

Attachment J-16
RRF Management System (RMS) - Brief Overview

MARAD is in the process of developing and transitioning to a new information support system called RRF Management System or RMS. It is part of a larger effort to improve Business Processes within the Program.

MARAD intends to have a COTS-based information technology solution to support the requirements of the RRF, from business planning solution concept design to full operational capability, as well as professional services for data analysis and conversion, operations and support planning, and documentation.

This shall include identifying the hardware and the infrastructure requirements for Onboard Ship LANs supporting up to five RMS workstations. The RMS shall be configured and installed for operation within the MARAD Enterprise Architecture providing capability at MARAD Headquarters; three MARAD Region HQ Offices and associated field and fleet offices; various contracted Ship Manager organizations, currently nine; and aboard numerous RRF ships in port and at sea, currently numbering 68. The RMS shall also be useable from remote locations when users are traveling or working from temporary locations.

The RMS system requirements shall include but are not be limited to:

- (a) Data Integration, strategic planning, budget development, and business planning as well as program and project management, historical maintenance and cost data.
- (b) A maintenance management capability for forward planning, actual tracking and analysis that includes maintenance history, machinery history, interface with spare parts utilization and inventory, corrective and unscheduled maintenance, preventive maintenance actions, and regulatory inspections.
- (c) An automated tracking process to show the progress toward measurable goals for RRF strategic objectives and business processes. The new system will incorporate program performance measures to account for inputs, outputs, and resulting program outcomes.
- (d) Single point of data entry, and smooth and seamless interfaces with the various support systems, and near real-time data accessible to all authorized users regardless of location.

RMS shall replace the following legacy systems and functions: Maritime Administration Automated Vessel Information Systems (MAAVIS); Maintenance and Repair Tracking System (MARTS), PC-SAL, and Project Administration System (PAS). It may link to or replace the Maritime Logistic Support System (MLSS).

It should interface, either through data import/export features or an Application Programming Interface (API) with:

- EIS (MARAD's Electronic Invoicing System)
- Free Balance (MARAD's financial system)
- IDEAS-PD (the Interior Department Electronic Acquisition System)

The RMS environment is comprised of the following components:

- Workstations
 - Operating system – Windows NT, 2000, and XP
 - Outlook 97 and greater
 - MS Office 2003 Professional Suite and greater
 - MS Internet Explorer 6.0. and greater
 - MS Project 2003 and greater
- Remote Systems
 - Operating systems – Windows NT, 2000, and XP
- Servers
 - Operating system – Windows Server 2000 and 2003 Server
 - Microsoft SQL Server
 - Microsoft My SQL
 - Microsoft IIS Web Server
 - Microsoft Exchange 5.5. and greater
 - Email protocols include MAPI, SMTP/POP3, SMTP/IMAP
- Network
 - TCP/IP Protocol Suite
 - Ethernet-based LAN
 - CISCO-based WAN (Routers and Switches)
 - Frame Relay Technology
 - Remote – Modem and VPN
 - Satellite

The Data Architecture shall include considerations for:

- Data sources:
 - Manual input (maintenance actions, planning, etc.)
 - External systems interfaces (finance, contract writing, logistics, etc) (flat file, automated mapped calls, etc.)
 - RMS historical data

- RMS derived data from functional processing (reports, performance measures, invoicing, etc.)
- Data storage and backups
 - Centralized data storage and processing
 - Centralized data backup
 - Ship based database storage, transmission and synchronization
 - Shore database storage, transmission and synchronization
- Data processing
 - Client and server functions and rules
 - Ship based client and server processes
 - Shore based client and server processes
 - MARAD region and Headquarters client and server processes
- Data Transmission
 - Ship to shore (batch / near-real-time)
 - Local to regional server (batch / near-real-time)
 - Local to central server (batch / near-real-time)
 - Local to MARAD network (batch / near-real-time)

NS5 HARDWARE AND SOFTWARE REQUIREMENTS

Client-Server Network Configuration

Server (Application Server / MySQL Server)		
	Minimum	Recommended
Processor	1 GHz (*)	2 GHz or higher (*)
RAM	1 GB (depending on # of users)	1 – 2 GB (depending on # of users)
Display	Super VGA (1024 x 768)	Super VGA (1024 x 768)
Peripherals	CD-ROM or DVD, Keyboard, MS Mouse or compatible pointing device	CD-ROM or DVD, Keyboard, MS Mouse or compatible pointing device
OS	Windows NT Windows 2000 Pro/Server Windows XP Pro/Server Windows 2003 Server	Windows 2003 Server

Workstations (Client)		
	Minimum	Recommended
Processor	1 GHz (*)	2 GHz or higher (*)
RAM	512 MB	512 MB or higher
Display	Super VGA (1024 x 768)	Super VGA (1024 x 768)
Peripherals	CD-ROM or DVD, Keyboard, MS Mouse or compatible pointing device	CD-ROM or DVD, Keyboard, MS Mouse or compatible pointing device
OS	Windows NT Windows 2000 Pro Windows XP Pro	Windows 2000 Pro Windows XP Pro

Stand-Alone PC Configuration

In the case of a stand-alone workstation, both the NS 5 client application and the MySQL database need to share the resources of the same PC.

Required Minimum Hardware:

Hard drive:	40 GB
Processor:	2 GHz
RAM:	1-2GB
Display:	Super VGA (1024 x 768)
Peripherals:	CD-ROM or DVD, Keyboard, MS Mouse or compatible pointing device
OS	Windows 2000 Pro or Windows XP Pro

*MARAD\ABS will need administrative rights access to both the RMS Hardware, Software, and E-mail accounts.

Notes:

- TCP/IP support must be available on all machines
- There are some known problems whereby the presence of personal firewalls can interfere with MySQL database connectivity
- Email protocols supported include MAPI, SMTP/POP3, SMTP/IMAP
- Intel Pentium/Celeron family or compatible processor is recommended
- Operating System, Windows 2003 Server is recommended
- MSOutlook 2003 sp#1 is recommended

EMAIL Specifications:

Ship Manager E-mail accounts are specified with the following guidelines:

- 1) Do not list them in any public or Ship\Ship Manager Address book.
- 2) They are not to receive any Ship\Ship Manager Postmaster\enterprise messages.
- 2) Ship Managers need to provide to MARAD the assigned email accounts and the owners.

These accounts are generic NS5 system usage mail boxes. It is requested that the Ship Managers use the following naming convention when creating the RMS email accounts.

- 1) *Shipname@shipmanager.com*
Owner: TBD
Owner: TBD

RMS is unlikely to be fully functional at time of Ship Manager Contracts award or Notice to Proceed, but will be phased in as it becomes available.

An overview of the ABS Nautical systems (MS Powerpoint presentation) is attached. (see Exhibit A)