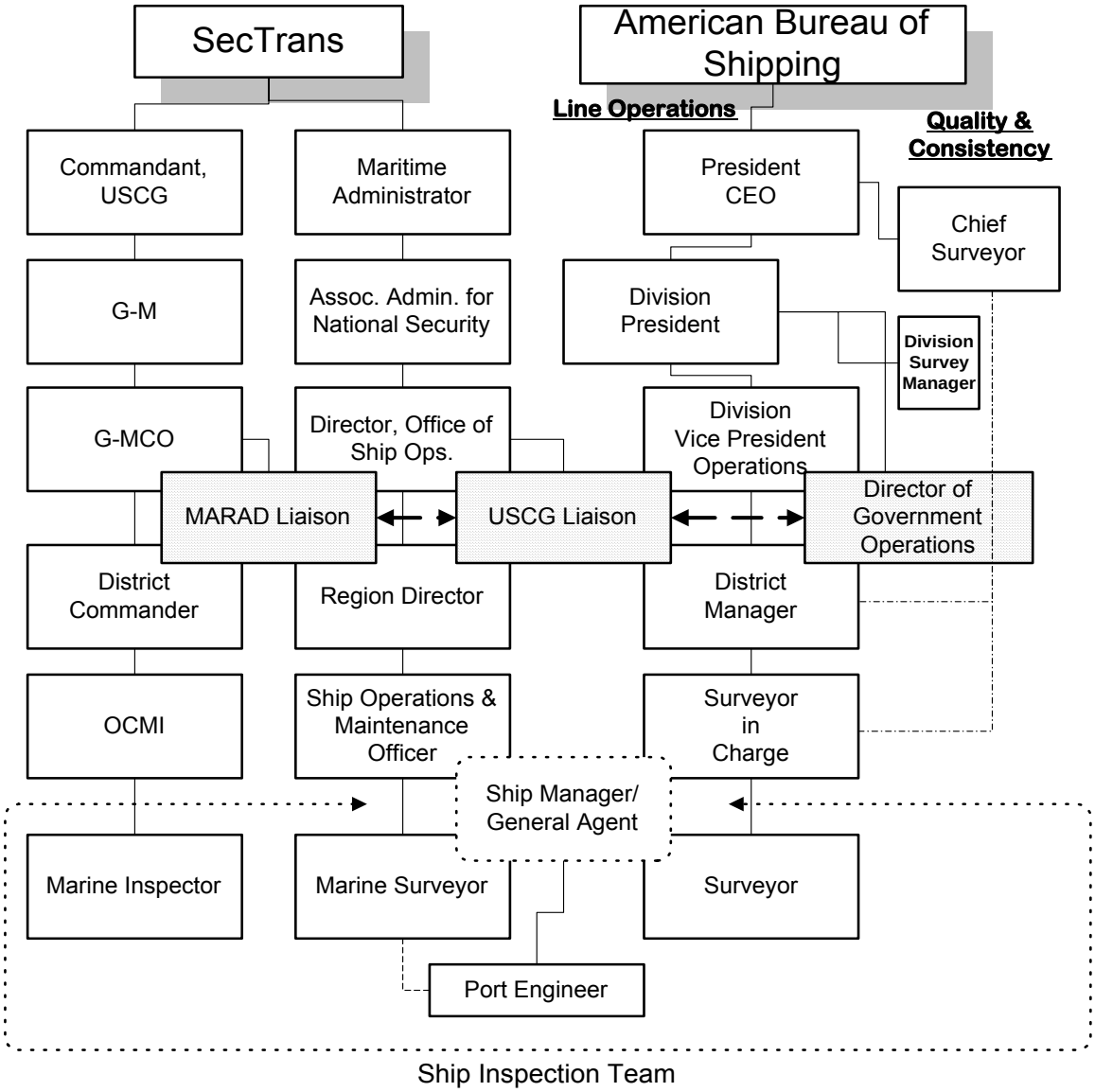
Figure 1 - Ship Inspection Chain of Command



MEMORANDUM OF UNDERSTANDING
Between

The Maritime Administration
and
The American Bureau of Shipping

Ready Reserve Force Surveys and Classification

I. Purpose

This Memorandum of Understanding (MOU) sets forth policies and procedures to be followed by the Maritime Administration (MARAD) and the American Bureau of Shipping (ABS) relative to the survey and classification of vessels of the Ready Reserve Force (RRF). RRF vessels are Public Vessels of the United States, owned by the Maritime Administration and maintained in either Reduced Operating Status (ROS) or Inactive Status, as reserve sealift assets for national defense and other purposes. The purpose of this MOU is to describe the RRF Program, and to discuss the classification of vessels in this program, giving particular attention to those conditions which differ from the "normal" classification requirements of active, commercial vessels. The following Annexes are attached to this MOU:

Annex I: Glossary
Annex II: Command, Control and Communications
Annex III: Program for Barges

II. Background

The Ready Reserve Force (RRF) was established in 1976 as a surge component of MARAD's National Defense Reserve Fleet (NDRF). Today, the RRF is a key element of the Department of Defense (DOD) Strategic Sealift Program, designed to provide reliable and responsive shipping to support the deployment of US military forces worldwide. Maintained in a high state of readiness, RRF vessels provide for the rapid availability of ocean shipping essential to the deployment of DOD equipment in a national emergency. MARAD is responsible for assuring that RRF vessels can be activated; i.e., transitioned to fully operational status, within their assigned Readiness Status (R-Status); i.e., 4, 5, 10, 20 or 30 days, and perform mission requirements. When operational for DOD, RRF vessels are under the Operational Control (OPCON) of the Navy's Military Sealift Command (MSC), however, MARAD retains responsibility for the inspection and maintenance of the vessels.

The American Bureau of Shipping (ABS) is recognized in 46 United States Code Section 3316 as the U.S. Government's sole agent for the classification of publicly owned vessels and for matters

related to classification. ABS has been a principal team member surveying U.S. Sealift assets for fitness for their intended purposes.

Vessel Legal Status: All RRF vessels are public vessels, fully documented with the USCG as evidence of ownership and nationality, and assigned official numbers and home ports. By Congressional direction, RRF ships are subject to USCG inspection (46 USC 2109) under U.S. law and regulation, and are issued USCG Certificates of Inspection. RRF vessels are otherwise given full status as public vessels. Each RRF vessel displays a Certificate of Public Vessel Status on its bridge.

RRF vessels are exempt from the following international conventions:

SOLAS (including Chapter IX - ISM)
MARPOL 73/78 (excluding Annex V)
ISM (as invoked by 33 CFR Part 96)

RRF vessels are exempt from the requirements of all international conventions, including SOLAS and MARPOL, except where incorporated in U.S. domestic regulations. In addition, RRF tank vessels are exempt from the double hull requirements of the Oil Pollution Act of 1990.

Voluntary Compliance: As a matter of policy, reflecting MARAD's decision to be a leader in the fields of marine pollution control and safety, MARAD has decided to voluntarily comply, to the maximum extent practicable, with the laws, treaties and international conventions listed above, and with all other environmental and safety laws from which MARAD is exempt, even though there is no legal requirement. This should not be construed as a waiver of the public vessel status of RRF vessels. The extent of compliance will be documented by ABS, with appropriate documentation issued (See Paragraph IV).

30.1.1 III. RRF Program Management

Program Phases: To meet DOD program requirements established for the RRF, MARAD employs a six (6) phase program for management of the RRF. The six phases are:

Phase I Acquisition
Phase II Upgrade (Change of class, if applicable)
Phase III Deactivation (initial only, following Acquisition/Upgrade)
Phase IV Maintenance (includes Upgrades and Sealift Enhancement - formerly Phase VI)
Phase V Exercise (Activation/Deactivation)
Phase O Operation

Expanded definitions and discussion of the various phases are included in Annex I of this MOU, and also in Paragraph IV, Survey Requirements, below.

Readiness Status: At the direction of the United States Transportation Command (USTRANSCOM), RRF vessels are maintained in one of several degrees of readiness, designated as either ROS-xx or RRF-xx, where ROS indicates Reduced Operating Status, and RRF indicates Inactive (laid-up) status. *[When using this MOU, please carefully consider the distinction between "RRF" when used to describe inactive vessels, and "RRF" when the term applies to the Ready Reserve Force as a whole].* The "xx" indicates the activation timeframe in days. ROS vessels are partially manned with hotel systems operational. ROS crews perform inspections, routine repairs, preventative maintenance and periodically operate equipment and systems. Inactive, or "RRF," vessels are unmanned and are maintained in a state of deep lay-up, generally at one of MARAD's three (3) NDRF sites. To prevent deterioration in lay-up, equipment and systems are preserved, critical spaces dehumidified and sea chests are blanked.

Activations / Deactivations: RRF vessels may be activated for a variety of purposes. Principally, activations are initiated for maintenance, readiness testing or to support a DOD mission or exercise. There are two types of activations: *"Notice"* and *"No-Notice."* "Notice" activations are scheduled and planned in advance. The pace is generally slow, and activation timeframes are often not a factor. "Notice" activations typically support a planned DOD exercise, or are strictly for maintenance purposes as shown in Table 1. Where possible, "Notice" activations will be scheduled to coincide with required regulatory surveys and inspections.

During *"No-Notice"* activations, vessels are activated as quickly as possible in order to meet assigned readiness criteria. "No-Notice" activations typically support an emergent DOD requirement, or they may be initiated to test readiness and whether a vessel, or vessels, area vessel, or vessels, is being maintained such that they can meet their assigned activation timeframe(s).

Following activation (and any subsequent operation), the vessel is returned to either ROS or Inactive (RRF) status through Deactivation. The deactivation process is often used as an opportunity for making repairs and scheduling inspections and surveys.

ABS Notification: MARAD HQ shall provide written notification (FAX & e-mail) to the Assistant Chief Surveyor when a No-Notice activation occurs, identifying the vessel, Ship Manager, the activation shipyard or facility, and the vessel readiness status. Notification at the local level will be made as part of any request for survey, if necessary. The scope of ABS survey(s) at activation is defined in Paragraph IV.C. For Notice activations, MARAD will provide advance notification to facilitate the scheduling of requested surveys.

Ship Management Services: The day-to-day management of RRF vessels is assigned to commercial ship management companies under either Ship Manager contracts or General Agency task orders.

General Agency tasks are usually temporary; however, the responsibilities of a General Agent are generally the same as that of a Ship Manager, and for the purposes of this MOU, the terms are interchangeable. The MARAD Region(s) in which the assigned vessel(s) is located provides primary oversight of Ship Managers.

Ship Managers manage all aspects of RRF vessel maintenance and operation. Ship Managers are contractually responsible for maintaining RRF vessels in class, certificated, and are responsible for their overall material condition and readiness. The Ship Manager is responsible for requesting ABS surveys, with the Port Engineer designated as the primary Point-of-Contact for requested vessel surveys (see Annex II).

The Ship Manager is the designated billing entity for survey fees, and is contractually responsible for the processing and payment of invoices. However, ABS shall have the right to address serious delinquencies in invoice payments directly to MARAD.

RRF Maintenance Program: The level of maintenance on RRF vessels is based on readiness criteria described above. The maintenance program includes preventative maintenance, periodic maintenance, and planned activations culminating in dock or sea trials. The frequency of maintenance actions and the type of activation trial is again dependent on assigned readiness, and is summarized in Table 1.

IV. Survey and Maintenance of Classification Requirements

A. General

RRF vessels are maintained in class with ABS, and, in general, conform to the regulatory requirements typical of commercial, US flag cargo and tank vessels. RRF vessels are issued full convention loadline and tonnage certificates, and may be issued Statements of Voluntary Compliance for Safety Construction, Safety Equipment, Safety Radio, and International Oil Pollution Prevention (See Paragraph II, Voluntary Compliance). Taken together these certificates are collectively referred to as "International Trading Documents."

MARAD intends that RRF vessels will proceed to sea fully classed with valid International Trading Documents. National security considerations may make it necessary for a vessel to get underway without full certification. In such cases, a National Defense Waiver (NDW) is obtained by the Department of the Navy, Commander, Military Sealift Command.

RRF vessel survey requirements vary based on their assigned program management phase. Phases I through III, are specific phases related to the acquisition and initial entry of a vessel into the RRF. Vessels in these phases will comply with all applicable ABS Rules, in the same manner as commercial vessels. Where these vessels were previously classed with a classification

society other than ABS, they will undergo required surveys and conversion, if any, for transfer to ABS class.

Selected RRF vessels have been, or may be, modified for a specific military function. In general, such modifications are performed in accordance with all normally applicable Rules and regulations, except where military equipment is installed. Military equipment survey and inspection requirements will be developed on a case-by-case basis.

Routine day-to-day management of the RRF is conducted with ships in Phases IV, V and O; therefore, the following discussion considers these Phases only.

Phase IV - Maintenance: RRF vessels in lay-up, whether inactive or in ROS status, are generally assigned to Phase IV. Phase IV maintenance activations and cycles are based on a vessel's assigned readiness status, and are shown in Table I. Ship Managers will arrange for ABS surveys as appropriate (see Annex II).

Phase V - Exercise (Activation/Deactivation): Phase V is divided into two non-sequential sub phases; *Activation* during which the vessel transitions from Phase IV Maintenance to Phase O Operation, and *Deactivation* during which the vessel transitions from Phase O back to Phase IV. Vessels are activated as discussed in Paragraph III. Any vessel which is tendered to the DOD through MSC, including vessels which are activated for military exercises, will transition through Phase V to Phase O. Note that vessels activated for Phase IV maintenance activations do not transition to Phase V or Phase O, and remain under MARAD's Operational Control.

Phase O - Operation: During Phase O, RRF vessels come under the operational control of MSC (independent MARAD control of RRF vessel operations - other than Phase IV - is rare). Phase O survey intervals will be in accordance with ABS Rules.

B. Classification based on Readiness

All MARAD vessels of the Ready Reserve Force are maintained using preventative maintenance techniques. Therefore, classification of the vessels may be maintained using approved Preventive Maintenance and Condition Monitoring Schemes generally in accordance with the latest version of the "ABS Guide for Surveys based on Preventative Maintenance Techniques." This will be done on a selective basis as decided by MARAD but will apply mostly to ROS 4 and 5 vessels.

ROS 4 and 5 vessels: ROS vessels will be considered active vessels by ABS. MARAD will maintain the classification of ROS vessels up to date. ROS vessels will receive notices of due and overdue surveys and will be subject to suspension and cancellation of classification for overdue surveys. The vessels are to be fully classed and fit to proceed within 4-5 days. Outstanding recommendations concerning fitness to proceed and/or

overdue surveys are to be completed prior to departure from the outport. However, it will not be necessary to conduct an activation survey for an ROS 4 or 5 vessel entering Operations.

RRF 10, 20 and 30 vessels: These vessels will be considered Laid-Up vessels by ABS and will not receive notices of due and overdue surveys. These vessels will not be subject to suspension and cancellation of classification due to the passage of time. Although surveys for Laid-Up vessels need not be progressed, to satisfy readiness requirements MARAD will perform routine preventative maintenance (Table 1) and voluntarily progress surveys on these vessels.

RRF 10, 20 and 30 vessels are laid-up in accordance with Lay-Up specifications submitted by MARAD for approval. These specifications are to be in general compliance with the latest version of the "ABS Guide for Lay-up and Reactivation of Laid-Up Ships." Individual vessel or vessel class specific maintenance procedures (known as "Phase IV Maintenance Procedures") will also be submitted for approval. The frequency of maintenance activities for these vessels is based on readiness criteria, and is shown on Table 1.

C. Surveys at No-Notice Activation

As described in Section III, No-Notice Activations may be initiated either for test purposes or for an emergent DOD requirement. Surveys during No-Notice Activations are to be limited based on the activation timeframe.

ROS 4/5 vessels The vessels are normally to be classed and fit to proceed within 4-5 days; therefore, Reactivation Surveys are not required. Outstanding recommendations concerning fitness to proceed are to be completed prior to departure from the outport. Due surveys may be considered for completion if it will not interfere with the activation.

Inactive (RRF 10/20) vessels. Reactivation Surveys are required as described in paragraph IV.D. If necessary, International trading documents may be issued valid for 15 months. Overdue surveys and outstanding requirements will be completed within 15 months of activation.

Inactive (RRF 30) vessels. Reactivation Surveys are required as described in paragraph IV.D. If less than five years have elapsed from the date of lay-up, International-trading documents may be valid for 15 months. Overdue surveys and outstanding requirements will be completed within 15 months of activation. For vessels that have been laid-up longer than five years, all overdue surveys will be completed during the activation period.

D. Surveys

To provide MARAD flexibility to schedule needed work to coincide with vessel drydock examinations, activations or deactivations

following operations, surveys may be credited with outstanding requirements.

Load Line Inspections. RRF vessels carry International Convention Load Line Certificates. The USCG has required that the vessels be in full compliance in order to carry Load Line marks. Load Line renewal surveys will be requested at each scheduled drydocking.

Load Line Certification for ROS 4 and 5 Vessels is required to satisfy readiness requirements, and the vessels must maintain a full term Load Line certificate. It is recognized that the requirements for renewal of a Load Line Certificate are less detailed than those for maintaining classification. Therefore, it is possible for a Surveyor to credit the Load Line Renewal survey while items remain to credit the Special Survey of Hull. Provided that the vessel is in full compliance with the Load Line Regulations, the Load Line Certificate will remain valid for a period of five years.

Load Line Certification for RRF 10, 20 and 30 Vessels is not required to satisfy readiness requirements. On occasions of Activation, and provided the Cognizant Officer in Charge of Marine Inspection concurs, vessels that do not have a credited drydocking within five years of an intended period of operation may be issued a Provisional Load Line Certificate. Issuance of the Provisional Load Line Certificate will be subject to internal and external structural examination of the vessel to determine the fitness of the vessel to proceed for the requested period. The examination is to be to the satisfaction of the attending Surveyor and is to include a diver's examination of the underwater body of the vessel and its appendages. At the discretion of the Surveyor the average thickness of the vessel's hull may be required to be determined and repairs made to satisfy the surveyor of the vessel's fitness to proceed.

Annual Surveys of Lay Up for RRF 10, 20 and 30 Vessels: MARAD lay up procedures are to be verified as follows:

- Dehumidification systems are maintaining the relative humidity in all critical spaces and equipment at 38% to 41.
- Cathodic protection system for the hull is operating satisfactorily.
- Systems to detect flooding and sound an alarm are operating.
- That preservation of the hull, decks, deck houses, machinery and equipment appears satisfactory.
- That cargo gear including booms, blocks, runners, etc. is maintained in accordance with the applicable Phase IV Maintenance Procedures.
- That ballast tanks are either empty or filled with fresh water and appropriate chemicals added retain their

ability to retard corrosion and microbial activity within the tank.

Drydocking. All RRF vessels will be subject to the most current Rule intervals for drydocking and their status will show due dates. Due to the stand-by service of the vessels, the Surveyors will be allowed to waive the Intermediate drydocking of ROS 4 and 5 vessels provided the following are found satisfactory:

1) It is to be verified that the vessel has no record of groundings, collisions or allisions that would need to be considered for a drydocking.
2) It is to be verified that cathodic protection system for the hull is operating satisfactorily.
3) It is to be verified that systems to detect flooding and sound an alarm are satisfactorily installed in the engine room, shaft alley and any other spaces considered appropriate, and there were no alarms of record that would require the vessel to be drydocked.
4) If considered necessary, it is to be verified by a qualified diver's modified (no TV camera) examination (usually at the time of an activation); that there are no apparent conditions of a concern on the vessel's underwater body or appendages.

Since RRF 10, 20 and 30 vessels are considered in an ABS laid-up status, there is no requirement to progress drydocking surveys. However, MARAD has a regular drydocking program at which time these vessels will be presented for credit.

Tail Shafts Surveys for oil lubricated bearing systems will be due as per the most recent Rule requirements. All other type Tail Shafts will be subject to special consideration on a case by case basis.

Special Surveys for ROS 4 and 5 vessels will be due as per the most recent Rules requirements, and will generally follow a 5-year cycle although special situations may exist and are covered in other sections of this document.

Progression of Special Surveys for RRF 10, 20, and 30 vessels will be suspended as allowed by the "ABS Guide for Lay-Up and Reactivation of Laid-up Ships." However, the maximum interval between examination of special survey items will not exceed ten (10) years. In order to qualify for this extended Special Survey period vessels must meet the following requirements:

- Comply with MARAD standard lay-up procedures.
- Comply with MARAD Phase IV Maintenance procedures.
- Carry out Annual Surveys of Lay-up.
- Be in extended lay-up a minimum of five (5) years (cumulative) during the applicable ten (10) year special survey period.
- In addition, MARAD will strive to maintain a condition monitoring program for these vessels during lay-up and periodic reactivations, particularly with regards to vibration

measurement and oil analysis (lube oil and hydraulic oil). A list of machinery covered by this modified condition monitoring program will be submitted to ABS for entry on the SAFENET Survey Status system.

30.2 Reactivation Surveys: These surveys normally apply only to inactive vessels and do NOT apply to ROS vessels.

30.2.1.1 No-Notice

Inactive (RRF 10/20) vessels. Reactivation Surveys of vessels in these categories shall generally be in accordance with the "ABS Guide for Lay-up and Reactivation of Laid-up Ships" and may be limited with due consideration given for the conditions of lay-up, including ABS approved MARAD Lay-Up Specifications and Phase IV Maintenance Procedures, routine Dock Trial and Sea Trials, and the status of the USCG Certificate of Inspection. Intrusive type surveys, such as internal inspection of tanks, and opening up of machinery, are not normally required.

Inactive (RRF 30) vessels. Reactivation Surveys of vessels in this category are required in accordance with the "ABS Guide for Lay-up and Reactivation of Laid-up Ships."

Other than No-Notice

Inactive (RRF 10/20/30) vessels. Reactivation Surveys of vessels in this category are required in accordance with the "ABS Guide for Lay-up and Reactivation of Laid-up Ships" to the extent that they are not covered by other survey procedures being performed.

E. Alternate Compliance Program

Alternate Compliance Program: As authorized by the USCG, RRF vessels that are in full compliance with the requirements of International Convention, ABS Class and the US Supplement to the ABS Rules may participate in the Alternate Compliance Program (ACP). ABS issued "Statements of Voluntary Compliance" are accepted by the USCG as equivalent to convention certificates. However, such Statements of Voluntary Compliance must be free of exemptions, except for cargo stowage exemptions endorsed by the USCG, in order to permit a particular vessel's participation in the ACP. Selected RRF vessels, which meet the above criteria, will be enrolled in the ACP program in accordance with the applicable enrollment regulations contained in 46 CFR.

Under the ACP, the USCG will accept surveys performed by ABS as equivalent to tests and examinations required for initial and in-service inspections for certification, periodic reexamination, and drydock examinations. The USCG will conduct oversight of ABS under this program.

V. Special Situations

Special Situations will occur when certain survey requirements for these vessels may be specially considered as allowed per ABS Rules and Guides. Any special situations to be considered must be proposed by MARAD in writing to the Assistant Chief Surveyor, ABS Americas. These special situations include all requests for postponement of due or overdue surveys.

VI. National Defense Waivers

National Defense Waivers may be required during activations of RRF vessels for rapid deployment of U.S. forces during crises or upon declaration of war or national emergency. Situations may arise where a vessel is required for service with incomplete or overdue surveys. In such cases where a statutory certificate is involved, MARAD will follow the procedures set forth in its MOU with the United States Coast Guard for the issuance of National Defense Waivers. Where such cases involve classification surveys that do not adversely affect the safety of the vessel or crew, the environment, or the vessel's fitness to proceed, MARAD will request from the ABS Americas' Assistant Chief Surveyor, requirements for appropriate extensions to complete the surveys.

VII. Appeals

Appeals of a decision of a local or Principal Surveyor that aggrieves the vessel's representatives may be appealed to the Assistant Chief Surveyor, ABS Americas in accordance with the terms of this MOU or the ABS Rules.

VIII. Coordination

Coordination of RRF Maintenance and Classification is critical to the success of the program. Local operating level meetings with MARAD, Ship Managers, and ABS should be held frequently to discuss the operation of this MOU. All parties are cognizant that:

- Surveys can occur in all three ABS divisions,
- All efforts are to be made to settle situations at the local level and with the Assistant Chief Surveyor of the division,
- All situations that cannot be resolved locally are to be referred to the Assistant Chief Surveyor, ABS Americas, with whom rests responsibility for coordination with MARAD. The Assistant Chief Surveyor, Americas will work with the ABS Americas Director of Government Operations to mediate situations,
- Ultimate responsibility for survey matters will rest with the ABS Corporate Chief Surveyor,
- Ultimate responsibility for engineering matters will rest with the ABS Americas Vice President of Engineering,

IX. Modification / Termination

This agreement may be modified in whole or in part at any time by mutual agreement of the parties. Either party may propose modifications whenever deemed necessary or desirable. The parties agree to consider such proposed modifications promptly. Either party may terminate this agreement upon delivery of written notification to the other party.

X. Effective Date

This Memorandum of Understanding is effective Jan 28, 1999, and supersedes the previous Memorandum of Understanding dated 18 February 1987, and its Addenda.

AMERICAN BUREAU OF SHIPPING	MARITIME ADMINISTRATION
_____SIGNED*_____	_____SIGNED*_____
_____ *(Signature/Date)*	_____ *(Signature/Date)*
Robert D. Somerville President and Chief Operating Officer American Bureau of Shipping	Clyde J. Hart Maritime Administrator

*Original signed copy available from MAR-611.

Table 2: RRF Maintenance Frequencies

R-Status	*Outported*	*Crew Size*	*Maintenance Activation w/Dock Trial*	*Maintenance Activation w/Sea Trial*	*Phase IV Maintenance Cycle*
ROS-4	Yes	10	None	1 yr.	Continuous
ROS-5	Yes	9	2 yr. (1)	2 yr. (1)	Continuous
RRF-10	No(2)	N/A	None	2 yr.	6 mo.
RRF-20	No(2)	N/A	5 yr. (3)	5 yr. (3)	6 mo.
RRF-30	No	N/A	None	none	1 yr.

Notes:
(1) Sea and dock trials alternate annually (i.e. yr. 1 = ST, yr. 2 = DT, yr. 3 = ST, etc.)
(2) Generally located at an NDRF site; however, some exceptions exist. Maintenance frequencies do not differ based on lay-up site (NDRF or outport).
(3) Sea and dock trials alternate. Dock trials are carried out approximately at the mid-period of the 5 year sea trial interval.

Remarks:
The maintenance frequencies shown for each "R-Status" assignment are subject to change. Direction on the frequency of maintenance actions is provided to MARAD by USTRANSCOM. The frequencies shown reflect guidance in effect at the time of signing this MOU. Any changes to these frequencies will be disseminated by updating this page.

Phase IV Maintenance Procedures (P4P) and ROS Vessel Maintenance Actions (VMA) are designed to ensure systematic exercising, maintenance, inspection and testing of ship systems and equipment. Preventative maintenance of equipment and machinery during Phase IV is performed on a cyclical basis, at intervals shown above.

Maintenance activations are carried out to conduct operational tests of equipment and systems. Dock trials involve activation of the vessel's machinery plant, but the vessel is not taken to sea. Regulatory inspections and surveys, including COI renewal and mid-period inspections, are scheduled to coincide with dock and sea trials whenever possible. In the case of RRF-20 vessels this may result in periodic expiration of COI's.

ANNEX I to the MARAD / ABS Memorandum of Understanding; GLOSSARY

C-Rating: Alternately referred to as "C-Status" or "Readiness." Not to be confused with "R-Status." A readiness reporting system established for vessels in Phase IV (Maintenance). Developed by MARAD in coordination with the U.S. Transportation Command, C-Ratings identify and report a vessel's condition relative to its ability to meet its

assigned Readiness Status (R-Status) activation timeframe. See C1, C2, C3, C4, C5, OP and PP.

C1 {C-Rating}: No Mission Degrading Deficiencies: Describes a ship having no known deficiencies which impact its mission or activation within assigned readiness period.

C2 {C-Rating}: Documented and Correctable Mission Degrading Deficiencies: Describes a ship which has mission degrading deficiencies which can be corrected within the assigned readiness period.

C3 {C-Rating}: Mission Degrading Deficiencies Exist Which Cannot be Corrected (within the assigned readiness period): Describes a ship which can be activated within its prescribed readiness time frame but has deficiencies which cannot be corrected within the readiness time frame limiting the full operational capability of the ship.

C4 {C-Rating}: Major Deficiencies Prevent the Ship Activating or Performing its Primary Mission and cannot be corrected within the assigned readiness period: Describes a ship which cannot be fully mission capable within the activation period, or a ship which has a COI that will expire within 15 days or a COI that has expired. RRF 20/30 day ships are exempt from C-Status downgrade due to COI expiration.

C5 {C-Rating}: Scheduled Major Repairs in Progress; unable to meet assigned readiness period: Describes a ship undergoing major repairs which prevent it from meeting its assigned readiness time frame.

Commandant[7]: In general, the use of the term "Commandant" denotes USCG Headquarters and the various staff elements who act on the basis of the Commandant's authority and documentation. G-MOC administers the inspection program for merchant vessels, including those in the RRF.

District Commander: For marine inspection related issues within the boundaries of each geographic district, a staff officer designated as the Chief, Marine Safety Division acts on the basis of the USCG District Commander's authority. District Commanders are subordinate to the Commandant.

General Agent: A ship operating company that represents MARAD for the maintenance and operation of RRF vessels by letter of agreement. Is empowered as MARAD's agent in all matters related to vessel maintenance, inspection, activation and operation; analogous to "Ship Manager."

MARAD Liaison: Individual on staff at USCG Headquarters as delegated by Commandant, G-MOC. Acts as the liaison to and from MARAD as the need arises.

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[7] For further information and more detailed descriptions, the USCG Marine Safety Organization and definitions of titles and functions are contained in Title 46, Code of Federal Regulations, Subchapter A. Subpart 1.01 of Subchapter A, "Organization and General Flow of Functions," contains a thorough list of organizational titles and corresponding functions pertinent to USCG inspection of merchant vessels. In addition to titles and organization, Subchapter A provides a useful description of the decision making flow within the Coast Guard Marine Safety Program. Various subchapters within Title 46 CFR also define organizational titles (e.g., OCMI).

Marine Inspector: Either an officer or civilian federal employee of the USCG, designated by the OCMI to witness all required tests and inspections on board merchant vessels. The Marine Inspector is the primary individual in the field tasked with direct physical observation and initial evaluation of a particular vessel for compliance with vessel safety regulations. The marine inspector is subordinate to the OCMI.

Marine Surveyor: MARAD employee responsible for one or more RRF ships to oversee vessel maintenance, repairs and activations. Works closely with Port Engineers and their respective Ship Managers/General Agents to ensure that vessels are kept in their assigned readiness status.

"No-Sail" CG-835: A deficiency which, as determined by the OCMI, would seriously endanger the vessel or its crew if the vessel proceeded to sea.

Officer in Charge, Marine Inspection (OCMI): Designated and delegated to give immediate direction to marine safety functions including the inspection of vessels within their zone. OCMIs are subordinate to the District Commander.

OP {C-Rating}: Operational: Describes a ship placed in operational status for the purpose of supporting military exercises or operations as required for National Defense.

Phase I - Acquisition: The acquisition of a vessel for the RRF, whether by purchase, transfer from other government entities, or upgrade from the National Defense Reserve Fleet (NDRF).

Phase II - Upgrade: The initial upgrade of an acquired vessel to RRF standards, including USCG Certification, ABS Classification, and compliance with other regulatory requirements. If the acquired vessel is of foreign registry, this Phase includes re-flagging to United States registry.

Phase III - Deactivation: The initial deactivation of a vessel following acquisition, upgrade and operational testing. The vessel is laid-up in a state of preservation consistent with its assigned readiness status, and location (outport or NDRF site).

Phase IV - Maintenance: The retention phase wherein an RRF vessel is maintained, tested, and otherwise prepared to meet its assigned readiness status. Vessels in Phase IV are either in Reduced Operating Status (ROS), or Inactive (RRF). Inactive vessels undergo periodic "Phase IV Maintenance Cycles," based on ship specific maintenance procedures. ROS vessels undergo continuous maintenance cycles performed primarily by the embarked ROS crew. The Ship Manager is contractually responsible for assigned vessels in this phase.

Phase V - Exercise: This phase is divided into two non-sequential sub phases, Activation during which the vessel transitions from Phase IV Maintenance to Phase O Operation and Deactivation during which the vessel transitions from Phase O back to Phase IV. Any vessel which is tendered to the DOD through the Military Sealift Command (MSC), including vessels which are activated for military exercises, will transition through Phase V to Phase O

Phase O - Operation: Vessels which have been activated for exercises, or National Defense purposes are placed in Phase O once tender to the MSC has been accepted. During Phase O, RRF vessels come under the operational control of MSC, but administrative control (ADCON) is retained by MARAD and the Ship Manager.

Phase VI - Sealift Enhancement: This phase is similar to Phase II Upgrade, however, it involves the installation of equipment and facilities to support DOD mission requirements. Such features include, but are not limited to, underway replenishment at sea rigs, vertical replenishment helicopter platforms, Offshore Petroleum Discharge System equipment on selected tankers, and craneship conversions for offloading conventional, non self-sustaining cargo ships. *Note: effective July 1, 1998, Phase VI will be eliminated as a separate program phase. Sealift Enhancement Features will be accomplished in either Phase II or Phase IV.*

Planned Maintenance: A program of routine and continuous maintenance of the hull and machinery. The program should be developed in consultation with the manufacturers of the machinery and the various lubricants and coatings used to preserve the hull and machinery. In the situation of idle vessels, the long term lay up may affect the retention of oil films in bearings which could lead to brinneling of the bearings. Particular attention is to be given to prevention of brinneling.

Port Engineer: The "on site" representative of the General Agent or Ship Manager. Responsible for the daily operations required for the various Phases of RRF Management. Works closely with the Marine Surveyor during activations and inspections.

PP {C-Rating}: Pre-Position: Describes a ship placed in operational status for the purpose of pre-positioning military cargo in a designated theater of operations.

Readiness: Not to be confused with Readiness Status. See "C-Rating."

Readiness Status {R-Status}: Readiness status is defined as the timeframe in which MARAD must activate and tender a vessel to DOD. A vessel's R-Status is designated by the Department of Defense. The two categories of R-Status are: a) ROS and b) RRF.

Regional Director: The MARAD Regional Director administers all MARAD programs within his region, including the RRF program. The director is the regional representative for the Maritime Administrator.

ROS/# {R-Status}: Reduced Operating Status/# Days - Vessels in Reduced Operating Status have a reduced crew of key personnel living on board for maintenance purposes. Vessels in this status conduct sea trials or dock trials on an annual basis. The 4 or 5 after "ROS" indicates the number of days authorized for vessel activation and tendering to Military Sealift Command's Operational Control.

RRF/##{R-Status}: Ready Reserve Force/## Days - RRF vessels are deep lay-up, generally at one of the National Defense Reserve Fleet Sites. A vessel in this status requires

towing to a repair facility for activation, crewing, storing and sea trials prior to tendering to Military Sealift Command's Operational Control. The number following "RRF" indicates the number of days authorized for vessel activation and tendering to Military Sealift Command's Operational Control.

Rules: The requirements set forth by a classification society to which a vessel is constructed and maintained. For the purposes of the RRF, the term Rules refers to the Rules of the American Bureau of Shipping.

Ship Manager: A ship management company that is contracted to represent MARAD for the maintenance and operation of RRF vessels. Is empowered as MARAD's agent in all matters related to vessel inspection, activation and operation. The Ship Manager is an independent contractor for purposes of procurement of supplies and services for maintenance, and is contractually responsible for maintaining the vessel(s) in class and certified.

Ship Operations & Maintenance Officer: Is the primary point of contact in the Regional office for RRF vessel maintenance, repair, and activation contracts. Plans, submits and administrates budgets for vessel maintenance and repairs within the RRF program.

Statement of Voluntary Compliance: Authorized in the Memorandum of Understanding between MARAD and USCG (dated July 20, 1998), a SOVC is issued in-lieu-of convention SOLAS and MARPOL certificates. SOVC's may only be issued when the vessel fully complies with convention requirements, except for specific exemptions which have been issued by the USCG. The SOVC substitutes for convention certificates when the Alternate Compliance Program is invoked.

Surveyor, Exclusive: Not to be confused with the term Marine Surveyor. An Exclusive Surveyor is a full time employee of the American Bureau of Shipping.

USCG/ABS Liaison: Individual on staff at MARAD Headquarters as delegated by the Chief, Division of Ship Maintenance and Repair in the Office of Ship Operations. Acts as the liaison to both the USCG and ABS on matters pertaining to merchant vessel inspection requirements as they relate to the RRF.

ANNEX II to the MARAD / ABS Memorandum of Understanding; COMMAND, CONTROL & COMMUNICATIONS

I. Introduction

As in all complex operations involving inter-agency coordination, rapid and effective communications are essential. This section identifies procedures ensuring that communication is maintained between USCG, ABS and MARAD decision-makers to facilitate the inspection of the RRF.

II. ABS / USCG / MARAD Organization

Figure (1) illustrates an index of decision levels of the ship inspection team and the relationships between USCG, ABS and MARAD.

III. Organizational Points of Contact

Overview - ABS / USCG / MARAD: As Figure (1) illustrates, a one to one correlation among the three organizations does not exist at all levels of RRF inspections and activations. At the headquarters level, interagency coordination is expedited by ABS/USCG/MARAD liaison officers and employees located at ABS, USCG and MARAD Offices and Headquarters. Below the Headquarters level the organizations diverge in both geographic distribution and assignment of responsibility for completion of ABS and USCG inspections. MARAD currently has five Regional offices; the USCG has 10 districts, each with two or more OCMI zones; and ABS has three divisions (not including the ABS Corporate Office). This results in each MARAD regional office spanning several OCMI zones and at least two USCG District Commanders, and the three ABS Survey Managers and Director of Government Services. Most OCMI inspection zones lie entirely within the boundaries of a single MARAD Region.

Inspection Scheduling and Conduct: OCMIs, ABS Attending Surveyors and MARAD coordinate scheduling of RRF vessel inspections, and work to resolve deficiencies noted during inspections on board the vessel in question. As discussed in the MOU, MARAD employs Ship Managers (and/or General Agents) to manage all aspects of RRF vessel maintenance and operations. The Ship Manager, through an assigned Port Engineer, is the primary point-of-contact when requesting and conducting RRF vessel inspections and surveys. This delegation of responsibility does not, however, relieve the cognizant MARAD region from its oversight responsibilities, or from its ultimate responsibility as vessel owner.

The following procedure shall be followed when scheduling and conducting vessel inspections and surveys:

Prior to the commencement of an inspection or survey, the Ship Manager shall contact either the cognizant OCMI and/or responsible ABS field office, as appropriate, in whose zone an RRF vessel is to undergo inspection or survey. The Ship Manager will identify the vessel, their designated Port Engineer and the MARAD Marine Surveyor who will be available to respond to inquiries and resolve inspection or survey issues, when requested by the OCMI, USCG marine inspector, ABS field office, or ABS Surveyor.

Prior to, or as soon as possible after the commencement of any regulatory inspection or classification survey (i.e., COI, Drydock Exam, Cargo Gear, etc.) of an RRF vessel, the attending USCG Marine Inspector(s), and/or ABS Surveyor(s), as appropriate, will meet with the Port Engineer and MARAD Marine Surveyor. They will agree on a schedule for maintaining contact with each other to discuss inspection and survey issues. USCG, ABS and MARAD will be readily accessible to each other throughout the course of the inspection or survey and they will designate an alternative point of contact in the event of an individual's absence.

Coordination: **When inspections or surveys involve multiple OCMIs, District Commanders, ABS Offices or MARAD Ship Manager(s) and Regional offices, these individuals are encouraged to make direct contact with each other when coordination is required to resolve inspection issues involving an RRF vessel. This should occur as early as possible.**

For issues requiring headquarters level policy interpretation, or requiring a national defense waiver, the ABS/USCG/MARAD liaison officers should be contacted. The liaison officers will assist by contacting the appropriate headquarters staff at each agency and coordinate a response to the issue/inquiry. Each agency will then be responsible for rapidly transmitting its decision to the subordinate offices and commands involved.

#

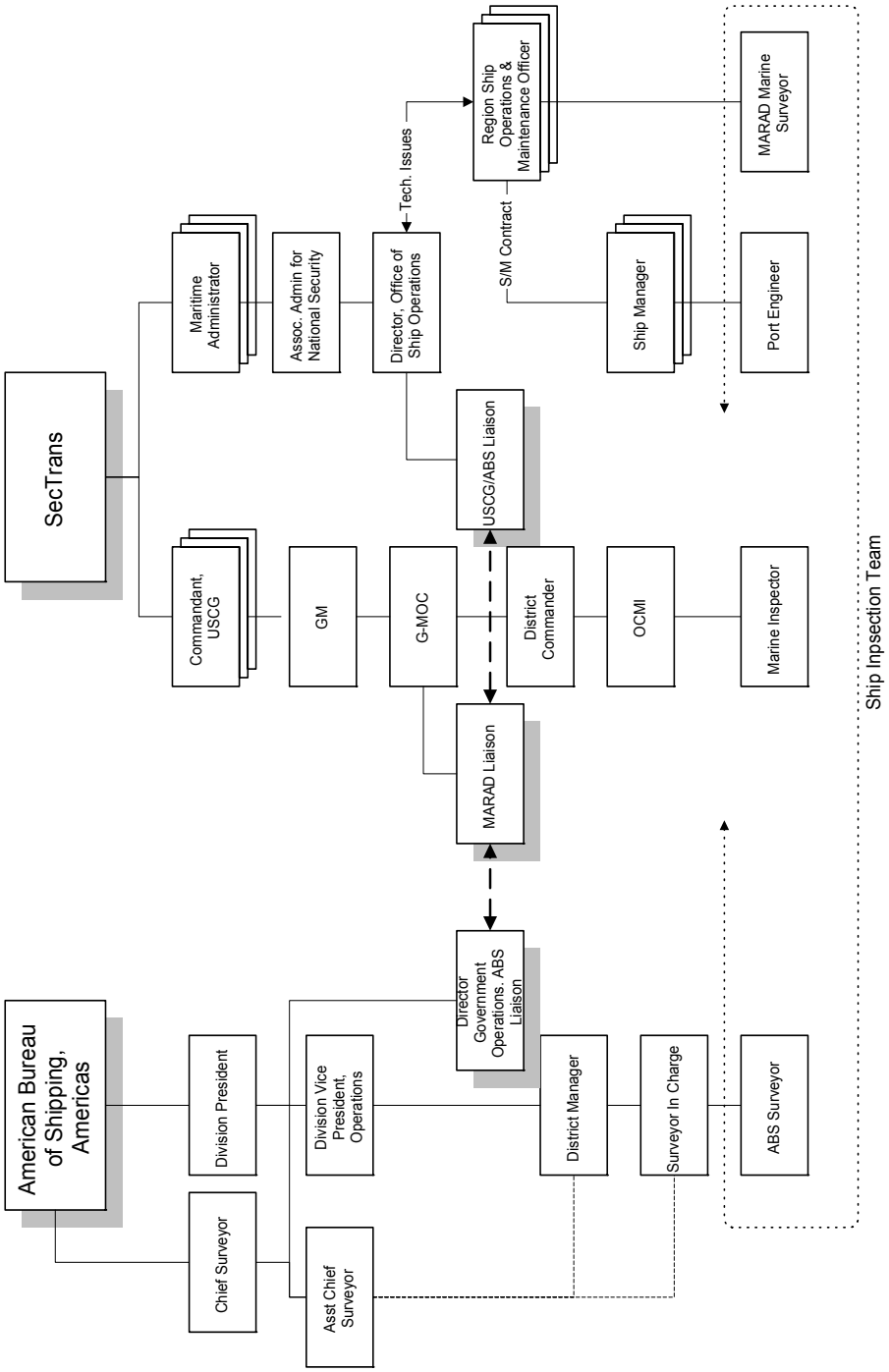

Figure 1 - Ship Inspection Team Chain of Command

ANNEX III to the MARAD / ABS Memorandum of Understanding; PROGRAM FOR BARGES

The following discussion of classification procedures for Ready Reserve Force Barges is based on the six (6) phase RRF management program developed by MARAD. These phases are defined in Annex I to this MOU, and within the MOU itself. For reference, the phases are:

Phase I Acquisition
Phase II Upgrade (Reflag if applicable)
Phase III Deactivation (initial only, following Acquisition/Upgrade)
Phase IV Maintenance
Phase V Exercise (include. Activation and Lay-up [deactivation])
Phase O Operation

Both LASH and SEABEE barges are employed in the RRF.

Phase II: - Upgrade (Preliminary to Lay-Up)

A. It is understood that barges entering the MARAD RRF Program will undergo repairs and surveys, including classification surveys due within one year, to confirm their satisfactory condition.

Phase III: - Deactivation (Lay-Up)

A. It is understood that preparations for active retention will include appropriate coatings of external plating and exposed plating in cargo areas.

Phase IV: - Maintenance

A. It is understood that barges will be stowed out of water during this phase.

B. No surveys are required during this phase.

Phase V: - Exercise (Reactivation)

A. Upon removal from lay-up, a Reactivation Survey is to be carried out consisting of, as a minimum, an examination of the entire shell plating to confirm its continued satisfactory condition and any surveys currently due or due within one year. On satisfactory completion, the Reactivation Survey will be credited.

NOTE: It is recognized that these barges are normally stowed in a vessel for quick deployment. They are in essence "LAID UP". ABS policy is that Barges may be considered as laid-up any time they are on the Vessel or when fleeted awaiting cargo. The owner must notify ABS that the barge is laid-up. Any overdue surveys must be carried out when the barge is taken out of lay-up. Extensions may be given. For Special Survey and Special Intermediate Survey, extensions should normally be limited to three months.

31. SECTION 31 - STANDARD LAY UP PROCEDURES

Are available from MAR-611 or MARAD COTR.They include:

- Boiler Inspections
- Boilers, Main Steam Systems, and Steamsides of Turbines and Condensers
- Ship's Service Turbo-Generators (SSTGs)
- Distillers and Evaporators
- Steam Vessel Control Systems
- Turbine Steam Admission Valves
- Steam Vessel Lube Oil Systems
- Steam Vessel Fuel Oil Systems
- Piping Systems
- Medium Speed Propulsion Diesels
- Cargo Winches and Hydraulics
- Electronic Gear
- Safety Equipment
- RRF Deactivation Procedures, Revised June 1992

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CHAPTER 1. COATING TECHNOLOGY

A. INTRODUCTION

The technology of Marine Coating systems has changed considerably in the last ten years. The type of coatings available have increased in sophistication to the point that it is difficult for the average marine surveyor to determine the "perfect" coating system for his needs based on manufacturer's recommendations alone. The purpose of this publication is to provide guidance for use in maintenance and preservation of various surfaces on RRF vessels.

Since MARAD's primary maintenance goal is preservation, be it of a ship's hull or machinery, the type of preservation system employed is of great importance. For this reason, the marine coating policies and practices outlined herein should be followed as closely as possible. When new systems are approved, they will be added to these guidelines.

B. CORROSION

1. Oxidation: Corrosion by oxidation is the process by which unprotected metal (steel, copper, aluminum) combines with oxygen (**oxidizes**) and disintegrates.

Iron oxide (**rust**) forms on steel or iron as a film. It is permeable and easily flakes off, thereby exposing new metal, which oxidizes and disintegrates until eventually no metal remains.

Aluminum and copper oxides form tough, adhering films which are not easily removed, sealing the metal from further exposure, and thereby inhibiting further corrosion. Unfortunately, constructing ships out of copper or aluminum is too costly to be considered practical. Therefore, steel remains the major metal used in shipbuilding.

2. Galvanic: Galvanic corrosion exists when two different metals are in physical contact with each other while immersed in a saline or acidic solution. This is the battery principal: one metal (**cathode**) remains totally unharmed, while the other metal (**anode**) corrodes away. Which of the metals is left unharmed is dependant on the reactive nature of the two metals. Steel tends to corrode when in contact with copper, whereas steel is preserved when in contact with zinc.

C. CORROSION CONTROL

1. Coatings: The most common method of corrosion control is to coat the surface with paint. This provides a physical barrier to block moisture and oxygen from contact with the surface. In reality, all coatings are permeable to some degree, so corrosion is only slowed, not prevented.

How permeable any coating will be is largely dependent on its material condition: coating type, age, how intact it is, how well it is bonded to the surface, etc. The rate of corrosion is determined by how much oxygen can get into contact with the original surface. **Warmer temperatures will accelerate the process of oxidation.**

2. Paint Vehicles: Paints are classed according to the type of binder (film-forming vehicle): alkyd, vinyl, epoxy, etc. Most paints are solvent-based. This means that the paint solids are dissolved into a solvent to liquefy them and make application easier. The combination of solvents and binder is called the vehicle. Once the paint is applied, the solvent evaporates, leaving a film of solids adhering to the surface. Several coats might be required to build enough thickness for a good shield.

Under earlier technology, most paints were generally 50% solids, 50% solvent; however, there are currently "**high solids**" paints available on the market where the amount of solids is as high as 100%, thereby allowing a thicker dry film coating with a single application. This equals fewer total coats to achieve optimum film thickness. The trend is toward using more of these high solids coatings due to expected federal regulation of solvent emissions in shipyards.

Other types of coatings are "two-component" packs: a convertor is stirred into a paint, provoking a chemical reaction which causes the paint to harden and adhere (**cure**). The curing process enhances the paint's cohesion as well, thus providing for better abrasion resistance. **Epoxies** and **urethanes** are the most common two-component paint types for marine service.

A guide to mutual compatibility of different types of paint vehicles is presented in Table 1-A. For more extensive information, an excellent reference is the Society of Naval Architects and Marine Engineers Technical Research Bulletin 4-15, Coating Systems Guide for Exterior Surfaces of Steel Vessels, which is available from the Publications Department, S.N.A.M.E., 601 Pavonia Avenue, Jersey City, NJ, 07306.

The Steel Structures Painting Council (SSPC) also publishes information relative to various types of paint systems and their suitability for different uses. The types of paint vehicles most likely to be found in use, and the recommended systems discussed in these guidelines are described in alphabetical order as follow:

a. ALKYD: Alkyd vehicles are oil based resins which dry by solvent evaporation or oxidation. Alkyd finishes are general-purpose, economical paints, available in flat, semi-gloss, and high-gloss finishes in a wide range of colors. Alkyd finishes are easy to apply, and retain their color and gloss in most interior and exterior environments; however, they do not stand up to corrosives very well.

b. COAL TAR EPOXY: See "Epoxy" for a general description of the vehicle. Coal Tar is often added to epoxy paints, allowing application over compromised surfaces, with substantial savings, and relatively little effect on corrosion control. Color choices are usually limited due to the black color of the coal tar, so it is usually used on concealed or submerged surfaces. These paints may contain carcinogens and are **not recommended** for use. See Chapter 8 for more information on the hazards associated with Coal Tar paints.

c. EPOXY: As was discussed earlier, most epoxies are two-component paints that are mixed just prior to application: the epoxy resin and a convertor. These paints have a limited working (**pot**) life, usually no more than several hours. Cured epoxy films have outstanding adhesion, flexibility, abrasion-resistance, and resistance to alkali and solvents. The cost per gallon is high as compared to alkyds, but is offset by the reduced number of coats necessary to achieve optimum film thickness.

Epoxy paints provide excellent long term corrosion resistance, but they tend to chalk when exposed to sunlight, therefore low gloss levels and fading can be expected over long term exposure. The more common marine epoxies are made by reacting the epoxy resin with an amine curing agent. There are some differences between types of epoxy, such as resistance to abrasion, chemicals and water. Consult with manufacturers for recommendations on specific needs.

d. INORGANIC: The major inorganic vehicles used in paints are sodium, potassium and lithium for water-based paints, and titanates and ethyl silicates for solvent-based paints. These are used in inorganic zinc paints, where they react with the zinc dust to form hard films. These films are extremely corrosion-resistant in humid environments; however, the zinc can leach into certain products, requiring overcoating with a more chemical-resistant paint in petroleum tanks and other critical areas.

e. LATEX: Latex paints are water-based emulsions such as acrylic and polystyrene butadiene. They dry by a combination of evaporation of the water, and coalescence of the polymer particles. They have little odor, are easy to apply over a properly prepared surface, and dry rapidly. Latex paints are generally used on interior walls and ceilings as a primer or finish coat where oil or oil-alkyd paints would otherwise be used. They do not adhere readily to chalked, dirty, or glossy surfaces, so careful surface preparation is necessary.

f. OIL: These paints are the oldest type of coatings still in use, with the longest performance history. They are used primarily on exterior surfaces since they do not dry quickly. The benefits of oil paints are film thickness per coat, and surface tolerance. Since these paints are very wet, they wet the surface as well, so that surface preparation becomes less critical. Oil paints are not very abrasion resistant, or tolerant of chemicals and solvents.

g. OIL-ALKYD: Oil vehicles are often combined with alkyd resins to reduce drying times, improve leveling, hardness, gloss retention, and to reduce fading. The combination also maintains ease in application, adhesion, and flexibility of the paint. Oil-alkyd paints are commonly used when faster-drying oil finishes are desired; however, better surface preparation is required than with oil paints.

h. RUBBER-BASE: Rubber-base vehicles are solvent-thinned, and should not be confused with latex vehicles which are often called rubber-based emulsions. They are lacquer-type vehicles which dry quickly to form finishes which are highly resistant to water and mild chemicals. They are available in a wide range of colors and gloss. Care must be taken when recoating these paints so that the strong solvents used do not lift the finish. These paints are most frequently used in splash areas, such as laundry rooms and kitchens. Styrene-butadiene combined with chlorinated plasticizers and silicone resins is used to produce high-heat-resistant ready-mixed aluminum paints.

i. SILICONE: Silicone vehicles have one basic shipboard use: Heat resistant finishes. Heat resistant organic finishes containing a high concentration of silicone resins, when pigmented with aluminum, have the ability to withstand temperatures up to 1200°F.

j. SILICONE ALKYD: The combination of silicone and alkyd resins results in an expensive but extremely fade-resistant coating for use on exterior metal. These coatings come in a wide range of colors, and various levels of gloss, but it is recommended that if gloss is not a significant factor, the high gloss paint be used. A coat of silicone alkyd paint over an epoxy system will provide excellent long-life coverage for exterior surfaces exposed to sunlight.

k. URETHANE: The following vehicles are all considered urethanes:

(1) Oil-Modified Urethanes: These are more expensive than, but similar to phenolic varnishes in that they are most commonly used for exterior spar varnishes, or as topcoats for tough floor finishes. They have better color and color retention, are harder and more abrasion-resistant, and dry faster. They can be used on all types of surfaces.

* * * WARNING * * *

POLYURETHANES OTHER THAN THE OIL MODIFIED TYPE ARE STRONG SENSITIZERS AND REQUIRE SPECIAL HANDLING TO PREVENT PERSONAL INJURY. CARE SHOULD BE TAKEN TO FOLLOW ALL SAFETY GUIDELINES AS PER MANUFACTURER'S MATERIAL SAFETY DATA SHEET.

(2) Moisture-Curing Urethanes: These are the only organic products available which cure by reacting with the moisture in the air. They are packaged in single containers. They tend to be less expensive than two-component urethanes. They are to be used in a manner similar to other single-pack finishes except that all containers must be kept full to prevent moisture from curing the paint in the container. Any unused coating must be discarded after the container has been opened.

(3) Two-Component Urethanes: These are urethanes that are reacted with polyols, polyethers, polyesters, or acrylics to produce extremely hard, abrasion resistant, and durable coatings. These are the types of urethanes most commonly used as top coats on exterior surfaces exposed to sunlight.

(4) Aromatic vs Aliphatic Urethanes: Urethane polymers can be made from isocyanates which are either aromatic or aliphatic. Aliphatic urethanes are preferred for exterior use because of their outstanding durability, gloss and color retention. Pigmented aromatic urethanes are also very durable, but chalk rapidly when exposed to sunlight.

I. VINYL: Lacquers based on modified polyvinyl chloride resins are moderate cost coatings that provide excellent durability when used on steel; however, they are low in solids and require the most extensive surface preparation and more coats than the other types of coatings. If the anticipated VOC control regulations are passed nationwide, these paints may not be accepted for application due to their low volume of solids. They have excellent resistance to water, chemicals and corrosives, but do not have very good resistance to solvents. Great care must be taken when overcoating to avoid lifting the finish. Vinyl chloride vehicles are listed as possible carcinogens by OSHA, and should not be applied without special approvals. Refer to Chapter 8 for more information on restrictions.

TABLE 1-A
COMPATIBILITY OF PAINT VEHICLES

NEW TOP COAT / PRIMER/ AGED TOPCOAT							
Alkyd	R	R	N	N	*	*	N
Silicone Alkyd	R	R	N	N	N	*	N
Epoxy	N	R*	R	R	N	N	*
Coal Tar Epoxy	N	N	*	R	N	N	N
Zinc-rich Epoxy	N	N	R	*	N	N	N
Inorganic Zinc (water based)	N	N	R	N	*	*	N
Inorganic Zinc (solvent based)	N	N	R	N	*	N	N
Chlorinated Rubber	R	R	N	N	R	*	R
Latex Acrylic	R	R	*	N	*	R	*

R - Compatible under normal conditions.

R* - Compatible within recoat time guidelines.

* - Compatible with special preparation or special application/tie coat.

N - Not recommended due to known or suspected problems.
NOTE: Some "N" coatings can be used with a tie coat.

3. Paint Pigments: Pigments are chemical compounds in fine particle form which give color and opacity to paint, and to some degree determine their consistency and overall characteristics. The pigment component of a paint may be a single compound, but is generally a combination of two or more. Pigments are classed according to their function. Pigments that provide color are what we normally associate with the word "pigment". Special purpose pigments are corrosion inhibitors such as zinc dust for **anti-corrosive** paints, and biocides such as cuprous oxide for **anti-foulants**.

Other ingredients may enhance the paint's resistance to outside forces such as seawater, chemicals, ultraviolet radiation, etc. or to control color and gloss, such as with extender pigments.

*** * * WARNING * * ***

LEAD PIGMENTS MAY LEAD TO LEAD POISONING IF INGESTED OR INHALED. PAINTS CONTAINING LEAD PIGMENTS ARE NOT AUTHORIZED FOR USE. CARE SHOULD BE TAKEN TO PROTECT PERSONNEL WHEN REMOVING OLD COATINGS WHICH MAY CONTAIN THIS PIGMENT.

4. Surface Preparation: The effectiveness of a coating system depends in large part on how successfully it is initially applied. Prior to applying any coating, it is necessary to prepare the surface. Proper surface preparation requires cleaning away any contaminants that might prevent proper coating adhesion, scaling any rust, and roughing up the surface (**PROFILE**) for a better bond. Successful application requires properly mixed ingredients, acceptable atmospheric conditions in the area to be painted, and good application techniques.

The type and degree of surface preparation is dependent upon the type of surface, its overall condition, physical location, and the type of coating to be applied. Surface contaminants such as dirt, grease, rust, scale, chemicals and moisture reduce adhesion of coatings, and can cause blistering, flaking, and underfilm rusting. Surface defects such as irregular welds, crevices, burrs, weld spatter, holes and old paints which are loose or failing will also cause poor coating adhesion.

A recent study[8] was conducted to determine the optimum surface preparation for various coating types. Table 1-B shows the results of this study.

TABLE 1-B
MINIMUM & OPTIMUM BLAST CLEANING LEVELS
FOR VARIOUS COATING SYSTEMS

COATING SYSTEM	MINIMUM	OPTIMUM
Alkyd	Commercial	Near White
Latex Acrylic	Commercial	White Metal
Vinyl	Commercial	Near White
Epoxy	Commercial	Near White
Coal Tar Epoxy	Commercial	Near White
Inorganic Zinc	Near White	White Metal

METHODS OF PREPARING STEEL FOR PAINTING ARE VERY IMPORTANT, AND SHOULD BE GIVEN SPECIAL EMPHASIS IN THE COATING SPECIFICATION. Some excellent references are listed below:

1.) The Steel Structures Painting Council (SSPC) manual, Vol. 2, Systems and Specifications, which is available from the Steel Structures Painting Council, 4400 Fifth Avenue, Pittsburgh, PA 15213.

2.) The Swedish Academy (SA) also publishes steel preparation standards that can be referenced.

3.) A good reference for older vessels is The Society of Naval Architects and Marine Engineers (SNAME) Technical and Research Bulletin No. 4-21, ABRASIVE BLASTING GUIDE FOR AGED OR COATED STEEL SURFACES, which is available from the Publications Department, The Society of Naval Architects and Marine Engineers, 601 Pavonia Avenue, Jersey City, NJ 07306.

[8] Richard W. Drisco, Eddy S. Matsui and Lee K. Schwab, "The Effects of Steel Profile and Cleanliness on Coating Performance," NCEL Technical Note (January 1986)

For all cleaning methods, review applicable health and safety guidelines before contracting for work. The Steel Structures Painting Council (SSPC) standards are listed below for quick reference:

a. SSPC-SP 1, SOLVENT CLEANING: Removal of dirt, oil grease, and other organic compounds from the surface by various methods. If solvent cleaning is to be the only surface preparation method used, consult with your coatings manufacturer to determine the proper solvent to use.

b. SSPC-SP 2, HAND TOOL CLEANING: Hand tool cleaning cannot be expected to do more than remove major surface contamination. Only "surface-tolerant" coatings should be used in these areas.

c. SSPC-SP 3, POWER TOOL CLEANING: Power tool cleaning provides more adequate surface preparation than hand tool methods. Both methods of preparation are very time-consuming and manpower-intensive, and should be used only for maintenance of a basically intact coating system. Only "surface-tolerant" coatings should be used in these areas.

d. SSPC-SP 4, FLAME CLEANING: Flame cleaning is a method used on metal surfaces where oxy-acetylene flames are passed over the surface. This method is not used often on our vessels, and therefore will not be discussed.

e. SSPC-SP 5, WHITE METAL BLAST CLEANING: Blast cleaning is the most effective mechanical means of surface preparation. White metal blast is the ultimate in blast cleaning. It is also the most expensive method of blast cleaning. It is normally specified for new construction, and for coatings which must withstand highly corrosive atmospheres, and are not surface-tolerant.

f. SSPC-SP 6, COMMERCIAL BLAST CLEANING: With this method of blast cleaning, the degree of cleaning is not nearly as critical as with a White metal blast. Commercial blast cleaning is generally considered adequate to the long life of most coating systems under normal exposures.

g. SSPC-SP 7, BRUSH-OFF BLAST CLEANING: This is a relatively low cost method of blast cleaning to remove all loose rust, old paint, and scale. Brush-off blasting is not recommended in areas where severe corrosion is prevalent, but it can replace hand or power tool cleaning where blast equipment is available and more economical.

h. SSPC-SP 8, PICKLING: This method involves surface preparation by a chemical reaction, electrolysis or a combination of the two. It is not practical for most of our coating work, and therefore will not be discussed.

i. SSPC-SP 10, NEAR-WHITE BLAST CLEANING: This type of blast effects a 10% to 35% savings over white metal blasting, and has proven to be very effective for the types of coatings to be applied for long-term marine use.

NOTE: When Abrasive Blasting is the preferred cleaning method, the surface should be free of grease, oil and dirt by solvent cleaning before commencing blast operations. All spent abrasives, soot and dust must be removed from the surface after blasting has been completed and before any coatings can be applied.

5. Hydroblasting: An alternative to the conventional surface preparation techniques described above is hydroblasting. At this time there are no written standards for water blasted surfaces. Therefore it is imperative that the degree of surface cleanliness and preparation be defined and understood by all involved parties, i.e. the MARAD inspector, the coatings manufacturer and the applicator before any work commences.

An evaluation of the effectiveness of this type of blasting was performed under the National Shipbuilding Research Program[9] (NSRP), and a copy of the report is available from the NSRP. Various methods of wet blasting were tested, and are briefly discussed as follow:

a. AIR ABRASIVE WET BLASTING: This method is similar to abrasive blasting; however, water is introduced into the abrasive stream before contact with the surface. The unique feature of these blasters is that the water is not mixed with the abrasive, merely sprayed around it as it leaves the nozzle.

The major advantage to air abrasive wet blasting is that it reduces airborne dust by about 50-75% of conventional dry blasting. The drawbacks to these units during testing were a higher incidence of equipment breakdown than with dry blast units, and operator difficulty with

[9] EVALUATION OF THE EFFECTIVENESS OF WET BLAST CLEANING METHODS OF SURFACE PREPARATION, U.S. Dept. of Transportation, Maritime Administration, June 1985

surface observation and cleaning control due to the spray-back of water and wet abrasive.

b. AIR-WATER ABRASIVE SLURRY BLASTING: These units combine the air, water and abrasive at the control unit, rather than at the nozzle. These units can be more cumbersome than the air abrasive wet blast units because of the added weight of water before the mixture reaches the nozzle. Again, the major advantage of these units is in the control of dust generated during the operation; however, since these systems operate at a lower nozzle pressure, the cleaning rate is quite a bit lower than with a conventional dry blast unit.

c. HIGH PRESSURE WATER BLASTING: This technique utilizes water pressures from 6,000-15,000 psi. In addition, an ultra-high pressure water blaster operates at 20,000 psi. This type of blasting has not shown the capability of removing tight rust, or intact mill scale at acceptable cleaning rates, and also does not produce a surface profile of the steel. This type of surface preparation shows the most promise for use on ablative antifouling paints which only require a new topcoat. An important consideration with this type of blasting is the amount of thrust that the operator must withstand while using a high-pressure water blaster. Thrusts of greater than 35 to 40 lbs. can be very fatiguing. Fatigue and operator control were the major problems with the ultra-high pressure water blaster.

NOTE: If a form of water blasting is used for surface preparation, a rust inhibitor should be added to the water during blasting operations to prevent "flash rust" from forming; however, specify that the rust inhibitor be compatible with the coating supplied.

6. Application: There are several different techniques for application of paints, each of which has its validity based upon the area to be covered and the specific properties of each paint. Inspectors should be thoroughly familiar with the Product Data Sheets for each coating they will be applying. The only coating techniques we will discuss in these guidelines are spray and hand application.

Ambient weather is critical when applying paints. In Northern shipyards, paints should be suited to the colder temperatures expected during winter months. In Southern shipyards, humidity and high temperatures can affect paint adhesion.

NOTE: Coating specifications should provide for expected weather conditions, stating maximum humidity readings for application, and stating that feasible methods will be available to avoid these problems.

Some acceptable methods for meeting weather requirements are: erecting a shelter around work areas, dehumidifying enclosed spaces, and use of heat lamps and portable ventilators. If inspectors are dissatisfied with ambient weather conditions all coating work should be stopped until conditions improve.

a. SPRAY APPLICATION: For coating large areas, Spray Painting is the usual method used. There are two types of spray equipment used regularly, **Conventional Spray** and **Airless Spray**.

(1) Conventional Spray: This equipment uses compressed air to break the paint up (**atomize**) into small particles at the nozzle of the gun, and to supply the feed pressure to move the paint from the supply tank to the gun. Problems associated with conventional spray application are **OVERSPRAY** (the nozzle is too far from the surface, causing the paint to dry before striking the surface, so that it doesn't adhere well), and **SAGGING** (the nozzle is too close to the surface, causing the paint to build up too thick and droop). Application technique and operator skill are vital with conventional spray. This method is not acceptable for application of several of the paints recommended in this manual, and is therefore not recommended when airless spray equipment is available.

(2) Airless Spray: This is the most frequently recommended method of application for epoxies and urethanes. This method entails pumping the paint directly through a restricted orifice at very high pressure which causes atomization. The particles strike the surface at very high velocity, enhancing adhesion of the coating, and extending coating life. Problems associated with this type of application are **BOUNCE-BACK** (the same as overspray), and **SAGGING**. As with conventional spray, application technique and operator skill are vital with this type of application.

(3) HVLP Spray: High Velocity, Low Pressure Spray is a relatively new technique designed to radically reduce overspray and total paint consumption. This technique incorporates the principals used in conventional and airless spray. The paint is pumped at low pressure to the spray nozzle, where air is introduced into the nozzle to aide in the atomization process. The difference is

the way the air is introduced and the fluid pressure at the nozzle. This technique looks very promising for reducing solvent emissions during painting operations and is being used by the Navy in their shipyards in an experimental capacity at this time; however, at the present time it can not be used with paints containing over 60% solids and has a slightly slower application rate. **HLVP spraying should be considered for jobs such as the interior spaces since it is cleaner and faster than hand application.**

b. HAND APPLICATION: The most common technique for maintenance of existing coating systems or coating small areas is brush or roller application. This usually follows hand cleaning or power tool cleaning of the areas to be painted, and feathering the edges of tightly adhering coatings. A compatible surface-tolerant primer will then be applied to the bare steel by brush or roller, with a finish coat "tying" the new and old coatings together.

Problems associated with hand application are poor mixing techniques and uneven thickness of application. This method should only be used for small areas to be "touched up" to maintain an existing coating.

7. Paint Failures: All paints will gradually deteriorate and fail over time, even when properly applied over prepared surfaces; however, the rate of deterioration under optimum conditions is much slower than when improper preparation or application occurs. Inspectors must be familiar with the signs of various stages of deterioration in order to effect repairs properly and at minimal cost.[10]

a. CHALKING/FLATTING: Glossy paints eventually lose their gloss and turn flat with age. This is the sign of initial breakdown of the paint vehicle at the surface. Loss of gloss is soon followed by chalking. The vehicle is broken down by sunlight and other destructive influences, leaving a loose, powdery pigment on the surface which can be easily rubbed off with the fingers. Flatting is caused if moisture in the form of fog, dew or condensation lies on the surface of newly applied paint before it has thoroughly dried. This is primarily an appearance problem, causing a new paint job to look inferior.

Chalking, if gradual and controlled, can be an asset, particularly on white paint, since it is a self-cleaning process. It also helps to reduce coating thickness over time, thus decreasing excessive build up of the paint film. The major problem with chalking is adhesion of the next coat to be applied. Maintenance painting over chalked surfaces is

[10] Section 7 is adapted from the United States Coast Guard Coatings and Color Manual, COMDTINST M10360.3, June 8, 1983

one of the most common areas for paint failure. When applying a new coat over a chalked surface, as much of the chalking as possible should be cleaned off first.

b. CHECKING/CRACKING: These are breaks in the paint film which are formed as the paint hardens. Temperature changes cause the substrate (surface to be painted) to expand and contract. As the paint hardens, it loses its ability to expand and contract without breaking to some extent. Checking consists of tiny breaks which take place only in the upper coat or coats of the paint without penetrating to the substrate. Cracking describes larger and longer breaks which extend through to the substrate.

Checking is caused by stresses within the paint film, whereas cracking is caused by stresses between the paint film and the substrate. Checking and cracking are aggravated by excessively thick paint films because of their reduced elasticity. In addition, in colder climates, the freezing temperatures coupled with the heating of the sun can cause some coatings to crack.

c. ALLIGATORING: This is when the outer layer of paint cracks, and presents a pattern similar to alligator leather. Alligatoring occurs when a relatively hard finish coat is applied over soft primers or underlying coats. Undercoats which are too rich in oil, or are given insufficient drying time cause this softness. Expansion and contraction of the painted surface where paint coats have uneven flexibility causes alligatoring and checking. To avoid this problem, choose undercoat materials which dry harder than the topcoat materials, and allow undercoats to dry sufficiently before applying the next coat.

d. CRUMBLING/SCALING/FLAKING/PEELING: These are all failures involving complete loss of adhesion over some part of the surface. If cracking occurs with relatively small spacing, the moisture penetrating the coating will lift small pieces away from the substrate. If the cracks are large, the moisture will cause the edges to curl up, exposing more of the substrate, causing more curling, and eventually causing the coating to peel off in large pieces. When large areas are affected by this failure, the remaining coating will probably also have to be removed to prevent it from lifting the new coating being applied.

e. BLISTERING/LIFTING/INTERCOAT PEELING: Blistering occurs in the paint film when the top coat lifts from the base, leaving the primer intact. This failure is most frequently the result of moisture or vapors trapped between coats. To prevent blistering, use dehumidification equipment as needed, and recoat within manufacturers' specified times. To repair blistered areas, scrape thoroughly, feather the edges of tightly adhering coating, and repaint. Blistering can also be caused by excessive current in an impressed current cathodic protection system.

8. Cathodic Protection: Cathodic protection is not meant to replace proper coatings, but rather to enhance total protection, and to reduce total galvanic corrosion.

Because of their relative reactivity, zinc ingots are used for sacrificial anodes on steel ships' underwater hulls. Zinc and zinc-rich paints are used for the same effect: the coating will sacrifice itself while protecting the steel surface to which it was applied.

Zinc anodes are usually located on the underwater hull in areas where the coating is most likely to erode away due to high turbulence, such as the bow and near the propeller. Zinc anodes only protect the steel within a small radius (approximately 5 feet) of their location, and are not recommended as the sole cathodic protection source for underwater hulls unless they are spaced along the entire length of the hull.

A recent study[11] on cathodic protection used in conjunction with coatings on static pilings at a site off the Florida coast showed that sacrificial anodes reduce the corrosion rates of bare steel from 6 mils per year to 0.1 mil per year, and that when used in conjunction with a successful coating, resulted in very little total corrosion over the ten year study period.

Proper performance of a zinc anode system is dependant on exposure to seawater. Therefore, zincs must never be painted or covered up: when the hull is being blasted and painted, zincs must be masked. When drydocking, any zincs that show more than 50% wastage should be replaced.

It is also **NOT RECOMMENDED** that zinc primers be used on underwater hulls, as they will likely cause premature blistering and undercutting of the topcoats over time.

NOTE: ZINC ANODES SHOULD NEVER BE INSTALLED ON HULLS USING AN IMPRESSED CURRENT PROTECTION SYSTEM! The impressed currents will greatly accelerate the corrosion rate of the zincs!

9. Impressed Current Systems: Impressed current systems also work on the "battery principal": reference cells (**cathodes)** and shields (**anodes**) are installed at strategic points on the underwater hull. A small electric current is forced through the

[11] J. Bukowski and A. Kumar, "Coatings and Cathodic Protections of Piling in Seawater: Results of a Ten Year Exposure at LaCosta Island, FL", CERL Technical Report (August 1982)

hull between them, effectively turning the ship into a giant cathode, and inhibiting corrosion.

Unfortunately, the nature of the electric field in the vicinity of the shields is very detrimental to most paints, tending to make them brittle. Therefore, careful paint selection is required in these areas.

NOTE: If the impressed current system is generating an overvoltage or fluctuating voltages, the paint coating can easily blister and crack.

The steel hull within a five foot radius of the shield should be initially sandblasted and coated with a minimum 20 mils Dry Film Thickness "**DFT**" of a high-build, anticorrosive epoxy paint. After installation, reference cells and shields must **never** be coated and should be securely masked against blasting and painting.

CHAPTER 2. HULL COATINGS

A. INTRODUCTION

The following is a general discussion of the recommended coating systems for steel hulled ships. Coatings for fiberglass and aluminum hulls are listed under **SPECIAL PURPOSE COATINGS**. For details on surface preparation and application beyond a general discussion, refer to Chapter 1. COATING TECHNOLOGY.

The coating systems recommended in this section are for a ten year service life, and should be warranted for five years if at all possible.

B. ANTI-CORROSIVE SYSTEM

A two-coat system of surface-tolerant, high solids EPOXY is the recommended coating system for the underwater hull surfaces of the vessel. This type of system, when properly applied, provides the most effective long term corrosion control for this vital area.

Long term testing[12] has shown that under harsh environmental conditions, with and without cathodic protection, **EPOXY** systems perform well. This two-coat system is suitable for application to the entire hull inclusive of underwater surfaces, boottop and freeboard areas; however, if more protection against mechanical damage is desired, a zinc-rich epoxy primer as described under section **E. FREEBOARD**, can be substituted for the first coat of high solids epoxy.

1. Surface Preparation: The first surface cleaning will be to water-wash the underwater hull area with high pressure hoses. This should remove most of the marine growth. If it is not possible for the entire wash to be fresh water, the final rinse should be fresh, and should leave the surface ready for inspection. Past studies[13] have shown that high pressure hosing with fresh water, followed by hand scraping and blasting on old, previously coated steelwork can reduce or eliminate the formation of iron sulfates and

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[12] J. Bukowski and A. Kumar, "Coatings and Cathodic Protections of Piling in Seawater: Results of a Ten Year Exposure at LaCosta Island, FL", CERL Technical Report (August 1982)

[13] Singelton and Wilson, Shell Research, Ltd., "Blast Cleaning and Surface Quality", presented to the British Paint Corrosion Group,(1968)

chlorides on the freshly blasted surface. Solvent cleaning (SSPC SP-1) can be done at this time if necessary.

Prior to abrasive blasting, mask all impressed current reference cells and anodes, zinc anodes, etc. to prevent damage. Plug deck scuppers, and run socking from any other discharge opening that is likely to leak liquid. Degrease as necessary (best done before or during freshwater wash). Seal all ventilation openings to ship's interior spaces.

Where an existing approved coating is largely intact with an acceptable DFT (**Dry Film Thickness**), then a full scale abrasive-blasting will not be required; however, when spot-blasting and touching up epoxy coatings, great care must be taken to ensure adhesion of the new coating. Most epoxies have a maximum "cure" time after which a special solvent or tie coat must be used even when overcoating with epoxy. If the existing coating is not an epoxy, refer to Table 1-A for coating compatibility.

NOTE: When inspecting spotblasting, be sure that remaining coating is "TIGHT" (NO BLISTERING, FLAKING, DELAMINATION), and that all edges are properly feathered. ALSO ASCERTAIN THAT THERE IS NO EXCESSIVE STEEL LOSS IN SPOTBLASTED AREAS.

If the existing coating has deteriorated substantially, or has become too thick due to overcoating, then it may be necessary to completely remove it down to bare (or nearly bare) metal, and apply a new coating.

It is recommended that the minimum blast specification for the entire hull, inclusive of underwater hull, boottopping, and freeboard areas be a commercial (SSPC-SP 6) blast. The optimum surface preparation is a near white (SSPC-SP 10) blast. See Chapter 1. COATING TECHNOLOGY, section C.4. for a more detailed surface preparation discussion.

2. Application: For coating an area as large as the vessel's hull, **Airless Spray** is the recommended coating method. See Chapter 1. COATING TECHNOLOGY, section C.5.a. for more information on this technique.

When applying a new epoxy system to the hull area, the first coat should be surface-tolerant. This means it should be able to be applied over the remains of an existing coating system and/or minor steel imperfections. This is particularly important in the freeboard area where inorganic zinc primers were previously used. When a hull that has been painted with inorganic zinc is blasted, a certain amount of the zinc will become embedded in the steel, and although the surface may appear to be bare metal, there

may still be significant traces of zinc. If the first coat is surface-tolerant, then it will bond to any embedded zinc.

It is recommended that for the underwater anti-corrosive (AC) system, two 4-6 mil minimum DFT coats be applied to the entire submersible hull, inclusive of underwater and boottop areas. The antifoulant (AF) system would then be applied to the underwater portion of the hull and the black topcoat to the boottop. See Appendix A for approved systems.

When a new AC system is being applied, the vessel should be fleeted to insure that no areas are left exposed. **This is vital to maintaining the system for ten years!** When only the anti-foulant is being renewed, fleeting may not be necessary, but should be considered.

C. ANTI-FOULANT SYSTEM

The anti-foulant coating system's purpose is to withstand marine growth in order to provide a smooth surface on the underwater hull. Marine growth comes in many forms: slime, seaweed, barnacles, etc., and can attach very easily to almost any surface. This growth can increase the frictional drag on the underwater hull, and clog seachests and intakes.

Anti-foulant systems use various mixtures of biotoxins to prevent marine growth. One of the more common natural toxins is copper, which is used in various forms as discussed later.

The two categories of anti-foulant paint are:

1. Conventional
2. Ablative/Self Polishing

NOTE: Anti-foulant paints are not designed to protect against corrosion, and should not be substituted for specified DFT's of AC systems.

1. Conventional: Conventional AF systems contain biotoxins mixed into a base such as vinyl or chlorinated rubber. The type of base used depends on the AC system employed. The AF system must be a compatible paint. Such systems are not recommended for laid-up vessels, as they begin to lose their effectiveness after 12 to 18 months. The toxins at the surface are the only ones that come into contact with marine growth, so extra coats will not increase coating life, as buried toxins in the underlayers have no way of reaching the surface.

2. Ablative: Ablative, or self-polishing systems consist of biotoxins mixed into a copolymer paint that is designed to gradually dissolve (ablate) over time. These paints are generally designed to improve efficiency on operating vessels, but there are types available that are designed for low activity use.

Ablative systems fall into two basic categories: those that polish with the action of water against the hull, and those that have slightly soluble resins and are "self-polishing". Since activation is not guaranteed on RRF vessels, it is recommended that self-polishing paints be used. The effective life of ablative coatings can be increased by adding more coats, therefore increasing paint thickness. At some point, though, the paint becomes too thick to properly adhere, so maximum recommended coating thicknesses should be followed.

3. Surface Preparation: When the AF system is to be applied over a new AC system, the AF must be compatible. Most manufacturers recommend that when AF is applied over an epoxy AC system, the epoxy must not have fully cured. Inspectors should closely monitor overcoating instructions on paint data sheets to ensure proper bonding.

When an existing AF system is being touched up, special care is required to ensure that the AC system is not damaged. In most cases hydroblasting or high pressure washing with fresh water will provide a clean surface ready for the new AF coat. The new coating can usually be applied to the remains of the existing one.

When the existing AF system contains tributyltins (TBT), special environmental precautions may be required during blasting operations, whether it be high-pressure water blasting or abrasive blasting. Chapter 8 gives more detail on the environmental regulations now in effect, and those expected to be enacted shortly. Consult with shipyard and paint manufacturers before starting blasting operations with these types of substances.

4. Application: The recommended application method for this system is Airless Spray. See Chapter 1, section C.5.a. for more information on application by this method.

The recommended number of coats and thickness for the AF paint system is three 5-6 mil DFT coats for a total thickness of 15-18 mils. The US Navy has been using up to 20 mils of AF for long term systems, but paint manufacturers recommend that 20 mils be the absolute maximum thickness, since thicker paint could cause poor adhesion of the total system.

It should be noted that none of the AF systems recommended in Appendix A have a proven service life of ten years, therefore close monitoring of vessels for fouling and AF failure will be necessary during extended drydocking intervals. The longest proven AF system available at this time has a service life of three to four years.

D. BOOTTOPPING

The boottop area is that area of the hull from the light load line to the deep load line, plus six inches above and below.

The boottop area should be painted black to conform with the standard MARAD color scheme. When using the recommended EPOXY system for the hull, the boottop area should be coated with either black acrylic epoxy, silicone alkyd or urethane paint as approved in Appendix A from 1.5 to 2 mils minimum DFT.

E. FREEBOARD AREA

The freeboard area of the hull is that portion of the sides above the boottop (six inches above the deep load line) to the railings, including bulwarks. The freeboard area should be painted haze gray to conform with standard MARAD colors.

The freeboard area should be coated with a 4-5 mil minimum DFT coat of zinc-rich epoxy primer, followed by the second coat of the same high-solids epoxy (4-6 mils) being used on the underwater hull, and topped by a 1.5-2 mil topcoat of acrylic epoxy, silicone alkyd or urethane (See note below). The primary reason for recommending a zinc-rich epoxy in this area is to control corrosion caused by mechanical damage to the coating system.

NOTE: When using the recommended two-coat EPOXY system, no further coating is necessary for long-life corrosive protection; however, as discussed in Chapter 1. COATING TECHNOLOGY, epoxy paint chalks more quickly than a conventional oil-

based paint, and may be overcoated with 1.5-2 mils of an approved acrylic epoxy, silicone alkyd, or urethane paint for cosmetic appearance.

F. HULL MARKINGS

1. Waterline markings: Since RRF vessels are in lay-up status, waterline reference marks should be painted at bow and stern as follows:

Stripes four (4) inches wide should be painted along the waterline extending thirty six (36) inches from the bow and stern towards midships, with a second stripe the same width and length three (3) feet above the first. These stripes should be painted white or fluorescent yellow for ease in visibility.

2. Draft Markings: Draft marks, frame markings, tank boundaries, etc., below the deep load line should be coated with two full coats of white acrylic epoxy or urethane paint.

Draft marks above the deep load line, names, hailing ports, deck line, etc. should be coated with two full coats of black acrylic epoxy or urethane paint.

3. Underwater Reference Marks: When entering a vessel into the 10 year program, a reference marking system for the underwater hull will aid the inspectors in identifying problem areas when the five year underwater hull survey is conducted. Each region intending to use extended-life coating systems should mark the hulls with a contrasting color paint system that consists of a line approximately 1 inch in width by 6 inches high, and numbers that are approximately 6 inches high, marking tank divisions and major frames (at approximately 50 foot intervals along the length of the hull).

These marks should be placed at the turn of the bilge, and along the keel. After the marking system is in place, a reference videotape should be made of the entire hull showing all reference marks and seachest blanks in place. At the time of the next underwater hull survey in lieu of drydocking, the reference video and a general underwater plan showing the location of blanks and reference markings should be provided to the ABS and USCG inspectors for comparison with the current hull condition.

CHAPTER 3. TOPSIDE COATINGS

A. INTRODUCTION

The following is a general discussion of the recommended coating systems for all topside areas of RRF ships, including Superstructure, deckhouses, and decks. These systems are for steel surfaces only. Other types of surfaces are listed under SPECIAL PURPOSE COATINGS. For more detailed information on surface preparation and application techniques, refer to
Chapter 1. COATING TECHNOLOGY.

The coating systems recommended in this section are for a ten year service life, and should be warranted for five years if possible.

B. SUPERSTRUCTURE/DECKHOUSES

The recommended new coating system for these areas is a zinc-rich epoxy primer at 4-5 mils DFT, followed by one 4-5 mil coat of high solids epoxy, and one 1.5-2 mil coat of acrylic epoxy, silicone alkyd, or urethane paint for cosmetic appearance. The topcoat should be haze gray to conform with MARAD colors.

When the existing coating system is largely intact with an acceptable DFT, then a full scale abrasive-blasting will not be required; however, when spotblasting and touching up existing coatings, care must be taken to ensure adhesion of the new coating. **See Note in Chapter 2, section B.1. regarding Spotblast Inspections.**

1. General Preparation: Prior to blasting and painting, all portholes and windows should be masked to prevent etching. All ventilation openings should be covered with filter material and stack covers should be installed. All scuppers, drainpipes, vents, hatchways and doors should be masked or plugged to prevent incursion of grit or paint. Any drain or pipe where liquid could flow onto the surface to be blasted should be socked or piped to another area. All lighting fixtures, receptacles, antennas, nameplates, valve stems, cables, firefighting and safety equipment, cargo gear, deck machinery and other surfaces not normally abrasive-blasted or spray-painted should be removed or adequately masked during blast/coating operations.

Specification should be made to limit production work requiring entry into the vessel's superstructure during topside blasting and painting. Specification should also be made requiring removal of all masking materials, and proving all scuppers and drains clear upon completion of all work. Whenever possible, vent louvers should be removed, grit blasted, and coated on both sides according to the same schedule as used elsewhere on the superstructure.

2. Surface Preparation: All areas of oil or grease are to be thoroughly cleaned with an approved solvent to SSPC SP-1 (See Chapter 1, section C.4.a.) and fresh water rinsed. The entire superstructure should be high-pressure fresh water washed (1500 psi minimum) before any coating work takes place.

If the existing coating has deteriorated substantially, or has become too thick due to overcoating, then a minimum commercial (SSPC SP-6) blast is recommended, with the optimum being a near-white (SSPC SP-10) blast.

Various standards for different degrees of surface preparation may be referenced in Chapter 1. COATING TECHNOLOGY, section C.4.

3. Application: There are several different application techniques for this area. If the system is being completely replaced, the recommended coating method is **Airless Spray**. For general information on application, including problems associated with this method, and weather considerations, see Chapter 1. COATING TECHNOLOGY, section C.5.a.

When applying successive coats to this area, specify that each coat be of a different color to ease inspection. Since the deckhouses and superstructure have many corners and angles, special care should be taken on each inspection to ensure that all areas have been thoroughly coated. Areas such as sills of portlights, shadow areas behind antennas, edges of bulwarks, lifeboat davits, boxes, etc. are common places for "holidays" (areas missed by paint). Such areas should be specified for "stripe coats" in the paint specification to ensure adequate coverage.

4. Miscellaneous: Fire stations, safety equipment and other topside stencilling is to be accomplished in accordance with USCG regulations. Stack logo is to be laid out as follows using two coats of acrylic epoxy, silicone alkyd, or urethane as used elsewhere:

(1) Top of stack(s) for a width of two-fifteenths (2/15) of the total height shall remain Haze Gray.

(2) Immediately below the Haze Gray band, a band equal in width to one-fifteenth (1/15) of the total stack height shall be painted Ensign Red.

(3) Immediately below the Ensign Red band, another band equal in width to one-fifteenth (1/15) of the total stack height shall be painted white.

(4) Immediately below the White band, another band equal in width to one-fifteenth (1/15) of the total stack height shall be painted Caribbean Blue.

(5) The remaining lower portion of the stack shall be painted Haze Gray.

C. DECKS

All weather-exposed horizontal steel surfaces except helicopter (helo) decks and special non-skid areas will be considered decks for the purposes of this guide. Helo decks will be discussed in Chapter 6. SPECIAL PURPOSE COATINGS. Decks shall be painted Haze Gray to conform to MARAD colors.

The recommended coating system for decks is the 3-5 mil coat of zinc-rich epoxy primer with a 4-6 mil coat of high solids epoxy paint on top. The final coat will depend upon the expected service the area will have. If a non-skid finish is not necessary, the same 1.5-2 mil topcoat of acrylic epoxy, silicone alkyd, or urethane paint as was used on the superstructure will suffice. If a non-skid finish is desired, one of the approved sprayable non-skid paints may be applied by spray or roller, or an alternative non-skid finish may be applied as discussed later in this section.

1. Surface Preparation: All General Preparation and Surface Preparation guidelines as listed under Section B, Superstructures/Deckhouses apply to decks as well.

The following deck areas should have non-skid paint additive, or a non-skid paint as approved in APPENDIX A: foc'sle and poop deck work areas around winches, capstans, and windlass; lifeboat stations; cargo working areas, and other areas where personnel are likely to be walking regularly. Deck areas subject to excessive wear may need an extra coat of EPOXY before the coat containing non-skid is applied.

NOTE: Areas coated with non-skid paint should not be touched-up or repainted with ordinary deck paint.

2. Application: There are several different application techniques for this area. If the system is being completely replaced, the recommended coating method is **Airless Spray**. For general information on application, including problems associated with this method and weather considerations, see Chapter 1, section C.5.a.

If a non-skid finish is being applied, the non-skid finishes recommended in Appendix A can be either sprayed or applied by roller. An alternative application of non-skid finish has been used successfully in some of our regions. To achieve a non-skid finish, a non-skid aggregate is broadcast by hand over the intermediate coat of high-solids epoxy while the paint is still tacky. Then the final coat of epoxy as recommended in Appendix A is sprayed over the top, sealing the aggregate in place. This gives a tougher, thicker type of coverage in these high-use areas.

The advantages to this type of application are less clogging of spray tips and a more even non-skid finish. The only disadvantage is that it requires more manpower than a spray finish, and closer supervision to ensure that the spreading is done evenly and at the proper time during the curing process.

When applying successive coats to deck areas, specify that each coat be of a different color to ease inspection. Since decks have the most exposure and wear, special care should be taken on each inspection to ensure that all areas have been thoroughly coated. Areas such as gunwales, shadow areas behind vertical bulkheads, etc. are common places for "holidays" (areas missed by paint).

CHAPTER 4. MACHINERY SPACES/CARGO HOLDS

A. INTRODUCTION

This section applies to steel bulkheads, decks and overheads of engine rooms, motor rooms, boiler rooms, steering gear flats, shaft alleys, auxiliary machinery rooms, and cargo holds. Where different materials are being coated, refer to Chapter 6. SPECIAL PURPOSE COATINGS section of this guide. Pumprooms and cargo tanks are covered under Chapter 5. TANKER COATINGS.

For details on surface preparation and application beyond a general discussion, refer to Chapter 1. COATING TECHNOLOGY.

B. GENERAL

Although the existing coating systems in these areas may not comply with these recommendations, whenever possible, they should be touched-up. For guidance on compatible coatings, refer to Table 1-A. Colors should match existing paint scheme.

C. MACHINERY SPACES

When inspection indicates that a complete renewal of coatings in these areas is required, the following system is recommended as a replacement. Since these areas are under dehumidification, a good alkyd coating system should be adequate for surfaces above the floorplates. This consists of two 2 mil coats of an alkyd primer, covered with two 1.5-2 mil finish coats of alkyd. For the floorplates and bilges, two 4-6 mil coats of surface-tolerant epoxy is recommended.

1. Surface Preparation: Surface preparation of machinery spaces must be determined on a case by case basis. Abrasive blasting is usually impractical in these areas; therefore, large areas are often prepared to SSPC SP-3 standard, by scaling with power tools such as power wire-brushes, disc sanders, or needle scalers. These spaces are usually washed down with a low or high pressure fresh water wash before application of coatings. For removal of loose paint and heavy rust, high pressure water blasting has proven to be an effective surface preparation method as well.

The major advantage to power tool cleaning these areas is that it creates less dust and grit. The two drawbacks are that:

a. more manpower is required, causing greater expense.

b. improper use of a wirebrush or disc sander can overpolish the metal, leaving it too smooth for paint adhesion.

In areas where machinery requiring lubrication is present, particular attention must be paid to solvent cleaning (SSPC SP-1) of the surface in preparation for painting. Refer to Chapter 1, section C.4.a. for more information on Solvent Cleaning. Any residual greases, oils, or moisture on the surface will affect paint adhesion.

2. Application: The type of application method chosen for these spaces is also dependent on the limitations of each compartment. When application by means of spray equipment is desired, refer to Chapter 1. COATING TECHNOLOGY, section C.5.a. for details on Spray Application. In addition, the following special precautions should be taken.

Mask any electrical fixtures, receptacles, valve wheels, etc. in such a way that incursion of paint is prevented. Cover any piping or machinery that should not be painted with heavy paper or cloths and seal with tape. Provide ventilation/dehumidification as necessary to maintain optimum painting conditions.

NOTE: When using spray equipment on interior spaces, adequate ventilation MUST be provided!

The more common method of application in these areas is by brush or roller. This is more labor-intensive, but avoids the problems associated with spraying coatings in an enclosed space near machinery.

Whenever possible, gratings and screens should be removed from the space, abrasive swept, and coated on both sides according to the same schedule as is used elsewhere in these spaces.

3. Piping Systems Color Coding: All piping in machinery spaces should be marked and color coded to show the name of the service, destination (where feasible), and the direction of flow (see figure below).

PIPING MARKINGS

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control purposes. Valve handwheels and operating levers may be painted by hand or spray using enamel where the surface temperature does not exceed 180oF. In areas where the temperature is excessive, alternate methods of system identification should be provided. The MARAD standardized color coding system for piping system valve handwheels and operating levers is described in Table 4-A.

TABLE 4-A: COLOR CODING

FLUID	COLOR CODE
Bilge Water	Brown
Condensate Drains	Red/Blue
Condensate	White
Contaminated Steam	Red/White
Fire (Salt Water)	Red/Green
Lube Oil	Yellow
Superheated Steam	Red
Potable Water	Blue
Desuperheated Steam	Red/Black
Salt Water	Green
Sewage	Gold
Hydraulic Oil	Orange
Feed Water	Blue/White
Chilled Water	Blue/Red/Blue
Fuel Oil	Black
Ballast (Salt)	Brown & Green
Ballast (Fresh)	Brown & Blue
Diesel Oil	Black & Yellow
Condensate Returns	Brown & White
Compressed Air	Gray
Freon	Purple
Foam Discharge	Red/Green/Red

D. CARGO HOLDS

As with machinery spaces, whenever possible, the existing coatings in these areas should be touched-up before considering removal and replacement of coatings. When inspection indicates that a complete renewal of coatings in these areas is required, one 4-6 mil coat of a high-solids, surface tolerant epoxy is recommended.

1. Surface Preparation: As discussed previously, the method of surface preparation used will be determined by the restrictions of the area. Abrasive blasting is the preferred method when large areas need preparation. This should be more practical

than in the Machinery Spaces. If abrasive blasting is used, the surfaces should be blasted to a minimum SSPC Sp-6, Commercial blast, with an optimum blast specification of SSPC Sp-10, Near-White blast. However, if abrasive blasting is not cost-effective or practical, the surface tolerant epoxy recommended in Appendix A for use in cargo holds should overcoat with less than optimum surface preparation (i.e. SSPC SP-3, Power Tool Cleaning) providing that the type of aged coating in the area is compatible. Refer to Table 1-A for coating compatibility.

Particular attention should be given to the decks, drainage areas, grating and rosebox in each cargo hold, as these tend to clog with loose paint and scale during surface preparation of the rest of the hold. Specification should be made to prove all drainage piping free after completion of work.

2. Application: As with surface preparation, the method of application used will vary with each compartment; however, cargo holds should be able to be spray-painted without too much difficulty in most cases. When applying Epoxy paint by spray method, Airless Spray is the recommended equipment to use. For more information on Spray Application, see Chapter 1, section C.5.a. Also see additional precautions regarding use of spray equipment in enclosed spaces as discussed in section **C. MACHINERY SPACES**.

When touching up existing systems, consult Table 1-A for coating compatibility. Cargo holds should be painted a light color for maximum reflection of lighting. The color chosen may vary somewhat dependant on the paint vehicle used, however white is the recommended color.

3. Alternative coatings: When it is cost prohibitive to use the epoxy coating recommended for cargo holds, some regions have had success using alternative coatings which provide a good degree of corrosion protection without requiring the same amount of surface preparation at a lower coating cost; however, it can be generally stated that "you get what you pay for" when selecting some of these lower cost coatings, and they cannot be expected to provide the same amount of corrosive protection as the coatings recommended in these guidelines.

CHAPTER 5. TANKER COATINGS

A. INTRODUCTION

The coating systems described in this section apply to the cargo and ballast tanks and pumprooms on all RRF tankers. Due to the special nature of their mission, OPDS tankers may have alternative coatings as determined during conversion.

The two major coating systems for cargo and ballast tanks are INORGANIC ZINC and EPOXY. Since our tankers are designated to carry Defense fuels, inorganic zinc cannot be applied to any cargo tanks. It is also not recommended that inorganic zinc be applied to a ballast tank which will be in "wet" lay-up, unless the coating is complemented by zinc anodes.

For more details on surface preparation and application beyond a general discussion and special considerations, see Chapter 1. COATING TECHNOLOGY.

B. CARGO/BALLAST TANKS

Due to the expense involved in staging for coating application in tanks, touch-up of an existing coating system is largely impractical, therefore it can be assumed that the system will be retained as is, or completely renewed. The recommended new coating systems for cargo and ballast tanks are a two coat high-solids epoxy system, at 4 mils DFT per coat.

1. Surface Preparation: Surface preparation may vary somewhat by type of coating system applied. For the two-coat epoxy system recommended above, the minimum blast level is a Commercial (SSPC SP-6) blast, with an optimum blast being a Near-White (SSPC SP-10) abrasive blast. See TABLE 1-B for recommended blast levels for different types of coatings.

When abrasive blasting and coating cargo and ballast tanks, it is imperative that proper staging be rigged to facilitate the surface preparation and inspection; however, on final inspection, be certain that removal of staging materials did not damage the newly applied coatings.

Some problems associated with coating tanks are high relative humidity due to enclosed space and sweating of bulkheads adjacent to tanks containing water and to ship's skin. Specification should be made in advance providing for these problems. It is

customary to require dehumidification of tanks while blasting and coating work is in progress. Whenever possible, adjacent tanks should be empty. Special attention should be paid to the cleanliness of the tank before permission to paint is given. All grit and dust must be removed from all tank surfaces and staging before application of coatings begins.

Provision should be made for taping all valve threads, couplings, reach rod joints, and other moving parts that would be adversely affected by abrasive blasting and coatings, as well as for removal of all masking materials upon completion of work.

2. Application: When applying a new coating to a tank, the recommended application method is by Airless Spray. As with superstructures and deckhouses, tanks have many "shadow" areas and corners which need to be closely inspected to ensure adequate coating. Specification for hand coating of corners and edges (**striping**) should be made for each coat applied.

When a two-coat epoxy system is being applied, specify that each coat be of a different color to facilitate inspection. When applying an inorganic zinc coating, it is recommended that a color other than grey be specified for inspection purposes.

NOTE: When using spray equipment in an enclosed space, adequate ventilation MUST BE PROVIDED!

C. PUMPROOMS

When coating pumprooms in tankers, the same limitations apply as with Machinery Spaces. Whenever possible, existing systems should be touched-up; however when inspection determines that the existing coating system requires complete renewal, a 4-6 mil DFT coat of surface tolerant epoxy paint is recommended. The color should be white or off-white dependent upon the vehicle used, to aid in reflectivity of the lighting system.

1. Surface Preparation: As with machinery spaces, the amount of surface preparation in pumprooms should be determined on a case be case basis. It is generally recommended that abrasive-blasting be avoided if at all possible. Pumprooms

are another area where a great deal of success has been had with removal of loose paint and rust scale by use of high-pressure water blasting. This method is certainly less intrusive to pumproom machinery than abrasive blasting. Regardless of what technique is used, specification should be made to note all valve, pump, bulkhead and pipeline markings before beginning any surface preparation, and to remark these areas after completion of all work. See additional notes as to stencils and markings in Section 2. Application.

When preparing the surface for paint using disc sanders and wire brushes, take care to avoid overpolishing the surface. When preparing bilges and splash areas for paint, ensure that they are solvent cleaned (SSPC SP-1) and freshwater rinsed prior to application. Any residual grease, solvent or moisture will adversely affect adhesion.

Whenever possible, gratings should be removed, abrasive blasted, coated on both sides in accordance with the recommended coating system, and replaced.

2. Application: The type of application method chosen for pumprooms must be determined on an individual basis taking into account the size of the coating job, the area to be coated, and the limitations of that particular pumproom. When application by use of spray equipment is desired, the following precautions should be taken.

All paint chips, dust and grit must be adequately cleaned. All pumps, motors, and associated equipment must be covered with tarps or heavy paper and sealed with tape. All exposed valve threads should be covered with petroleum jelly or heavy grease and taped to prevent adhesion of paint. Provision should also be made for removal of all masking materials at the completion of work.

All valve and pump markings, fire station markings, etc. should be recorded and restencilled upon completion of coating. All electrical fixtures and receptacles should be masked to prevent painting. Adequate dehumidification and ventilation should be provided. See NOTE in section B.2. regarding adequate ventilation for an enclosed space.

CHAPTER 6. SPECIAL PURPOSE COATINGS

A. INTRODUCTION

This chapter deals with coatings for areas not common to all RRF ships. Fiberglass and Aluminum hulls, HELO and flight decks, coatings for wood, etc. are all covered.

Unless mentioned specifically, surface preparation and application techniques are as discussed in Chapter 1: COATING TECHNOLOGY.

B. FIBERGLASS HULLS

Since fiberglass does not corrode, the major maintenance problem is replacement of the gel coat due to cracking or chalking from exposure to ultraviolet (UV) radiation.

Although paint manufacturers may suggest several types of paints for fiberglass hulls, it is recommended that only epoxy and silicone alkyd paints be used. These paints have been proven to provide a good, long coating life.

1. Blistering: Blisters have been known to form on occasion on fiberglass hulls. There is no particular stage of exposure at which they appear, but when they do, they must be repaired. Blisters should be removed by disc sanding. The exposed craters should be cleaned thoroughly, and filled with epoxy putty. When the putty has cured, It should be sanded flush with the surrounding surface and painted with an epoxy topcoat.

2. Surface Preparation: Fiberglass should **not** be abrasive-swept or blasted. The proper method of preparing the surface is sanding, by means of a disc sander, or by hand, depending on the area to be covered. New fiberglass is waxed, requiring removal of the wax before any coating is applied.

3. Application: Any method of application can be used with the exception of Airless Spray. The first coat or two (follow manufacturer's recommendations) should be a commercial fiberglass primer suitable as a tiecoat with epoxy or silicone alkyd paints. When painting lifeboats, workboats, or other small craft stored aboard the vessel, no anti-fouling paint is required.

C. ALUMINUM SURFACES

The paint technology discussed here is only for aluminum that is exposed to weather or water. Other coatings may be more suitable for aluminum when it is in a protected space.

As discussed in Chapter 1. COATING TECHNOLOGY, when aluminum oxidizes, a tough film which adheres tightly is formed, effectively sealing the surface from further corrosion. Therefore, the only corrosion which must be closely monitored is galvanic corrosion, where another metal is in prolonged contact with the aluminum.

The major reason for maintaining a coated surface on aluminum is for cosmetic appearance. Therefore it is recommended that except as noted for underwater hulls, epoxy, topcoated with silicone alkyd, gloss finish epoxy or urethane be used to coat aluminum surfaces.

1. Surface Preparation: Most of the basic preparation techniques that apply to steel surfaces can be used on aluminum; however, when abrasive-sweeping or blasting, special provisions for smaller grit and lower blast pressure are needed. Refer to Chapter 1: COATING TECHNOLOGY, Section C.4 for more details on blasting.

When coating aluminum, a clean, bare surface, free of all corrosion, paint, grit or dust is even more essential for adhesion than steel surface preparation.

2. Application: The same application techniques as described in all other chapters may be used on aluminum. When applying epoxies, no special tie coat is required. Alkyd paints require at least one to two mils DFT of epoxy primer as a tie-coat on aluminum.

If the aluminum surface to be covered is a hull on a boat that is always in the water, a suitable antifouling paint should be applied. In the event an aluminum hulled workboat is coated, two 4-5 mil coats of epoxy should be applied as an anti-corrosive, followed by a 5 mil coat of a TBT (Tin-based) anti-foulant paint containing no copper.

NOTE: Due to cathodic reactions with other metal-based paints, aluminum-hulled vessels are excepted from regulations limiting tributiltins in AF coatings.

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2. Application: Brush painting is the most effective application method for small areas, while air-spray can be used for large areas. For surfaces requiring a color finish, after the wood surface has been prepared, one coat of a penetrating wood preservative should be applied, followed by two finish coats of an alkyd paint. For surfaces requiring a natural finish, after the wood surface has been prepared, one coat of a penetrating stain should be applied, followed by two or more coats of a compatible polyurethane finish as per manufacturer's instructions.

F. HOT SURFACES

Surfaces that are exposed to consistently high temperatures, such as boilers, steam piping, and exhaust uptakes and surfaces that are likely to be exposed to high heat should be coated with two coats of a heat-resistant coating. These coatings are flexible enough to withstand thermal expansion, and do not blister under high temperatures.

The type of coating used is dependent on the temperature ranges likely to be encountered. Consult product data sheets for these paints to ensure adequate service. Heat-resistant coatings are not included in Appendix A, as their application and use varies depending on the area to be coated.

G. COMPROMISED SURFACES

In areas where it is not possible to prepare the steel surface for a standard paint or primer due to inaccessibility, etc. a **soft coating** or **float coating** can be applied. These coatings are usually petroleum-based thick fluids or gels which are designed for easy adhesion. They never completely harden.

These coatings were developed for application to less-than perfect surfaces and can be applied by spraying or "floating" (filling the tank, locker, or void space with water, with the coating floating on top, and then slowly emptying the water out, leaving the coating attached to the surfaces in the space). When the choice is available, spray application is the preferred method. It should be noted that since most of these coatings never harden, surfaces are left in a slippery condition resulting in conditions that might make later tank inspections unsafe. Consider all alternatives before choosing a soft coating.

Chain lockers, void spaces, some cofferdams and rudder interiors are some of the more likely areas to be coated in this manner. Application should be according to manufacturer's instructions. These coatings should not be used in tanks designated for cargo or fuel since they will leach into the cargo or fuel.

H. ANCHOR CHAINS

Anchor chains should be ranged while the vessel is drydocked, sandswept, coated with black high-solids surface tolerant epoxy and marked in accordance with the following:

Each shot to be marked with Ensign Red paint on the detachable link. For each successive shot, the links on either side of the red detachable link shall be marked with white paint to designate the number of the shot. For example, shot #1 would have one white-painted link on either side of the detachable link, shot #2 would have two white links on either side, etc.

CHAPTER 7. DOCUMENTATION

A. INTRODUCTION

Adequate documentation is necessary to monitor and plan for effective paint maintenance of RRF ships. It is imperative that these records be developed and maintained by Ship Managers. Ship Managers shall specify that they be revised by the paint contractor whenever any major coating work is done.

In order to provide accurate information for cost estimating and performance records for various paint brands when planning future paint work, please furnish your ship Managers with the following information for inclusion in their next set of shipyard paint specifications.

B. SURFACE AREA SCHEDULE

For each ship, develop a "Surface Area Schedule" which should list the painted surface area of the following:

Underwater Hull
Boottopping
Topside Hull
Each Coated Tank and Cargo Hold

Each schedule should be in booklet format (8 1/2" x 11") with an assigned shipyard drawing number. Ship managers may develop their own standard format and have paint contractors actually complete each schedule as each ship comes up for major coating work.

C. PAINT SCHEDULE

For each ship, develop a "Paint Schedule" which records all paint applied to major surface areas by shipyards and contractors. The schedule should be organized in such a manner that it can be easily revised, and will present a paint history of the vessel.

For all areas, the schedule should record: Surface preparation, primers, and each overcoat. Also, colors, types, DFT millages, application methods, manufacturer, and name of applying shipyard or contractor should be recorded.

Schedule should be in booklet format (8 1/2" x 11") with an assigned shipyard drawing number, and revised whenever any major paintwork is done. Ship managers may

develop their own standard format and have the painting contractor complete or revise the schedule as the work is done.

NOTE: The typical "Paint Report" submitted by some manufacturers does not necessarily provide all of the information listed above, and should not be relied upon to fulfill the requirements of this report.

Appendix B is an example of a NAVSEA paint schedule with applicable paint specifications.

CHAPTER 8. ENVIRONMENTAL/SAFETY CONCERNS

A. TOXIC SUBSTANCES

1. General: Many substances used in the formulation of coatings are considered to be toxic by OSHA standards, and may have exposure tolerance levels for painters and blasters. Material Safety Data Sheets and Product Data Sheets should be consulted prior to commencing any surface preparation or coating work. In addition, accurate records of the types of coatings used in all areas should be maintained (see Chapter 7. DOCUMENTATION). These records could save you time and trouble if you can prove that the coatings used do not require special handling in either application or removal.

a. LEAD: Any paint manufactured on or after June 23, 1977, may contain no more than 6/100ths of one percentum lead by weight in the total non-volatile content of liquid paint, or in the dried film of the paint already applied, by public law. Since this ban went into effect, the paint suppliers have all come into compliance, and no specific specification needs to be added to your coatings specs.

However, due to the age of RRF vessels, the possibility exists that some of the paints on our ships, particularly in the interior spaces, contain excessive amounts of lead, and may require special removal techniques. OSHA has set maximum employee exposure limits of 30 micrograms per cubic meter of air (30 $\underline{u}g/m^3$) averaged over an 8-hour period.

b. MERCURY: The EPA established regulations regarding mercury-containing fungicides prohibiting their use in solvent-thinned paints. They can be used only as a preservative in water-based interior paints, or as a fungicide in water-based exterior paints. The EPA has not set limits on the amount of mercury that may be used; however, the Federal Hazardous Substances Act limits the use of mercury to 0.2% of the total weight of the paint.

c. COAL TAR: Although these substances have no controls at this time, coal tar pitch volatiles are a suspected carcinogen by OSHA standards, and are presently being studied and considered for exposure limitations. For this reason, it is not advised that coal tar paints be applied to MARAD vessels.

d. VINYL CHLORIDE: This type of paint vehicle is also listed as cancer suspect agent by OSHA, and is therefore not recommended as a coating agent for MARAD vessels; however, some of our vessels are presently coated with this material, and OSHA safety standards must be observed when removing vinyl chloride coatings.

e. ZINC CHROMATES: These coatings are also listed as suspected carcinogens and have exposure controls set by OSHA. Special precautions should be taken to protect personnel when applying or removing these paints. Refer to OSHA exposure limits before use.

B. TBT REGULATIONS

1. General:

Tributyltin (TBT) compounds are part of the organotin family of pesticides and are used as biocides in paint applied to ship and boat hulls as well as buoys, crab pots, and fish nets. They are also registered as wood preservatives and disinfectants. TBT antifoulant paints can be classified into three categories according to the way the TBT is incorporated into the paint coating and subsequently released.

a. FREE ASSOCIATION PAINTS: These paints fall into the Conventional category as discussed in Chapter 2. The TBT is physically incorporated into the paint matrix with the pigments, resins and inert substances. The TBT leaches from the paint surface by diffusion. Gradually the matrix becomes clogged with insoluble materials trapping some of the toxicant while leaving the surface unprotected.

b. COPOLYMER PAINTS: These paints are the Self-polishing Copolymer (SPC) type that contain TBT. This is the category in which the TBT is chemically bonded to a polymer matrix. The biocide is released only by chemical hydrolysis of the TBT itself. These paints are characterized by slow dissolution from ship hulls and thus achieve a constant but prolonged release of toxicant.

c. ABLATIVE PAINTS: These paints have characteristics of both of the other two types of paint. The TBT is not bound to a polymer, but is incorporated into the paint matrix. They are paint films with a slightly soluble resin so that the surface slowly sloughs (ablates) away as the water moves past the vessel's hull. This allows new toxicant layers to be revealed and prevents the buildup of insoluble materials.

A TBT antifouling paint formulation can have a single TBT active ingredient, can be combined with one or more of the other 8 TBT antifoulants, can be combined with copper compounds, or can be found in a variety of other combinations.

Preliminary findings of studies indicate that low concentrations of elemental or inorganic forms of tin do not appear to cause negligible toxicological effects in man or wildlife; however, when carbon groups such as butyl units are added to the tin, as is done with

TBT paints, there is an increase in the toxicity to aquatic organisms. The studies on effects to humans are still in progress; however, TBT paints are being treated as potential carcinogens as far as personnel safety procedures for application and removal of these coatings are concerned.

2. History: In order to properly discuss the present and future regulations of Marine Antifoulant paints, a little history is necessary. Antifoulant paints containing TBT were initially registered in the early 1960's.

In 1980 a study was conducted in the Archachon Basin in France on the effect of tributyltins on the oyster population. As a result of the study, the use of TBT paints was banned in 1982. By 1988, the oyster population had returned to normal, confirming in the minds of many that the TBT ban had been effective. In the meantime, studies were initiated by the Environmental Protection Agency in the U.S. to determine the effects of these compounds on our marine life.

3. EPA Actions: In January of 1986, the EPA initiated a special review on the nine TBT compounds used in antifouling paints due to possible adverse effects to nontarget aquatic organisms such as oysters, mussels, crabs and fish. The main areas targeted as sources of contamination were ships, pleasure boats, and shipyard wastes from hull cleaning in drydocks.

a. DATA CALL-IN: In approximately the same time frame, the EPA also issued a Data Call-in Notice requiring TBT manufacturers to submit data on product chemistry, environmental impact, ecological effects, usage, worker exposure, and release rates. Additional testing and worker effect studies are due in one to four years. Those manufacturers who failed to provide the required data had their registrations suspended.

b. RESULTS: The release rate study provided the EPA with a basis for comparing the amount of TBT released from different paint products. Based on submitted data and published studies, the EPA determined that even low concentrations of TBT in the water can cause irreversible chronic effects to a broad spectrum of aquatic organisms. Concentrations as low as 20 parts per trillion (ppt) have had adverse effects on oysters and certain snails. Concentrations in the water at 20 ppt or greater were found in more than 30 test sites in the U.S.

4. EPA Requirements: As a result of the studies mentioned above, on October 7, 1987, the EPA announced its preliminary determination of limiting TBT use to products: (1) with maximum release rates of 168 micrograms (ug) of organotin per cm^2 (short term) and 4 ug of organotin/cm^2/day (long term); (2) whose labels prohibit use on

non-aluminum boats under 65 feet in length; (3) classified as restricted-use pesticides to be used only by persons under the direct supervision of an on-site certified commercial applicator; and (4) in compliance with application, removal and disposal requirements.

5. Congressional Requirements: On June 16, 1988, the President signed into effect the Organotin Antifouling Paint Control Act (OAPCA). It contains interim and permanent TBT use restrictions that supersede those issued by the EPA. OAPCA established an interim certification program under which products which don't exceed the 4 ug organotin/cm^2/day can be sold and used. OAPCA also contains a permanent use restriction prohibiting the application of TBT antifoulant paint to non-aluminum vessels under 25 meters (82 feet) in length. When the EPA testing is complete, these requirements may be changed again.

6. Effects on MARAD Ships: The prohibition of use on non-aluminum boats under 25 meters in length was primarily for two reasons. The first was that these boats are clustered together in high concentrations in marinas and yacht basins where the cumulative release of TBT's exceed allowable concentrations. The second was that the economic impact on the user was considered to be small, since many small boat owners were reapplying TBT paints on the same 1 to 2 year schedule as with the more economical copper-based antifoulant paints. Since the paints containing tributyltins are more expensive than the copper-based paints, the only savings realized by the user would be over a long-term period.

Unfortunately for MARAD, many of our vessels are "clustered" together in the same manner as small boats. If MARAD used the paints containing TBT on our vessels we would be risking a concentrated release in these "cluster" areas that might exceed the allowable limits. Furthermore, the newly established release rates will reduce the amount of TBT released into the aquatic environment by 80%. This raises questions as to the effectiveness of these new TBT paints in controlling fouling.

The EPA is not expected to make a final determination on TBT for the next 1 to 4 years. As a result of future studies, the EPA may determine that additional restrictions are required. Due to the present volatility of TBT legislation, application of TBT paints is not advised at this time.

C. CLEAN WATER ACT

1. General: The Clean Water Act has been used in California to provide a very narrow interpretation of what constitutes pollutants. Because of the present interpretations, most of the waste resulting from blasting old coatings off of metal falls into the pollutant definition. At the present time, if MARAD contracts for blasting and coating the freeboard and boottopping areas of the sideshell, provision must be made to collect all spent grit and blast residue. Consequently, operations that were once carried out in the fleet or at dockside must now be carried out in the drydock. Indications are that other states will eventually follow California's lead and tighten up on their restrictions as well.

2. Effects on MARAD Ships: These regulations are already affecting contracts in the Western Region, and should they be adopted nationwide, will eventually affect all MARAD vessels. It is advisable to check with local authorities before contracting for any work of this nature.

D. SOLVENT EMISSIONS

1. Background: The passage of the Clean Air Act in 1970 involved the EPA in legislating solvents to be used in coatings. The original Act set emissions limits, but left the specifics of attaining these limits to each state. In California, the California Air Resources Board (CARB) developed a proposed model regulation restricting solvents, because studies had proven that <u>all</u> Volatile Organic Compounds (VOCs) contribute significantly to the formation of oxidants (smog). A modified version of the model ruling was adopted by the South Coast Air Quality Management District in southern California in 1979, and similar regulations will be adopted on September 1, 1989, in all other parts of California. Legislation is being considered in Congressional Committee to adopt the California standards nationwide. These regulations drastically reduce the allowable solvent content of most coatings.

2. Requirements: The California regulations state that no person may sell, offer for sale, or apply any coatings manufactured after September 1, 1989, which contain more than 420 grams of volatile organic compounds (VOC) per liter of coating for an air-dried single-component alkyd or vinyl coating, or 340 grams/liter for a two-component coating as applied. The term "as applied" has significance in that the VOC content is measured at the point of application, which includes any thinners added to the paint for ease of application. These limits are dropped even further to 340 grams/liter for alkyd-type paints effective September 1, 1991.

3. Effects on MARAD Ships: These regulations are already affecting contracts in the Western Region, and should they be adopted nationwide, will eventually affect all MARAD vessels. The best way to comply at this time is to use high solids coatings in preference to those that have a higher solvent content whenever possible. The paint manufacturers listed in Appendix A are already reformulating their paints to meet the new standards, and most of the coatings recommended are presently VOC compliant. As new coatings are approved, the appendix will be updated. Until all coatings recommended meet VOC requirements, check with manufacturers as to use of an alkyd or silicone alkyd topcoat as described previously.

GLOSSARY

Term/Phrase	Definition
Abrasion resistance	Resistance to mechanical damage/wear
Abrasive	Compound used for blast cleaning
Acrylic resin	A clear resin obtained by polymerizing various acrylic monomers
Activator	Catalyst; curing agent; reactor
Adhesion	The degree of attachment between a paint film and the surface to which it is applied
Air spray	Paint spray technique which uses air for atomization
Airless spray	Spray technique using hydraulic pressure instead of air for atomization
Aliphatic hydrocarbons	Solvents of relatively slow strength, derived from petroleum
Alkyd resin	Resin prepared by reacting alcohols and acids
Alligatoring	Type of paint failure caused by underfilm softness. Surface has the appearance of alligator skin
Amine	Organic substituted ammonia, or compound having NH_2 group
Amine adduct	Amine curing agent combined with resin
Anchor pattern	Surface profile and degree of roughness
Anode	An electrode of an electrolytic cell that has the greater tendency to sacrifice itself
Anti-corrosive paint	A paint designed to prevent the corrosion of steel or iron
Aromatic hydrocarbons	Solvents containing the cyclic benzene ring having moderate to high solvent strength, e.g. toluol, xylol.

Barrier coat	A coat where the film itself is used as the primary surface protection
Binder	The portion of the paint solution that binds the pigment particles together
Blast cleaning	The cleaning & roughening of a surface by projecting abrasives on to a surface with compressed air
Bleeding	The surfacing of color from undercoats
Blistering	Paint failure due to loss of adhesion. Blisters may contain liquid, gas, or crystals. May be caused by excessive voltage on impressed current protection
Blushing/Blooming	Paint failure causing a flat milky appearance on surface. Caused by thinners that evaporate too rapidly, or unevenly
Bonding	Adhesion
Brittleness	Degree of resistance to cracking or breaking by bending
Bubbling	Paint failure caused by trapped solvents or water under paint film
Catalyst	Curing agent; reactor; activator
Cathode	The electrode of an electrolytic cell which remains protected
Cathodic Protection	Corrosion protection using sacrificial anodes or impressed current.
Chalking	Paint deterioration at the surface from exposure to ultraviolet rays
Checking	Tiny cracks in the upper coats of paint films due to poor flexibility
Chipping/lifting	Paint failure where topcoat fails to adhere to undercoat
Chlorinated Rubber	Paint binder made by chlorinating polyisoprene
Coat	The coating applied to a surface in a single application

Cobwebbing	Paint failure caused by premature drying of the solvent causing a spider web effect
Cohesion	The forces which bind the parts of a paint film to each other
Color-fast	Non-fading
Compatibility	Ability to adhere properly to other coatings
Copolymers	Large molecules obtained by simultaneous polymerization of different monomers
Corrosion	Decay; oxidation; deterioration due to interaction with environment
Coverage	Area covered by unit volume at specified D.F.T.
Cracking	Splitting; disintegration of paint by breaks through film
Cratering	Formation of holes or deep depressions in paint film
Crawling	Shrinking of paint to form uneven surface
Critical Curing Times	Minimum and maximum intervals between coats, and after final coat for best adhesion
Crosslinking agent	The chemicals reaction by which substances unite to form films
Cross-spray	Spraying first in one direction and second at right angles
Curing	Setting up; hardening
Curing agent	Hardener; promoter; reactor; activator; catalyst
DFT	Dry Film Thickness; the thickness of the film layer after curing is complete
Delamination	Separation of layers
De-scaling(scaling)	The removal of millscale or caked rust from steel by mechanical means, sometimes assisted by flame cleaning
Dew Point	Temperature at which moisture condenses

Diluent	A volatile liquid which while not a solvent, may yet be used in conjunction with the true solvent without causing precipitation
Drier	Chemical which promotes oxidation or drying of paint
Dry Spray	Overspray or bounce back; sand finish due to spray particle being partially dried before reaching the surface
Drying time	Time interval between application and final cure
Dry to handle	Time interval between application and ability to pick up without damage
Dry to recoat	Time interval between application and ability to adhere to next coat satisfactorily
Dry to touch	Time interval between application and tack-free time
Drying oil	An oil, of which linseed and tung oil are the commonest examples, having the property of hardening by oxidation to a tough film, when exposed in the form of a thin layer to air
Dulling	Loss of gloss or sheen
Durability	The degree to which paints and paint materials withstand the destructive effect of the conditions to which they are subjected
Electrolysis	Decomposition by means of an electrical current
Electrolyte	A substance which dissociates into ions when in solution or a fused state and which will then conduct an electric current; i.e. salt water
Electrostatic spray	Spraying in which electric charge attracts paint to surface
Emulsion paint	Water base paint with an emulsified resin vehicle
Enamel	Pigmented varnish; any hard, glossy coating

Epoxy paint	A paint based on an epoxy resin; the designation is frequently qualified to indicate the nature of the crosslinking agent used, e.g., 'amine' polyamide' or 'isocyanate', where the crosslinking agents are polyamines, polyamides and isocyanates respectively
Epoxy resin	A synthetic resin containing epoxide groups
Epoxy ester	Epoxy modified with a drying oil
Erosion	Wearing away of paint films; heavy chalking tends to accelerate erosion
Ester	Reaction product of alcohol and acid
Etch	To roughen a surface by a chemical agent prior to painting in order to increase adhesion
Etch primer	Acid modified polyvinyl butyryl zinc chromate paint also called wash primer
Extender	Pigment with no obliteration characteristics
Elastomer	Polymer having rubber-like properties
Fading	Reduction in brightness of color; sometimes caused by a thin film of moisture under the paint
Fan pattern	Geometry of spray pattern
Feather edge	Tapered edge
Filiform corrosion	A form of corrosion under paint coatings on metals characterized by a thread-like form advancing by means of a growing head or point
Filler	Extender; bulking agent; inert pigment
Film build	Dry thickness characteristics per coat
Film former	A substance which forms a skin or membrane when dried from a liquid state
Film integrity	Degree of continuity of film

Fingering	Broken spray pattern; fingerlike
Fish eyes	Small round breaks in the coating surface resembling fish eyes that are caused by poor surface cleaning, or incompatible coatings
Flaking	Disintegration into small pieces or flakes
Flammability	Measure of ease of catching fire; ability to burn
Flash point	Minimum temperature of a liquid at which the vapors given off are sufficient to form a flammable mixture with air, under specified conditions of test
Floating	Separation of pigment colors on surface
Flow	The degree to which a wet paint film can flow out after application so as to eliminate brush marks and produce a uniform smooth surface on drying
Fogging	Misting
Forced drying	Acceleration of drying by increasing the temperature above ambient temperature accompanied by forced air circulation
Fungicide	Substance poisonous to fungi; retards or prevents fungi growth
Galvanic corrosion	Corrosion of dissimilar metals in electrical contact
Generic	Belonging to a particular family
Gloss	Sheen; ability to reflect; brightness; lustre
Gloss retention	Ability to retain original sheen
Grit	An abrasive obtained from slag and various other materials
Grit blasting	See 'blast cleaning'
Hardener	Curing agent; promoter; catalyst; crosslinking agent

Hardness	The degree a material will withstand pressure without deformation or scratching
High build	Producing thick dry films per coat
Holiday	Pinhole; discontinuity; small area left uncoated
Hydrophilic	Having an affinity for water; capable of uniting with or dissolving in water
Impact resistance	A measure of resistance to a blow; ability to resist deformation from impact
Incompatibility	Inability to mix with or adhere to another material
Inert pigment	A non-reactive pigment; filler
Inflammability	Measure of ease of catching fire; ability to burn; use of the word flammability is preferred to inflammability due to the possible interpretation of the prefix "in" use as negative
Inhibitive pigment	One which retards corrosion process
Inorganic	Containing no carbon
Inorganic coatings	Those employing inorganic binders of vehicles
Intercoat contamination	Presence of foreign matter between successive coats
Intercoat adhesion	Adhesion between successive coats of paint
Isocyanate resins	Resins characterized by NCO grouping; polyurethane resins
Ketones	Organic solvents containing CO grouping; commonly used ketones are Acetone-dimethyl ketone; MEK - methyl ethyl ketone; MIBK - methyl isobutyl ketone
Lacquer	Quick drying, low solids paint; usually nitrocellulose
Latex	Emulsion of a rubber-like polymer in water.
Leaching	The process of extraction of a soluble component; term used to describe toxicant release from AF paints
Leafing	Orientation of pigment flakes in horizontal planes

Mil	One one-thousandth of an inch; 0.001"
Millscale	The layer of oxidation produced during the hot rolling of steel. Usually requires abrasive blasting for removal
Mist Coat	Thin tack coat; thin adhesive coat
Monomer	The unit molecule from which a polymer is built up
Nonvolatile	Non-evaporating; the portion of a paint left after the solvent evaporates
Oleo-resinous	Varnishes composed of drying oils in conjunction with resins, which may be either natural or synthetic
Opacity	The ability of a paint to obliterate the color of the substrate
Orange Peel	Dimpled appearance of dried film resembling an orange peel
Organic	Containing carbon
Osmosis	Transfer of liquid through a paint film or other member
Oxidation	Reacting with oxygen; drying; burning; rusting
Peeling	Failure in which paint peels from substrate
Phenolic Resins	Particular group of film vehicles made from phenolformaldehyde
Pickling	A dipping process for cleaning metal; the pickling agent is usually acid
Pigments	Chemical compounds in fine particle form which give color, opacity, and toxicity to a paint
Pin-holing	Formation of small holes through the entire thickness of the coating due to insufficient paint atomization. Pin-holes are usually too small to be detected by the human eye
Plasticizer	Agent added to resin to increase flexibility

Polymer	A substance, the molecules of which consist of one or more structural units repeated any number of times; vinyl resins are examples of polymers
Polymerization	Formation of large molecules from small ones
Polyvinyl acetate	A synthetic resin used extensively in water-based paints; produced by the polymerization of vinyl acetate
Polyurethane resin	A synthetic resin produced by the reaction of a polyhydroxy reactant with polyisocyanate. These resins are usually supplied as two-pack products
Porosity	Ability of paint film to transmit vapors
Pot-life	Time interval after opening and mixing during which paint is usable with no difficulty
Prefabrication Primer	A quick-drying coating applied as a thin film to a surface immediately after cleaning to give protection during the period before, during and after fabrication
Profile	Cross section of surface contour
Resin	A natural or synthetic material contained in varnishes, lacquers and paints; the binder or film-former
Sagging	A downward movement of a paint film between the times of application and curing, resulting in an uneven coating thickness
Settling	Caking; sediment; solids settle to the bottom of the container if not mixed frequently
Shelf life	Maximum length of time material may be stored in usable condition
Skinning	Formation of a solid membrane on top of a liquid
Solids	Non-volatile portion of paint
Solvent	A liquid in which another substance may be dissolved; usually a petroleum product
Spray Pattern	Configuration of spray with gun held steady

Spreading rate	Coverage, usually at specified dry film thickness
Striping	Hand coating of corners, edges and hard to reach areas before/after each spray application
Substrate	Surface to be painted
Synthetic	Manufactured; not occurring naturally
Tack	Degree of stickiness
Thermoplastic	Coating which softens under heat
Thinners	Volatile liquids added to paints and varnishes to facilitate application by lowering their viscosity
Toluene/Toluol	An aromatic hydrocarbon solvent
Tooth	Profile; mechanical anchorage; surface roughness
Two pack	A coating which requires the mixing of two parts in the correct proportions for use. The mixture will then have a limited pot-life
Undercoat	The coat or coats applied to a surface after preparation, and before the application of a finish coat
Varnish	Paint vehicle; film former; binder
Vehicle	The liquid portion of paint in which the pigment is dispersed
Vinyl resin	A synthetic resin of the thermoplastic type obtained by the polymerization of monomers containing the vinyl group
Viscosity	A measure of fluidity
Volatile content	Percentage of materials which evaporate
Volume solids	Percentage of volume of solids in a paint
Water blasting	Blast cleaning using high velocity water

Water spotting	Surface defect caused by water droplets on uncured paint
WFT	Wet Film Thickness; the thickness of a paint film while still wet
Xylene/Xylol	Aromatic hydrocarbon solvent
Zinc rich primer	An anti-corrosive primer for iron and steel incorporating zinc dust in a concentration sufficient to give electrical conductivity in the dried film, thus enabling the zinc to corrode away and protect the substrate (cathodic protection)
Zinc silicate	A vehicle for inorganic zinc pigments in coatings

34. Section 34 - RESERVED

35. SECTION 35. OUTPORTING

35.1 ALARMS

Alarms that alert those in the immediate area that there is an emergency caused by fire, flood, or intrusion shall be installed. There may also be a system installed to for remote reporting of this information. For non-ROS vessels, ensure intrusion, fire, and flood alarms are operating.

35.2 CATHODIC PROTECTION

For non-ROS vessels, ensure existing hull protection system is operating during monthly site visits.

35.3 WATERTIGHT BOUNDARIES

Ensure proper maintenance of watertight boundaries, fumetight boundaries, and fire zones. Prior to entering boundaries and zones, the Ship Manager shall ensure adequate ventilation and ensure integrity of space or boundary has not been violated.

[END OF SECTION]

CONTRACT DATA REQUIREMENTS LIST – TE 3

Note to OFFERORS: This TE is under development. We have tried to provide all of the links to CDRL so that you may gain an idea of the workload. HOWEVER, in my twenty-five years of dealing with successful offerors, no one has ever told me they overestimated the DATA requirements of the Federal Government, no matter how detailed a CDRL becomes. Data begets more data.

Shipboard computer software covers: MICROSOFT Office Suite
Cargo Max

MARAD uses MICROSOFT SQL.

Maintenance Section C2

M-0001 C.1.3 Data to sustain SOLAS to COTR see also C2.1.3

M-0002 C1.4 Plan and schedule in RMS of regulatory requirements. As needed See J4
Name of Vessel
Regulatory Survey or Inspections
Due Date
Preparation Date
See also C2.1.4

M-0003 C2.1.8. Changes to regulatories in RMS As Required
Name of Vessel
Specific Change
Due Date
Impact to schedule

M-0004 C222 Report Readiness to COTR Weekly or As needed See J4
Email
Name of Vessel
R Status
C-status current
C-status change to
Comment on reason for change
See also C2.2.2.

M-0005 C2.2.6.1 Identify C5 periods in business plan in RMS As needed See J4
Name of vessel
Estimated Start date for C5 period
Reason for C5 period
Estimated Completion date for C5 period
Actual C5 period – start
Actual C5 period – completion

M-0006 C2.3.1.1 A ship-specific Preventative Maintenance Plan Phase M (see J4)

M-0007 C2.3.1.1.1 Estimate cost by hour and by skill level to accomplish PMP.
In RMS Business Plan As Needed

M-0008 C2.3.1.2 PMP Phase O (See also J4)
In RMS Business Plan

M-0009 C2.3.1.3 Changes to either PMP (Phase M or Phase O)
In RMS Business Plan

M-0010 C2.3.2 Water Chemistry usage logs.
Provided to MARAD Water Chemistry Contractor on monthly basis

M-0011 C2.4.4 Enter all Deficiencies
into RMS As Discovered, continuous
Name of Vessel
Date of Discovery
Deficiency Number
Deficiency Description
Related Equipment
Priority

M-0012 C2.5.3 Develop the Business Plan
In RMS initially and as Needed
Description of Item
Cost Estimates
Timeframe for accomplishment
Priority for accomplishment

M-0013 Update Business Plan estimates with actuals after they occur
In RMS As Necessary

LOGISTICS

L.0001 C3.1.5 All accountable property records
In PC-SAL As Needed

L-0002 C3.1.6 Accountable property lost or stolen
Use form As Needed

L-0003 C3.1.8 Annual inventory
Against information in PC-SAL Annually

L-0004 C3.1.9 Inventory after Phase O As Needed
Use form 4410.1

L-0005 C3.1.12.1 Joint inventory acceptance of spares, tech manuals. Etc
Use form Once within 30 days of NTP

L-0006 C3.1.13.1 Joint inventory at termination of spares, tech manuals etc.
Against PC-SAL data Once at termination

L-0007 C3.1.15 Replenishment of spare parts
In RMS As Needed

L-0008 C3.1.16 Ship Configuration Changes
Use Form As Needed
Description of requested change.

L-0009 C3.1.17.2 For OPDS only
RMS Once within 30 days of NTP
Procedures for implementing NAVSEA letter

L-0010 C3.1.17.3 OPDS Shortage List
RMS As Needed
Generate any shortages on a list

ACTIVATION

A0001 Activation Cost Estimate C3.2.6.1 Cost Estimate for specific activation
Upon receipt of activation notice: Crew costs, provisions, stores, Transportation, fuel,
One Time Provided to COTR

A0002 Activation Daily SITREP
Name of Ship, R- Status, C-Status, Ship Manager, Homeport start act, on Ship's power, main engines operational, habitability complete, number of bunks available for riders, provisioning complete, cargo gear tested, full crew onboard, crew vetting list sent to MARAD, no/position of crew with clearance, number of crew trained in small arms, Gun Safe Onboard Y/N, Number of crew trained in CBRD, Full Set of CBRD equip for entire crew onboard? Y/N/ N/A, PPTS Onboard Y/N, secure communications Onboard Y/N, Classified Doc Safe Onboard Y/N, Req for Small Pox vaccinations Y/N, Number of crew received Small Pox vaccinations, Requirement for Anthrax vaccinations, Number of crew received Anthrax vaccinations, Dock Trial, Sea Trial, Ready For Sea (RFS), Days, Hrs, Mins to ActivateDays, Hrs, Mins W/ Required Sea Trial, Remarks, Points of Contact. THIS NEW FORMAT is an excel spreadsheet which will be provided upon NTP by MAR-613. Daily.

A0003 Activation Special Status Report As directed by COTR
As defined by COTR at the time request is issued.

A0004 Activation Movement Report
E-mail or classified message
As Needed
Date, Time, Location of vessel movement from/to

A0005 Vessel Sailing List As Needed
Name
Position
This includes embarked crew, force protection personnel.

A0006 Activation/Operations Accounting Report As Needed

A0007 Crew Questionnaire. There are two surveys or questionnaire. The first is general on the crewmember's status in the merchant marine and is returned to MAR-613; the second is from the Office of Public Affairs and requests hometown paper information in case an article should be addressed to the hometown. Both surveys are voluntary. As Needed

A0008 Activation/Ops/Deactivation Lessons Learned As Needed. Data shall cover activation, operations, and preparation for lay up. Photographs are encouraged. Sections to be addressed include:

- MARAD Reports (submitted as part of the activation and ops)
  General Condition of Ship upon Activation, Equipment Problems Encountered at Activation Administrative Problems, Voyage Summaries Operating History, commencing at activation notification, and inclusive of*:*
- Activation notification received from MARAD
- Dock Trials
- Tender to MSC
- Shift to loading
- Commenced Loading
- Completed Loading
- Departure Sea Buoy
- Transit
- Funding
- Correspondence
- Personnel
- Sea Trials
- Deficiencies (Operating casualty history and repairs)
- Vessel Reports
- Vessel Logs
- Thermography and Vibration Analysis Survey Reports
- Deliverables
- Photo Album

OPERATIONS

O-0001 **C3.3.9.4 the Navy Small Arms Asset Verification List,** As Needed
will be sent to ship or SM by MSC HQ through MARAD MAR-613

O-0002. **C3.3.9.4 The Ammunition Transaction Report** As Needed
Required on a monthly basis when vessel is in possession of ammunition
Provided to MAR-613

O- 0003 **C3.3.9.5 Noon Position Report** Daily
Vessel's location each day at Noon, distance made,
and

S0004 Daily/Noon Message: report any additional measures taken for security including authorizing authority.

O-0004 **C3.3.10 US Customs Form –226** As Needed
Required to be filed at first US port of entry after an overseas voyage. – reports all repairs and repair parts. This form is REQUIRED for public vessels

O-0005 **C3.3.12 series The Casualty Reporting System includes: Casualty reports (CASREPs); Casualty Situation Reports (SITCASREP); Casualty Corrected Reports (CASCORs) and Casualty Cancelled Reports (CASCANs).** As needed, and daily until CASCAN'd
CASREP – reports vessel casualty
SITCASREP – reports current situation with respect to repair/correction of casualty before it is corrected
CASCOR – reported corrected casualty
Casualty Cancelled Reports – reports no further report to follow.
Note: the operation temp of a Phase O vessel involved in military operations requires a minimum of one full time radio or radio electronics officer.

O-0006 POSREP (position report sometimes referred to as SITREP)
May be classified and usually contains one or more of the following:

- Geographic position (lat/long)
- Wind/swell
- Temperature
- Bunkers consumed
- CASREPs open
- CASCANs
- Date of declassification

DEACTIVATION

D-0001 **C3.4.7.1 Revision** to the initial deactivation cost estimate. As Needed

D0002 **C3.4.7.3 Voyage Damage.** As Needed
Report any voyage damage or unsatisfactorily cleaning to MARAD COTR.

D0003 **C3.4.9.2 Testing.** report analysis of any and all testing done on the vessels in anticipation of deactivation, such as as thermography or vibration analysis. As Needed.

D-0004 **C3.4.15.1 Delivery Certificate** Upon delivery or re-delivery of the vessel to/fr MSC, provide a scanned copy of the ship's delivery certificate into the MARAD IT system. Once, each deactivation.

D-0005 **C3.4.15.2 FUEL DATA**. Ensure that fuel data is recorded before re-delivery and provided to Navy and MARAD representatives. As Needed

SAFETY, ENVIRONMENTAL, and SECURITY

SAFETY (SFTY)

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SFTY 0001 C4.1.1.3 ISM Safety Plan/Vessel Safety Plan:
Update and maintain for assigned vessels. As Needed

SFTY 0002 C4.1.2 Maintain vessel logs. As Needed

SFTY 0003 C4.1.11.2 Reports – As Needed
document all costs incurred in providing emergency services or other medical treatement, transportation, and all other costs incidental thereto (for crew).

SFTY 0004 C4.1.11.3 Quarterly Reports <u>Maintenance and Cure:</u> The Ship Manager shall email the following information and maintain its currency to MAR-611, MAR-780, MAR-220, MAR-380 and to the region COTR at least quarterly:

- *<u>Name of crewmember (Last First Middle Initial)</u>*
- *<u>Date of original report to MARAD (does not change)</u>*
- *<u>Date of lasestt (or current) report (changes)</u>*
- Name of vessel
- Position (rating) of mariner onboard
- Date of Injury
- *<u>Short history of the injury/illness including body part(s) affected</u>*
- Ship Manager claim number (if applicable)
- If during military operations, name of operation
- Administrative claim: date filed,
- Name of attorney filing admini9strative claim
- Estimated claim exposure (from administrative claim)
- Amount of requested reserve from SM. This is not funded.
- Amount of requested reserve funded by a Task Order
- Amounts paid to date by the following categories
- Unearned Wages
- Repatriation
- Maintenance
- Cure
- Medical invoices

- Investigations
- Other funds paid
- Amount submitted to union for payment
- Amount paid by unions
- Cost savings by medical review service
- Was a USCG 2692 filed?
- Names of witnesses or whether witness statements were obtained
- Contributing factors to the injury, if known
- Had mariner reviewed safety videos/is name in log?
- Who provided mariner safety orientation prior to sailing?
- Status of mariner (FFD, NFFD)
- Disposition
- Actual settlement amount

If during the course of the contract, this information is transferred to RMS, provide updates there.

SFTY 0005 **C4.1.11.3.2 contract termination** – list of all outstanding litigation. As Needed

SFTY 0006 **C4.1.12.1 Severe Weather Plan** As Needed
Obtain approval of this plan from the USCG COTP

SFTY 0007 **C4.1.13.1 Mooring Plan.** As Needed

E-0001 **C4.2.3.1 SOPEP/VRP** One initial update, and then As Needed
Change data to reflect ship assignments
Incorporate into SM procedures, plans, and policies.

E-0002 **C4.2.7 Material Safety Data Sheets** – keep legible, easy to access records. As Needed

E-0003 **C 4.2.9 keep records of disposal of any HAZMAT** provide copies of all documentation of work performed to the COTR or his representative pertaining to sampling, analysis, storage, transportation and disposal of all hazardous, industrial, and special wastes generated from work resulting from a subcontract. As Needed

E-0004 **C4.2.12 – repair permits.** As Needed

SEC-0001 **C4..3.4.1- data for ISPS**
Name of Shipboard Security POC in RMS
Name of Corporate Security POC in RMS. Initially and as needed.

SEC –0002 **C4.3.4.3 Update ISPS Plan** with corporate information Initially and updates as needed.

SEC-0003 **C4.4.5 Maintain continuous synopsis.** Maintain, via the Company Security Officer, the Continuous Synopsis Record IAW ISPS, (Chapter XI-1 Regulation 5 and Chapter XI-2) and shall report security incidents IAW ISPS Part A paragraph 12.2.8. As Needed

SEC 0004 **C4.3.14 facility clearance** and associated data
Is provided to DOD. Initially. As Needed

SEC 0005 **C4.3.14 associated data for crew clearances.** As Needed

SEC 0006 **C4.3.13.1 Force Protection report**
Spreadsheet provided by MAR-612 (Mike Franklin)

HUMAN RESOURCES

HR-0001 **C5.1.3** verify shoreside personnel lists within 15 days of NTP, Initially and updates as needed.

HR-0002 **C5.1.4** President/Owners's data. Intially and updates as needed.

HR-0003 **C5.1.5 Emergency POCs. See also Business CDRL.** As Needed.
Name of Ship Manager
Address
Phone
Fax
Emergency phone (24 hour/day)

Management Point of Contact Phone Fax Emergency cell phone
Owner *P = home phone*
President Phone, Fax Emergency cell phone P = home phone
Vice President Phone, Fax Emergency cell phone
Vice President Phone, Fax Emergency cell phone
ISM Point of Contact Phone Fax Emergency cell phone
Corporate Security Officer Phone Fax Emergeyc cell phone
Vessel security officer(s) per ship could be up to 12.
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RRF Program Manager Phone Fax Emergency cell phone
Procurement Manager Phone Fax Emergency cell phone
Logistics Point of Contact Phone Fax Emergency cell phone
Fleet superintendent Phone Fax Emergency cell phone
Port Engineer Phone Fax Emergency cell phone
Could be multiple addresses
Address for satellite office facilities
Port Engineer Phone Fax Emergency cell phone
Address for satellite office facilities
Port Engineer Phone Fax Emergency cell phone
Address for satellite office facilities
Operations Phone Fax Emergency cell phone
Marine Personnel Phone Fax Emergency cell phone
Accounting Phone Fax Emergency cell phone
Facility/Classified Materials Mgr Phone Fax Emergency cell phone
Other Phone Fax Emergency cell phone

HR-0004 **C5.4.3 Mariner vetting** provide data to MAR-613. As Needed

HR-0005 **C5.5.8 complete J3 forms** for screening seafarers MA-1001A and MA-1001B
As Needed

HR-0006 **C5.6.1.2 maintain list of training** per employee. As Needed

HR-0007 **C5.8.7 ROS Crew list.** As Needed

HR-0008 **C5.10.2 FOS Crew** ratings. Initially and updates as needed.

HR-0009 **C5.10.4.3 report crew shortages** on CG729. As Needed

HR-0010 **C4.10.4.4. process articles.** As Needed

HR-0011 **C5.10.7 Second Seaman's war risk.** As Needed
Provide insurance estimates and terms/conditions.

HR-0012 **C5.10.8 Keep records** for later payment of Imminent Danger Pay. As Needed

HR-0013 **C5.11.1.1. Maintain overtime expenditure records.** As Needed
Report to MARAD COTR

BUSINESS MANAGEMENT

BUS-0001 **C6.5.1.2 Provide data on acquisition awards.** As Needed
To the region ACO.

BUS-0002 **C6.5.2.1 Provide data on QA Plan or any changes.** As Needed
To the MARAD COTR.

BUS-0003 **C6.5.2.2. Copies of all third party audit reports.** As Needed

BUS-0004 For Information purposes the Standard Administrative (Yellow) Filing Cabinet – usually located in Master's of ship's business office. If not readily found, consult COTR.

1. Index of Administrative Documents
2. Blue Book of Ship Regulatory Certifications
3. Vessel Response Plan (VRP) Tankers and OPDS vessels

3a. Shipboard Oil Pollution Emergency Plan (SOPEP) Balance of RRF

4. Ship's Trim and Stability Booklet
5. Military Sealift Command Communications Policies and Procedures Manual
6. Military Sealift Command Standard Operating Manual (CD-ROMs)
7. Commander, Military Sealift Command 5090.1 An Environmental Protection Program and Oil/Hazardous Substances (OHS) Spill Reporting Procedures and Contingency Plan.

8. RRF Operations Management Manual (TE-1 of SM contracts)
9. RRF Logistics Management Manual (TE-5 of SM contracts)
10. RRF Safety Rules and Guidelines Manual
11. Ship Manager Activation Plan
12. Ship Operations Plan
13. MARAD Safety Reference Folder
14. Reserved.
15. GMDSS Master Plan of Shorebased Facilties
16. RRF Videos

a. SOPEP/VRP video
b. MARAD Safety Videos (series)

1. Back injury, Slips, Trips and Fall Prevention.....
2. Heat Stress, Sight, Hearing and Respiratory Protection....
3. Electrical Safety Program.....
4. Safety Awareness Program.....
5. Shipboard Drug and Alcohol Testing Policy.....
6. Shipboard Safety Inspection Program.....
7. Back Care for the Maritime Industry*.....

c. Master's Orientation Video (7 in series)
d. Prevention of Sexual Harassment
e. Bloodborne Pathogens
f. MSC Surge Representative Pre-sailing Instructions

17. Marine Fire Protection, Firefighting, and Fire Safety (Book)
18. The Ship's Medicine Chest and Medical Aid at Sea
19. ISM Safety Plan (as provided by the SM)
20. For Gas detectors and SCBAs separate instructional videos were provided, although these may not necessarily be in the standard administrative filing cabinet. They may possibly be in a damage control locker.

J-3

J-0001

Seafarer Data Sheet (Form MA-1001A)
Particulars of Engagement and discharge (CG 705-a)
Seafarer's Statement of Physical Condition (Form MA-1001B)
Initial Report of Personal Illness/Injury (Form MA-1001C)
Statement of Individual Reporting Injury (Form MA-1001D)
Master's Report of Request for Medical Attention (Form 1001E)
Report of Attending Dentist/Physican (Form MA-1001F)
Report of Investigation of Serous Illness/Injury (Form MA-1001G)

Statement of Witness to or Person Nearby Scene of Reported Accident (Form MA-1001H)
Statement of Non-witness to Personal Injury Incident (Form 1001I)
USCG Form 2692 Report of Marine Accident/Injury or Death
USCG Form 2692B Report of Required Chemical Drug & Alcohol Testing…
Evidence List (Form MA-1001J)

Group Number	Design	Vessel	Locations	FY08	FY09	ACP compliant	ABS	Mooring Plan Availability
1	RO/RO	CAPE EDMONT	Charleston, SC	ROS-5	ROS-5	yes	7104516	yes
	RO/RO	CAPE DUCATO	Charleston, SC	ROS-5	ROS-5	yes	7219662	yes
	RO/RO	CAPE DECISION	Charleston, SC	ROS-5	ROS-5	yes	7322530	yes
	RO/RO	CAPE DOUGLAS	Charleston, SC	ROS-5	ROS-5	yes	7313092	yes
	RO/RO	CAPE DIAMOND	Charleston, SC	ROS-5	ROS-5	yes	7318862	yes
	RO/RO	CAPE DOMINGO	Charleston, SC	ROS-5	ROS-5	yes	7314181	yes
3	RO/RO	CAPE RACE	Portsmouth, VA	ROS-5	ROS-5	yes	7616377	yes
	RO/RO	CAPE RAY	Portsmouth, VA	ROS-5	ROS-5	yes	7530810	yes
	RO/RO	CAPE RISE	Portsmouth, VA	ROS-5	ROS-5	yes	7530808	yes
4	RO/RO	CAPE WASHINGTON	Baltimore, MD	ROS-5	ROS-5	yes	7826166	yes
	RO/RO	CAPE WRATH	Baltimore, MD	ROS-5	ROS-5	yes	7826178	yes
5	T-ACS 4	GOPHER STATE	Newport News, VA	RRF10	RRF10	yes	7300403	no
	T-ACS 5	FLICKERTAIL STATE	Newport News, VA	ROS-5	ROS-5	yes	6900915	no
	T-ACS 6	CORNHUSKER STATE	Newport News, VA	ROS-5	ROS-5	yes	6904652	no
Col J: Are vessels ACP compliant as of May 2004?								
Col K: Does MAR-612 have a copy of the vessel mooring plans as of May 2004?								

Group Number	Design	Vessel	Locations	FY08	FY09	ACP Compliant	ABS	Mooring Plan Availability
6	C4-S-1u	CAPE JACOB ***	PREPO	Prepo	Prepo	no	6200860	no
7	RO/RO	CAPE KENNEDY	New Orleans, LA	ROS-5	ROS-5	no	7905302	yes
	RO/RO	CAPE KNOX	New Orleans, LA	ROS-5	ROS-5	no	7815759	yes
8	RO/RO	CAPE TAYLOR	Houston, TX	ROS-5	ROS-5	no	7603497	yes
	RO/RO	CAPE TEXAS	Houston, TX	ROS-5	ROS-5	no	7602247	yes
	RO/RO	CAPE TRINITY	Houston, TX	ROS-5	ROS-5	no	7602259	yes
9	RO/RO	CAPE VICTORY	Beaumont, TX	ROS-5	ROS-5	no	8211306	yes
	RO/RO	CAPE VINCENT	Beaumont, TX	ROS-5	ROS-5	no	8211291	yes
11	OPDS 4	PETERSBURG***	Alameda, CA	RRF10	RRF10	no	6304034	no
	OPDS 5	CHESAPEAKE***	Alameda, CA	ROS-5	ROS-5	no	6402169	no
Col J: Are vessels ACP compliant as of May 2004?								
Col K: Does MAR-612 have a copy of the vessel mooring plans as of May 2004?								
		***** See Section B**						

Group Number	Design	Vessel	Locations	FY08	FY09	ACP compliant	ABS	Mooring Plan Availability
12	RO/RO	ADM WM M CALLAGHAN	Alameda, CA	ROS-5	ROS-5	yes	6707014	no
	RO/RO	CAPE ORLANDO	Alameda, CA	ROS-5	ROS-5	yes	7909968	no
13	RO/RO	CAPE HENRY	San Francisco, CA	ROS-5	ROS-5	yes	7909833	yes
	RO/RO	CAPE HORN	San Francisco, CA	ROS-5	ROS-5	yes	7914949	yes
	RO/RO	CAPE HUDSON	San Francisco, CA	ROS-5	ROS-5	yes	7914866	yes
14	RO/RO	CAPE INTREPID	Tacoma, WA	ROS-5	ROS-5	yes	7606645	yes
	RO/RO	CAPE ISLAND	Tacoma, WA	ROS-5	ROS-5	yes	7704241	yes
	RO/RO	CAPE INSCRIPTION	Long Beach, CA	ROS-5	ROS-5	yes	7602586	no
	RO/RO	CAPE ISABEL	Long Beach, CA	ROS-5	ROS-5	yes	7615266	no
16	T-ACS 1	KEYSTONE STATE	Alameda, CA	ROS-5	ROS-5	no	6615077	yes
	T-ACS 2	GEM STATE	Alameda, CA	ROS-5	ROS-5	no	6614920	yes
	T-ACS 3	GRAND CANYON STATE	Alameda, CA	ROS-4	ROS-4	no	6504949	yes
18	C5-S-75a	CAPE GIBSON	Alameda, CA	ROS-5	ROS-5	no	6817079	yes
	C5-S-75a	CAPE GIRARDEAU	Alameda, CA	ROS-5	ROS-5	no	6814736	yes
Col J: Are vessels ACP compliant as of May 2004?								
Col K: Does MAR-612 have a copy of the vessel mooring plans as of May 2004?								

Group Number	Design	Vessel	Locations	FY08	FY09	ACP compliant	ABS	Mooring Plan Availability
19	T-AVB3	WRIGHT	Baltimore, MD	ROS-5	ROS-5	no	7002918	yes
	T-AVB 4	CURTISS	San Diego, CA	ROS-5	ROS-5	yes	6906484	no
20	C8-S-82a	CAPE MAY	Norfolk, VA	ROS-5	ROS-5	yes	7207047	yes
	C8-S-82a	CAPE MOHICAN	Alameda, CA	ROS-5	ROS-5	yes	7303712	yes
21	C9-S-81b	CAPE FLATTERY	BRF	RRF-10	RRF-10	no	7312515	no
	C9-S-81b	CAPE FAREWELL	BRF	RRF-10	RRF-10	no	7309455	no
Col J: Are vessels ACP compliant as of May 2004?								
Col K: Does MAR-612 have a copy of the vessel mooring plans as of May 2004?								

TYPE	SHIP NAME	RRF MAX RATING SPEED (KTS)	RRF OPS RATING SPEED (KTS)
MSD	CAPE DECISION	17.1	16.2
MSD	CAPE DIAMOND	17.1	16.2
MSD	CAPE DOMNTO	17.1	16.2
MSD	CAPE DOUGLAS	17.1	16.2
MSD	CAPE DUCATO	17.1	16.2
MSD	CAPE EDMONT	17.1	16.2
STM	CAPE MAY	**18.3**	**16.8**
MSD	CAPE RACE	**19**	**18**
MSD	CAPE RAY	**19**	**18**
MSD	CAPE RISE	**19**	**18**
LSD	CAPE WASHINGTON	**17**	**16**
LSD	CAPE WRATH	**17**	**16**
STM	GOPHER STATE	**18.5**	**17**
STM	CORNHUSKER STATE	**18.5**	**17**
STM	FLICKERTAIL STATE	**18.5**	**17**
STM	WRIGHT	**20**	**18.7**
GT	ADMIRAL CALLAGHAN	**23**	**21.3**
STM	CAPE GIBSON	**20.9**	**19.2**
STM	CAPE GIRARDEAU	**20.9**	**19.2**
LSD	CAPE HENRY	**19**	**17.5**
LSD	CAPE HORN	**19**	**17.5**
LSD	CAPE HUDSON	**19**	**17.5**
STM	CAPE INSCRIPTION	**20.5**	**18.9**
STM	CAPE INTREPID	**20.5**	**18.9**
STM	CAPE ISABEL	**20.5**	**18.9**
STM	CAPE ISLAND	**20.5**	**18.9**
STM	CAPE MOHICAN	**18.3**	**16.8**
LSD	CAPE ORLANDO	**18.5**	**17**
STM	KEYSTONE STATE	**18**	**17**
STM	GEM STATE	**18**	**17**
STM	GRAND CANYON STATE	**18**	**17**
STM	CURTISS	**20**	**18.7**

Type	SHIP NAME	RRF MAX RATING SPEED (KTS)	RRF OPS RATING SPEED (KTS)
STM	CAPE FAREWELL	19.8	18.7
STM	CAPE FLATTERY	19.8	18.7
STM	CAPE JACOB	18	17
LSD	CAPE KENNEDY	17.6	16.6
LSD	CAPE KNOX	17.6	16.6
MSD	CAPE TAYLOR	**16.2**	**15.2**
MSD	CAPE TEXAS	16.7	15.7
MSD	CAPE TRINITY	16.7	15.7
LSD	CAPE VICTORY	15	14.2
LSD	CAPE VINCENT	15	14.3
STM	CHESAPEAKE	14.9	14
STM	PETERSBURG	15.3	14.5