

# Marine Corps Readiness Equipment Module (MCREM)

## Introduction to MCREM

The Marine Corps Readiness Equipment Module (MCREM) is one of several information systems developed and sponsored by the Logistics Management Institute (LMI) for the Office of the Deputy Assistant Secretary of Defense for Reserve Affairs (OASD (RA)). Originally called the Reserve Unit Priority System (RUPS) Equipment Module, MCREM was expanded to include the entire Marine Corps. In 1998, another version of MCREM was modified to assist the Reserve community (MCREM-R) for reporting and calculating the equipment readiness in the Status of Resources and Training System (SORTS). To provide more timely parts support, an "add-on" package to be used with MCREM is currently being developed to associate parts documents to non-functioning (deadlined) equipment. Also the Marine Corps SORTS Analysis Module (MCSAM) developed for Joint Chiefs of Staff (JCS) SORTS reporting has many of the same applications discussed in this guide. MCREM versatility is the key component to providing information on the status of ground equipment in the Marine Corps for both materiel managers and operations planners.

MCREM is menu driven, requiring no special training to use. It is designed for analysts, not computer experts, so experience and practice have proven to be the best learning techniques (although a cursory knowledge of database manipulation enables a user to produce reports that can be timesaving for recurring briefs). Each report produced has a "help" screen that can be called up by depressing the "F1" key. The screen provides the choices available at the place you are in the report. This guide provides various "looks" at some basic reports in MCREM. Also the appendix at the end provides users not familiar with Marine Corps maintenance management terms a brief description of the data field's meaning.

## Data Sources and Classification

MCREM draws data from several sources. The principal source of table of authorized materiel control number (TAMCN) data is the Marine Corps Bulletin 3000 (MCBul 3000), which lists equipment tracked and reportable in SORTS. The MCBul 3000 is published annually and contains the TAMCN's, nomenclatures, functional area (FA), weapon system management (WSM) codes, Defense Logistics Agency (DLA) management levels, Master Equipment File (MEQPT) names, and the table of equipment (T/E) number for mission essential equipment (MEE or "pacing") reportable units. Other sources within MCREM include unit allowances, balances on-hand, and quantities of equipment deadlined in the Marine Corps Ground Equipment Resource Reporting (MCGERR) Equipment Status Report (LM2). This information is extracted weekly (Monday mornings) from the Headquarters Maintenance Subsystem (HMSS). In addition to the information contained within MCGERR, specific information by TAMCN can be extracted based on the item cost, age of equipment, national stock numbers (NSN), and listing in the latest USMC mission essential list (MEL) and/or the National Guard and Reserve Equipment Report (NGRER). Other information provided is the unit's geographic area, major command, or component (Active or Reserve).

While the basic readiness module is designed to include data for SORTS reporting, MCREM is unclassified. However, because it does contain relevant data, access to the information should be restricted to government organizations and contractor support personnel. Additional information unique to MCREM-R's business rules and data sources is discussed later in this manual.

## Hardware

All the modules run on standard IBM Personal Computer (PC) hardware. Table 1 shows the hardware and software required to run MCREM.

<i>Desired</i>	<i>Minimum</i>
80386-level IBM PC-compatible computer	IBM PC-compatible computer
640K conventional memory w/additional 640K expanded memory	640K conventional memory
Color VGA monitor	Monitor
DOS 3.3 or higher	DOS 2.0 or higher
Fast hard disk with 6 megabytes available	Hard disk or Bernoulli with 6 megabytes available
Laser printer	Printer

Table 1.

### Marine Corps Readiness Equipment Module Hardware/Software Requirements

## Distribution of the Equipment Module

MCREM is distributed weekly through two main conduits. The Marine Corps Ground Equipment Readiness Office (LPP-1) under the Deputy Chief of Staff Installations and Logistics (DC/S I&L) provides copies weekly via e-mail. Individuals desiring to be added to the weekly distribution are to contact the Readiness Office (LPP-1) via e-mail and should receive a copy the following Monday. MCREM can be downloaded via the Marine Corps Ground Equipment Resource Site (<http://relm.lmi.org/rem/usmc>) or the DC/S PP&O's GCCS homepage. Individuals requesting the passwords and access via the Internet should contact the Readiness Office (LPP-1) or Mr. Mike Konvalinka. Users of MCREM are encouraged to submit any comments or questions to HQMC (LPP-1) and LMI. Based on the comments received from users the module may be modified as an on-going attempt to continually improve Marine Corps readiness. As a feedback tool, users are encouraged to inform LPP-1 and LMI of any data anomalies or inaccuracies, and recommend additional data elements, sources, or more helpful report formats.

## Loading the MCREM/MCREM-R Programs

The MCREM program, when compressed is designed to fit on one 1.44 floppy disk. This makes the program portable for meetings, briefs, or for maintaining an archive file for time comparisons in equipment or unit configurations. The MCREM self-extracting program is named "eqsetup.exe." The MCREM-R program is also a self-extracting set of files labeled mcremr.exe. If you plan to maintain an archive set it is recommended that you rename the files to prevent copying over the previous file. HQMC maintains their files using the format of YYMMDD.exe for MCREM and YYMMDDr.exe for MCREM-R. These files can be requested from LPP-1.

To load the file to your computer, you must first download the file to a hard drive or to a floppy disk. Then using the run or file manager command run the eqsetup.exe file from the appropriate drive. The program will first determine if the computer is on a server or a stand-alone. The program will then inquire which drive you want to load the MCREM (or MCREM-R) module to. The amount of users and the speed of the network should determine the most appropriate location for the program. A key fact to remember is that both files automatically default to create a directory "\equsmc" and if you desire to use both MCREM and MCREM-R you need to rename the directory (i.e., "c:\mcrem-r") when prompted to create the directory during the setup.

## Creating a Shortcut and Icon

Once the file has been established, you can run MCREM from "My computer/file manager/run" or you can create a shortcut on your desktop. To create a shortcut, click your left button on your desktop (not on another icon) and then click your right button (If you are using Windows NT we will cover a work-around for NT separately). You will see a menu of choices appear. Move your mouse to "new" and then to the side panel "shortcut." Left click "shortcut." If you are in any other Windows applications you will see the Create Shortcut menu appear.

### Windows '95 (or 3.1) Applications

In the new window block, type "c:\equsmc\mcrem.bat" in the command. Then click the "Next" button. The next screen will ask for the name of the program (type MCREM or appropriate name) and then click the "Finish" button. You now have the basic DOS Icon shortcut created on your desktop.

To change the Icon and the screen size preferences left click once on the new shortcut icon to highlight it and then right click once. Move the cursor to Properties and left click. The next screen will have several tabs at the top. Left click the tab "Program." On this screen you will do two things; first, left click the window "Close on exit" (a check will appear). Next left click the button "Change Icon." In the window now highlighted, for file name, you can choose many icons available by hitting the browse button or scrolling the bar immediately below the icon pictures. The MCREM program also has an Iwo Jima memorial Icon that can be applied. To use this Icon type in the File name block "C:\equsmc\mcrem.ico."

The final preference is the screen size for viewing. The normal default is the entire screen. To be able to view your taskbar left click the Screen tab at the top of the current window. You can change the view to a "window" view by clicking the button next to "Window" or leave the "Full-screen" button default. To finish and accept the changes to the Icon and screen changes click the "OK" button at the bottom of the current window. You are now ready to start using MCREM (MCREM-R).

### Windows NT Applications

The easiest way to create the shortcut is to open the "My Computer" window and continue until the "Equsmc" window is open. Left click once in the MCREM.bat file (looks like a small window with a cog in the middle of the icon). Right click and drag the icon to your main screen. A list of selections will appear of which you left click "Create Shortcut(s) Here." The new icon will appear as "Shortcut to MCREM." Left click once on the "new shortcut" icon to highlight it and then right click once. Move the cursor to Properties and left click. The next screen will have several tabs at the top. Left click the tab "Program." On this screen you will do two things, first left click the window "Close on exit" (a check will appear). Next left click the button "Change Icon." In the window now highlighted for file name you can choose many icons available by hitting the browse button or scrolling the bar immediately below the icon pictures. The MCREM program also has an Iwo Jima memorial Icon that can be applied. To use this Icon type in the File name block "C:\equsmc\mcrem.ico."

The final preference is the screen size for viewing. You can change the view to a "window" view by clicking the window labeled "Run" as "Maximized" or leave the "Normal window" button default. To finish and accept the changes to the Icon and screen changes click the "OK" button at the bottom of the current window. You are now ready to start using MCREM (MCREM-R).

# Main Menu Options

The MCREM main menu is shown in Figure 1 consists of two groups, "reports" and "utilities." Within the Reports Menu, selections determine the format for the reports to be computed. All reports generate from two basic modules, the equipment (TAMCN) and unit. Equipment selections generate a series of reports that display the on-hand, authorized, and operationally ready quantities of equipment in the inventory, without regard to unit. Unit selections generate similar reports that compare on-hand, authorized allowances, and operationally ready equipment quantities by unit, down to the unit identification code (UIC) level. The equipment (option 1) and unit (option 2) status reports are the most complex reports in MCREM. Additional information on these selections and some examples using these formats are presented in later sections.

The Utilities Menu consists of several options to choose from. Option 'P' (printer setup) allows the user to configure the module to a particular type of printer or to a different printer port. Selecting 'S' on the menu provides the user the data sources on which the module is based. Selecting 'W' provides the latest updates to the module and additional capabilities. Option 'Z' (LAN user list) provides a list individuals logged on MCREM when MCREM is installed on a LAN or server. The most useful of these menus is 'C' (point of contacts), which provides phone numbers, e-mail addresses, and web sites for getting additional information on MCREM and other related programs.

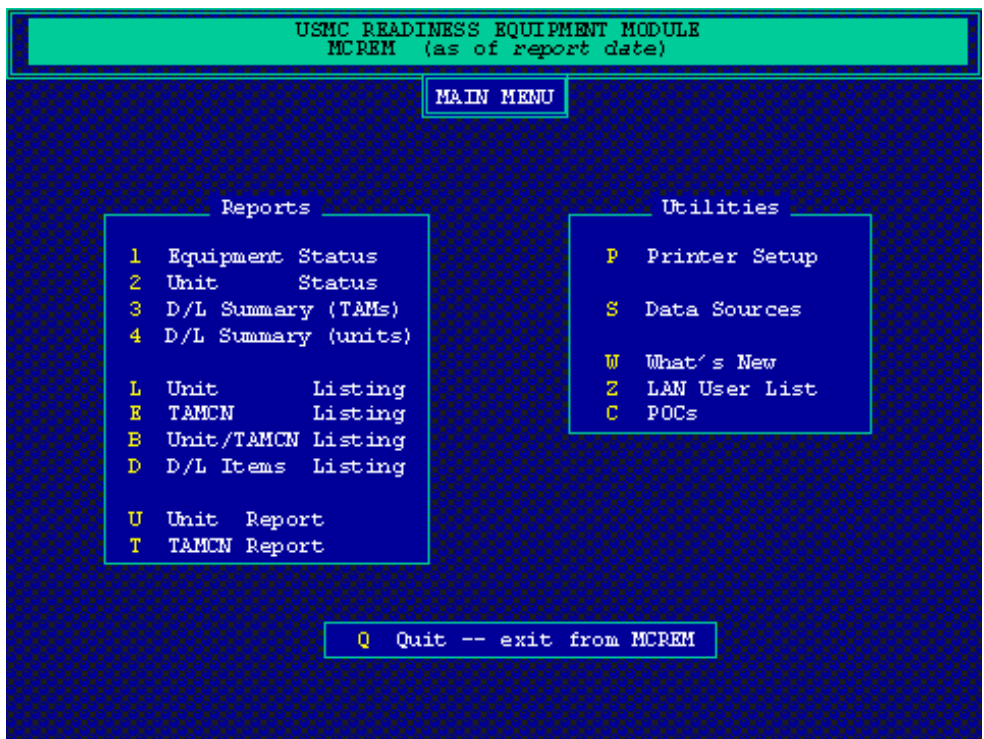


Figure 1.  
Main Menu

## Basic Reports

### Equipment Report

MCREM is composed of two basic modules, the unit and the equipment (or TAMCN). Each of the Reports are developed from these modules. The default for a report lists all equipment in the MCBul and all reporting units. The default for Item 'U' (unit) or 'T' (TAMCN) generates a report about a specific unit or about a specific TAMCN, the lowest level of detail in MCREM. Figure 2 shows the screen that appears when you select 'T' (TAMCN Report). The report is in Alpha-numeric sequence by

TAMCN. To go to a specific TAMCN start typing the letter and number combination and the cursor will automatically scroll as you type the TAMCN. The user may also execute a text search by pressing the 'Alt' and 'S' keys simultaneously.

TAMCN	Nomenclature	FA	Onhand	Deadline
A0010	AIR MOBILE ,DASC ,AN/UYQ-3	13	9	
A0011	AN/UYK-102 (V)1	14	498	38
A0248	AUTO TELEPHONE AN/TTC-42(V)	11	54	7
A0274	COMM CENTRAL AN/TSC-120	10	20	5
A0311	COMM TECH CONT CENTER AN/TS	11	15	
A0412	COUNTERMEASURE, AN/ULQ-19(V	19	31	4
A0465	DECODER GROUP AN/UPA-60	14	90	2
A0512	IMPROVED DASC AN/TSQ-155(V)	13	10	
A0655	AN/TSC-96A (V)	10	10	
A0812	COMMUNICATIONS TERM AN/TSC-	10	6	
A0814	COMM TERMINAL, AN/TSC-93A	10	20	1
A0881	INTERROGATOR SET, AN/UPX-27	13	55	2
A0891	TACTICAL ALERT RADAR, AN/UP	49	55	5

Select choice and press `↵`, Esc to cancel, or F1 for help:

**Figure 2.**  
**TAMCN Report**

## Unit Report

Figure 3 is an example of the Unit Listing from the Reports Menu. The Unit listing is a register in unit identification code (UIC) order. The unit report gives the number of TAMCN's reported in a Marine Expeditionary Force (MEF) location and the number of TAMCN's. From this menu the user can search using a "text search" (Alt 'S') for a particular unit by name or a group of units with similar names (i.e., MWSS).

UIC Report				
UIC	Name	MEF	#-TAMCNs	
M12400	2ND CBT EWGR BN	2	46	
M13001	HQ BN	3	43	
M13101	3RD MED BN	3	13	
M13110	1ST BN 3RD MAR	5	28	
M13120	2ND BN 3RD MAR	5	39	
M13130	3RD BN 3RD MAR	5	39	
M13160	3RD BN 7TH MAR	3	38	
M13170	2ND BN 6TH MAR	3	38	
M13201	HQ CO 4TH MAR	3	37	
M13220	BLT 2/1	1	56	
M13230	2ND BN 4TH MAR	3	52	
M13310	HQ BTRY 12TH MAR	3	45	
M13310	1ST BN 12TH MAR	5	44	

Select choice and press ↵, Esc to cancel, or F1 for help:

**Figure 3.**  
**Unit Report**

## Basic Report

An example of a basic report is the TAMCN listing (option 'E'). The other reports from the main menu default to the screen seen in Figure 4. Selecting 'E' defines the TAMCN's viewed from "all" reportable equipment to a more restricted view, such as a particular functional area (e.g. 41 'Light Armored Vehicles'), weapon systems family (e.g. SINCGARS), or some other user defined criteria. A similar screen appears under the other basic report ('L' unit listing) which allows the user to change the criteria for units in the selected report. The unit listing defaults to provide the user with an overview of the equipment contained in MCGERR reporting units from the non-SORTS reporting units (MPS and schools), as well as normal reporting Active and Reserve units.

```
Report:  TAMCN LISTING

Unit:   USMC

Equip:  MCB-3000 TAMCNs
        (as of report date)

=====

      U   change Unit selections

      E   change Equipment selections

      G   Go -- compute report

      C   Clear all unit/equipment selections

      Q   Return to Reports Menu

Enter selection
```

**Figure 4.**  
**Change Unit or Equipment Selection Menu**

When selecting any of the Reports menus from the Main menu (with the exception of the TAMCN and Unit reports) the first screen is Figure 4, the Change Unit or Equipment Selection Menu. From this screen, the user is able to select specific types of units and equipment to be included in the report. The details of the Unit or Equipment selections are in the next section of this guide, "Using the Selection Criteria."

For now, press 'G' for "go" from this screen to produce your listing. From this point in all "Reports" the F1 (help) key will provide the various options available to view the report. Using the "up" and "down" arrows, you can highlight a TAMCN on this list. If you then press the "Enter" key you will generate various views based on this specific TAMCN; or by pressing 'P' (print) or 'X' (export), you can print or export the produced report. The Unit Listing 'L' works similarly - but provides a unit listing in UIC order from which you can "dig-down" into a specific unit. These reports contain all the information in MCREM relating to the selected TAMCN or unit.

## Using the Selection Criteria

This section of the manual focuses on the Equipment Status and Unit Status reports. These reports provide the backbone for the report modules and options within MCREM. Selecting the Equipment Status report, item 1 from the Main menu, the next screen you will see is Figure 5.

```
Report:  Equipment Status
Unit:   USMC

Equip:  MCB-3000 TAMCNS
       (as of report date)

=====

      U   change Unit selections

      E   change Equipment selections

      G   Co -- compute report

      C   Clear all unit/equipment selections

      Q   Return to Reports Menu

Enter selection
```

Figure 5.

### Change Unit or Equipment Selection Menu for Equipment Status Report

Note its similarity to Figure 4 - only the report title is changed to reflect the current report submenu. If you select a Unit Status report (item 2 from the Main menu), you will a similar screen except that the report title in the upper left corner is Unit Status.

```
Report:  Equipment Status
Units:   USMC

=====

Select units to include in report.

      ◀ UNIT SELECTION ▶

      1 Component
      2 Major Command
      3 MEF Code
      4 Type Unit Code
      5 S-Rating
      6 R-Rating

      7 State/Country
      M Miscellaneous
      N Name
      U UIC
      D Define Your Own

      C Clear all unit selections
      Q Return to Selection Menu

Enter unit selection
```

Figure 6.

### Unit Selection Menu

From the screen depicted in Figure 5, if you press U, Change Unit Selection, you will get a screen like Figure 6. The items on the screen are all the unit characteristics that can be used to limit the type of unit you want to analyze. If you want to see the LM2 for Reserve units only, you would select item 1 (Component) and the screen will provide you with two options (Active and Reserve). Pressing 'R' sets the criteria for Reserve units only. You can restrict your selection even further by using the other unit selections shown in Figure 6. Notice that as you limit your selections, the choices are marked on the Unit Selection Menu and in the title at the top of the screen in Figure 6. To further restrict the search to a specific group of Reserve units select menu option "Name" and type in "MWSS."

When finished with your unit selections, your screen will now reflect the changes. Press 'Q' or the "Esc" key and return to a screen similar to the one shown in Figure 5. Notice that the title at the top of the screen has changed to "USMCR, Unit Name contains MWSS". At this point, you can also restrict the listing of equipment by selecting 'E'. This will bring up a screen similar to Figure 7.

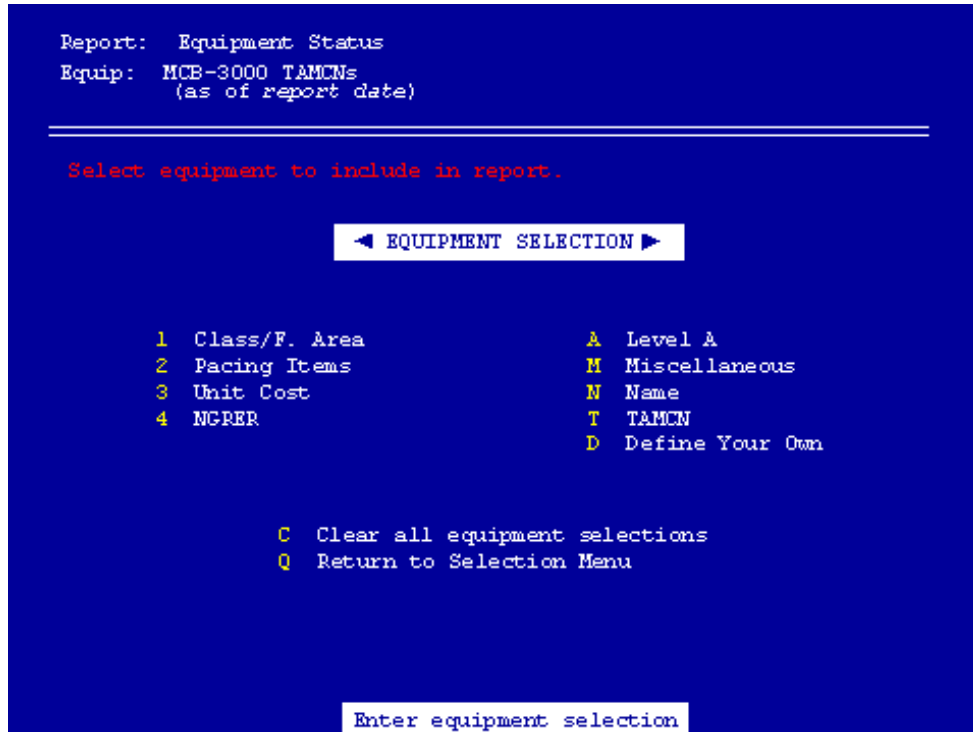


Figure 7.

### Equipment Selection Menu

The process is similar to the unit selection menu. As you make your selections you will see the selected group appear at the top of the screen following the "Equip:" listing. However to keep the widest amount of options for demonstrating MCREM we will not restrict the criteria for equipment. You are now ready to generate your report. If you are currently in the Select Equipment menu use either the 'Q' or 'Esc' key to return one menu level to the Figure 5 screen, and press 'G' to generate the report.

## Changing the Rows and Columns

Your screen should now resemble Figure 8. This first report will provide an overall report for the combined units (Reserve MWSS units) and sorted by commodity area (communication, engineer, motor vehicles, and ordnance). Managers can use this report to monitor the overall view of their specific commodity.

```

UNCLASSIFIED
Equipment Status          today's date
USMCR, Unit Name contains MWSS    * MCREM *

MCB-3000 TAMCNs
(as of report date)

```

Equipment Class	# of TAMs	Auth items	Onhand items	OH - Excess	S-rating (% Auth)	OpRdy items	R-rating (% OH)
Comm/Electronics (A-TAMs)	14	398	361	361	90.7%	390	98.0%
Engineer (B-TAMs)	22	489	303	283	57.9%	276	91.1%
Motor Transport (D-TAMs)	18	573	540	375	55.4%	488	90.4%
Ordnance (E-TAMs)	4	144	158	130	90.3%	158	100.0%
<b>TOTAL</b>	<b>58</b>	<b>1,604</b>	<b>1,409</b>	<b>1,149</b>	<b>71.6%</b>	<b>1,322</b>	<b>93.8%</b>

4 rows

Press Cursor key, P, or F1 for help

Figure 8.

**USMCR (MWSS units) Rating Summary (by Equipment Class)**

Other organizations manage items by functional area (press 'R' and then '2') such as generators, earth moving, or materiel handling equipment and would break down their respective reports for the specific shops that work on that equipment (Figure 9).

```

UNCLASSIFIED                               Equipment Status           today's date
                                           USMCR, Unit Name contains MWSS    * MCREM *

                                           MCB-3000 TAMCNs
                                           (as of report date)

```

Equipment Class	# of TAMCs	Auth items	Onhand items	OH - Excess	S-rating (% Auth)	OpRdy items	R-rating (% OH)
10 Radios	7	105	104	89	84.8%	98	94.2%
11 Communication Support	2	20	21	16	80.0%	21	100.0%
50 High Density/Low Deadline	4	272	273	256	94.1%	271	99.3%
97 Communications Security	1	1			0.0%		100.0%
20 Generator	5	157	94	91	58.0%	85	90.4%
23 Earthmoving	6	58	49	46	67.5%	41	83.7%
26 Materials Handling	5	90	79	65	72.2%	70	88.5%
29 Engineer Support	5	136	53	264	39.0%	52	98.1%
30 Trucks	11	440	394	130	60.0%	345	87.5%
35 Towed Motor Transport	7	133	146	111	83.5%	143	97.9%
46 Infantry Weapons	4	144	168	130	90.3%	168	100.0%
99 NBC Equipment	1	38	28	28	73.7%	28	100.0%
<b>TOTAL</b>	<b>58</b>	<b>1,604</b>	<b>1,409</b>	<b>1,149</b>	<b>71.6%</b>	<b>1,322</b>	<b>93.6%</b>

4 rows

Press Cursor key, P, or F1 for help

Figure 9.

### USMCR (MWSS units) Rating Summary (by Functional Area)

For most organizations however, the level of detail is at the TAMCN level (press 'R' then 'T'). Notice that as you pressed the 'R' you were provided with the various options to change the screen (Figure 10). Pressing the 'F1' key can see the list of options. In addition to the views you currently see, by using the right arrow on your keyboard you can scroll to the right to see additional columns currently hidden from view (due to screen size) such as the R-Rating, functional area, and weapon system code. You can also "dig down" into a specific area by using the "up" and "down" arrow keys to highlight a specific area and pressing 'Enter'.

```

UNCLASSIFIED                               Equipment Status           today's date
                                           USMCR, Unit Name contains MWSS    * MCREM *

                                           MCB-3000 TAMCNs
                                           (as of report date)

```

TAMCN	Nomenclature	Auth items	Onhand items	OH - Excess	S-rating (% Auth)	OpRdy items
A1795	RADIO SET, AM/MRC-193B(W)	8	6	6	75.0%	6
A1925	RADIO SET, AM/MRC-138B	8	11	8	100.0%	9
A1955	RADIO TERMINAL SET, AM/MRC-		6		100.0%	5
A1957	AM/MRC-145	12	12	12	100.0%	9
A2065	RADIO SET, AM/PRC-104	12	17			
A2069	RADIO SET UHF AM/PRC-113(W)	57	48			
A2070	RADIO SET, M&MPACK AM/PRC-119	216	231			
A2074	AM/VRC-88D	20	12			
A2167	RADIO SET, AM/VRC-88A	28	24			
A2168	AM/VRC-89A	8	6			
A2169	AM/VRC-90A	8	4			
A2505	SWITCHED TELE, SB2614/TT A	8	10			
A2508	SWITCHING UNIT TELEPHONE AU	12	11			
A8022	SPEECH SEC EQIP, TSEC/NY-58	1				
<b>TOTAL</b>		<b>1,604</b>	<b>1,409</b>			

ROW TYPE

- 1 Equipment Class
- 2 Functional Area
- 3 TAMCN Price Range
- 4 NGRER status
- A Level-A status
- W Weapon System Code
- T TAMCN
- Q Quit

Select rows

58 TAMCNs

Press Cursor key, P, or F1 for help

Figure 10.

### Row View Selection (Reports Menu by TAMCN)

At this time we will use MCREM to identify excess equipment at the unit level. The first step is to change the column view to reflect allowance, on-hand, excess, and shortage. Press 'C' (column) and then 'X'. The report view now reflects shortages and excesses by TAMCN. Next sort the TAMCN's based on the Excess column. Use the right arrow to place the cursor over the Excess column. Press 'O' (sort) and 'D' (or cursor to the appropriate line and press enter). This will bring the highest excess reported TAMCN to the top of the report. To now identify the units that have an "on-hand" (equipment) greater than their allowance press 'Enter' on the row and then 'D' (displays UIC data for highlighted TAMCN). We now have a listing of all units possessing that particular TAMCN. Using the toggle key (press 'F1' to see your options), excesses and deficiencies may be identified at the unit level (press 'S'). Finally, sort the report on the excess column in descending order for that particular TAMCN. You now have a by unit listing for the specific TAMCN to determine the amount of equipment excess to their allowance. You can dig down further by highlighting a row and pressing 'Enter' to include 'RM4' remarks, the detail information on the deadlined equipment (serial number, deadline days and status, equipment repair order (ERO), etc.), or a full unit report.

P	UIC	Name	Auth	Onhand	Short	Excess	D/L	%OH	MEF	TUC
	H00510	HWSS-471 DET A		29		29	5	17%	4	5
	H00540	HWSS-474 DET B		26		26	5	19%	4	5
	H00527	HWSS-472 DET B		24		24			4	5
	H00542	HWSS-473 DET B		20		20	1	19%	4	5
	H01199	HWSS-474 DET A	2	2					4	5
	H00524	HWSS-472 (-)	6	5	1				4	5
	TOTAL		8	106	1	99	11	10%		

Figure 11.

### Excess Equipment Report

The next example report shows how to identify deadlined equipment and the length of time that it has been in that status. This report assists managers at DLA and the logistics bases to identify problems and initiate assistance to those units.

First return to the Main menu by pressing 'Q' or 'Esc'. Press the menu 'D' (D/L Items Listing). You will see the figure 5 menu with the same selections made previously. In order to increase the example report sample size press 'U' and change the component to 'Active' units. Return to the Selection menu and press 'G' and you will generate a deadlined equipment report in UIC / TAMCN sequence. Change the dates from calendar to julian. To determine which equipment has been deadlined the longest, move the cursor to the column 'DeadLn date' and sort it in ascending order (similar to before but now it is ascending vice descending, if you don't remember press 'F1'). You will now see the report (Figure 12) listing "MWSS Active units" with the TAMCN that has been in a deadlined status the longest listed

at the top of the report.

```

UNCLASSIFIED
LM2 DeadLine Listing          today's date
USMC active, Unit Name contains MWSS * MCREM *

MCB-3000 TAMCNs
(as of report date)
  
```

UTC	Name	TAMCN	DeadLn Date	Cond	Cond	EOH	Holder	Stat	Serial
H00271	HWSS-271	D0215	97/254	97/254	NHCS	2	H00271	526	502323
H00172	HWSS-172 (R/W)	B0433	98/035	98/153	NHCS	2	H00172	262	569802
H00374	HWSS-374 (R/W)	D1064	98/054	98/099	TRAM	3	H33333	316	569802
H00371	HWSS-371 (F/W)	D0209	98/071	99/034	NHCH	3	H28357	016	569802
H00171	HWSS-171 (F/W)	D0215	98/117	99/040	NHCH	3	H2904I	010	569802
H00371	HWSS-371 (F/W)	D1158	98/124	99/019	NHCS	3	H28357	031	569802
H00171	HWSS-171 (F/W)	D0209	98/196	99/042	NHCH	3	H2904I	008	569802
H00273	HWSS-273	B2566	98/196	99/034	NHCS	2	H00273	016	569802
H00372	HWSS-372 (R/W)	B0433	98/198	99/039	TRAM	3	H00372	011	569802
H00171	HWSS-171 (F/W)	B0433	98/201	98/201	TRAM	3	H29049	214	569802
H00172	HWSS-172 (R/W)	B1922	98/209	98/261	NHCS	2	H00172	154	569802
H00272	HWSS-272	D1064	98/209	98/314	NHCS	2	H00272	101	569802
H00273	HWSS-273	D0209	98/209	99/042	NHCS	2	H00273	008	569802
H00273	HWSS-273	D1059	98/223	98/344	NHCS	3	H27140	071	569802
H00272	HWSS-272	B2561	98/230	98/230	NHCS	4	H66667	185	569802

379 items      Press Cursor key, P, or F1 for help      row # 1

Figure 12.

**Equipment Sorted by Deadline Date**

Highlight the row and press 'Enter'. Next press 'R' (remarks) to see a screen similar to Figure 13. This screen displays the unit's 'RM4' remarks explaining why an item remains deadlined (specific part, lack of mechanics, etc.). This capability allows the unit to identify directly to weapon system managers critical parts that are degrading readiness. It also highlights units that are not proactive in updating their readiness reports.

```

UNCLASSIFIED
LM2 Deadline Listing
today's date
USMC active, Unit Name contains MWSS * MCREM *

MCB-3000 TAMCNs
(as of report date)

```

UIC	Name	TAMCN	DeadLn Date	DateOf Cond	Cond	EOH	Holder	Stat	Serial Number
H00271	MWSS-271	D0215	97/254	97/254	MHCS	2	H00271	526	502323
H00172	MWSS-172 (R/W)	B0433	98/035	98/153	MHCS	2	H00172	262	569802
H00374	MWSS-374 (R/W)	D1064	98/054	98/099	TRAN	3	H33333	316	569802
H00371	MWSS-371 (E/W)	D0209	98/071	99/034	MHCH	3	H28357	016	569802
H00171	MWSS-171 (E/W)	D0215	98/117	99/040	MHCH	3	H2904I	010	569802
H00371	MWSS-371 (E/W)	D1158	98/124	99/019	MHCS	3	H28357	031	569802
H00171	MWSS-171 (E/W)	D0209	98/196	99/042	MHCH	3	H2904I	008	569802
H00273	MWSS-273	B2566	98/196	99/034	MHCS	2	H00273	016	569802
H00372	MWSS-372 (R/W)	B0433	98/198	99/039	TRAN	3	H00372	011	569802
H00171	MWSS-171 (E/W)	B0433	98/201	98/201	TRAN	3	H29049	214	569802
H00172	MWSS-172 (R/W)	B1922	98/209	98,					
H00272	MWSS-272	D1064	98/209	98,					
H00273	MWSS-273	D0209	98/209	99,					
H00273	MWSS-273	D1059	98/223	98,					
H00272	MWSS-272	B2561	98/230	98,					

H00271/D0215 Remarks

Auth= 10 Poss= 10 D/L= 4  
date (RM4 remark was made)  
T/O&E=10  
S/N 502323  
BATTERIES

Esc to continue

379 items Press Cursor key, P,

Figure 13.

Report with "RM4 Remarks" Box

## Introduction to MCREM-R

The Marine Corps Readiness Equipment Module-R (MCREM-R) was developed by LPP-1 with Logistics Management Institute (LMI) for the Reserve community (MCREM-R) in reporting and calculating the equipment readiness based on the wartime equipment lists (T/E) and the use of stores assets. This program takes various files provided and maintained by Materiel Command and MarForRes, combined with the current LM2 reports to provide a weekly calculation of assets. The program uses the LM2 information originally compiled in MCREM to form the initial on-hand information. This information is combined with a T/E allowance file, unit-mapping file, and unit priority list updated by MarForRes. The final source of information is the MatCom "stores report" breaking down the ready for issue (RFI) and not ready for issue (NRFI) equipment by TAMCN. The below diagram in Figure 14 shows the sources and brief explanation of the various files used by MCREM-R.

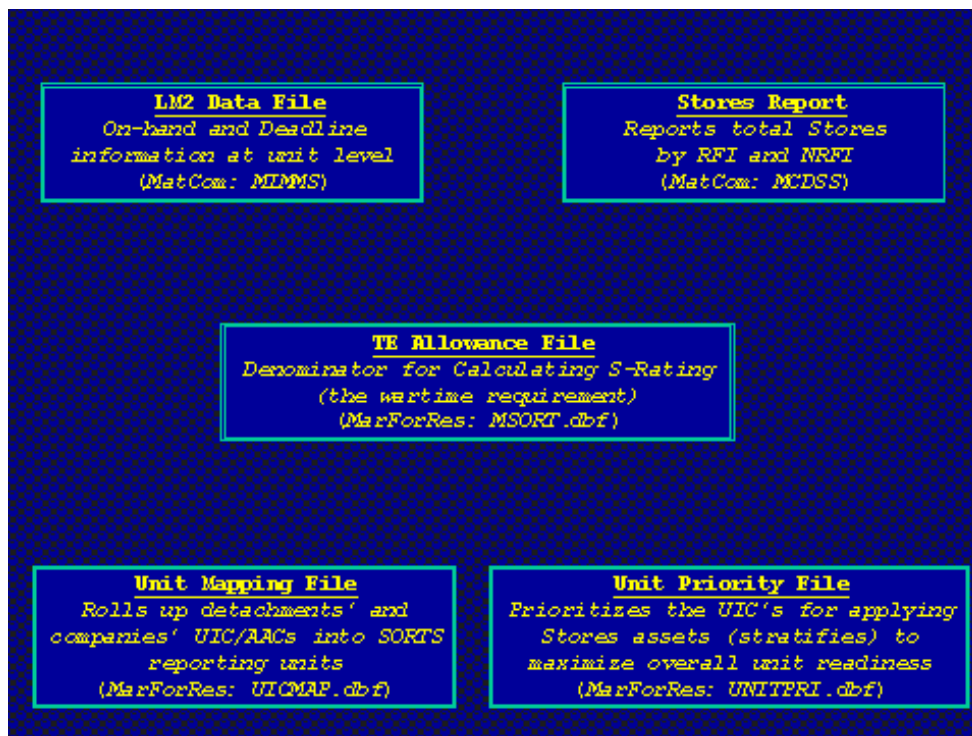


Figure 14.

#### Source Information

The difference between MCREM and MCREM-R is that MCREM reports the training allowance (T/A) for a unit, while MCREM-R uses the T/E allowance. Reserve units T/A can be the same or larger than their T/E allowance, but normally is smaller. The T/A is based on the unit commander's requirements to train the unit as well as considerations for location, facilities, and personnel. An example where a T/A could be larger would be where there is three companies in remote locations from each other. The unit has a radio that requires another radio to train, so a T/A of two per company is established to include the H&S. The company's rate 1 per company with 2 for the H&S (Battalion command groups). The T/E allowance for this unit is five, with a T/A of eight. The differences in the two programs can be used to determine where the errors are, and the effect on readiness for different courses of action by the unit.

The process for MCREM-R starts by ensuring that all the LM2's from a reporting unit are combined into one asset picture. An example is a Medical Bn that has a company on the west coast (Co A) and a company on the east coast (Co B) both with a LM2. Both of these companies have a T/E allowance of "one" ambulance. The T/A for the Co A is one, and Co B is zero. In SORTS the reporting unit is Medical Bn which means that the Bn total T/E allowance (warfighting mission) is two (one per company). To determine the on-hand allowance the two LM2 are first combined to form a Bn on-hand and deadline report. The Bn now has a report of "one" on-hand with an allowance of "two." This is done for all the Reserve units until the individual LM2 reports are "mapped" to the reporting battalions.

The next step is to determine on a TAMCN by TAMCN basis whether any units are deficient assets. If the unit has a deficiency assets are applied in the following sequence RFI assets from stores, then Excess assets from other units (operational and then deadlined), and finally NRFI from stores. The assets are applied across all units in the following priority, first all the units are applied assets to an 80% fill, then if assets remain to 90% up to 100%. The application is prioritized based on the file updated by MarForRes. Units with small equipment densities (such as a Medical Bn with a single TAMCN and an allowance of two) will be greatly impacted by applied assets (when one on-hand asset is operational and the applied asset is NRFI, the unit would have a 50% "R" rating). Conversely they benefit from that same asset being applied on the S rating (if no assets were applied the "S" rating would be 50%). By making the unit a high priority which receives RFI and excess equipment "first" in the application process the quantity of units reporting C-1 is increased, where it would only minimally effect a unit with a large equipment density (a Motor Transport Bn).

The first example uses the MCREM-R to highlight the transfer of equipment from one detachment to another without coordinating the LM2 timeframes. The result in this case is due to an error in reporting on a high visibility "pacing" piece of equipment. Setting up MCREM-R is the same as for MCREM. The only recommended change is

when prompted for a directory to set up the files that the directory name be changed to "c:\mcrem-r" vice the default "c:\equsmc". This becomes more critical if you have both loaded to the same machine. Once you have entered the main menu (the same as Figure 1), press 'L' (Unit Listing). The first issue will be to identify the lowest reporting units based on the S rating. Since the only units used in MCREM-R are Reserve units press 'G'. You will now see a Unit Report for Reserve units in UIC order. To tell whether you are in MCREM or MCREM-R (even if you only identify Reserve units in MCREM) you will see in the header title "MCB-3000 TAMs (incl STORES)." Stores assets are only added to MCREM-R.

The next step is to identify the low unit for "S" rating (normally indicating a procurement deficiency Marine Corps wide). Move the cursor to the S% column and sort the column from worst to first (press 'O' then 'A'). The screen should look similar to Figure 15.

UNCLASSIFIED UNIT LISTING today's date  
USMCR \* MCREM \*  
MCB-3000 TAMs (incl STORES)  
(as of report date)

UIC	Name	ST	MEF	TUC	MAJCOH	C	#TAMs	S%	R%
H00407	HWCS 48 (PRI-13)	IL	4	5	H00400	R	18	68.8	63.6
H28353	4TH FOR RECON (PRI-48)	HI	4	5	H14000	R	13	85.2	82.6
H14700	4TH RECON BN (PRI-42)	TX	4	5	H14000	R	19	89.6	88.0
H21400	8TH TANK BN (PRI-40)	NY	4	5	H14000	R	43	93.8	78.9
H01283	HWCS 23 (PRI-51)		4	5	H00400	R	24	94.7	70.3
H14001	HQ BN (PRI-49)		4	5	H14000	R	35	96.4	71.4
H14120	2ND BN 23 H&R (PRI-52)	CA	4	5	H14000	R	35	96.4	92.5
H01207	4TH L&AD BN (PRI-43)		4	5	H00400	R	18	96.6	97.6
H00512	HWSS 474 (PRI-46)		4	5	H00400	R	54	97.0	67.7
H14330	3RD BN 14 H&R (PRI-39)	PA	4	5	H14000	R	34	97.1	95.7
H01284	HWCS 24 (PRI-27)		4	5	H00400	R	33	97.7	86.4
H14130	3RD BN 23 H&R (PRI-38)	LA	4	5	H14000	R	35	97.9	93.2
H14151	HQCO 24 H&R (PRI-36)	HO	4	5	H14000	R	29	97.9	87.4
H14310	1ST BN 14 H&R (PRI-16)	CA	4	5	H14000	R	34	98.3	94.4
H14340	4TH BN 14 H&R (PRI-53)	AL	4	5	H14000	R	34	98.3	92.3
H20193	4TH C&G (PRI-5)	DC	4	5	H20015	R	10	98.4	69.4

50 units Press Cursor key, P, or F1 for help row # 1

Figure 15.  
MCREM-R Unit Listing  
(Sorted by S%)

In this example the first step is to identify what is driving the low S%. The percentage is based on the lower of two calculations: one for equipment identified as "pacing" for that particular unit, and the second for the remainder of the items (those items "not" pacing). To "dig" down for this unit, press 'Enter'. There will be a list of to chose from, select option 3 (Equipment Status Summary). The next screen (Figure 16) provides a single snapshot of the unit. The top section of the report details the report based on Pacing and PEI. The lower of the two numbers for both the 'S' and the 'R' is used for SORTS reporting, and are the numbers reflected in the initial report (Unit Listing). In this example the S rating identified earlier is a result of the Pacing items, which consists of one TAM and 16 authorized items. The next block provides a summary of where assets are distributed from, in order to give an overall assessment of how much is being applied from stores and redistributed internally from other Reserve units (a breakout by operational, deadline, RFI, and NRFI).

UNCLASSIFIED MCB-3000 TAMs (incl STORES) Summary today's date  
 \* Report U3 \* MWCS 48 (PRI-13) (M00407) \* MCREM \*  
 (as of report date)

	# TAMs	Auth items	Equip On-Hand		Equip Condition		
			#-OH	Excess S-ratng	#OpRdy	Excess R-ratg	E-ratg
Pacing	1	16	11	68.8%	7	63.6%	43.8%
PEI	17	159	158	99.4%	135	85.4%	84.9%
Total	18	175	169		142		

\*\* PEI = principal end items used for SORTS computations  
 (includes all reportable equipment except pacing items)

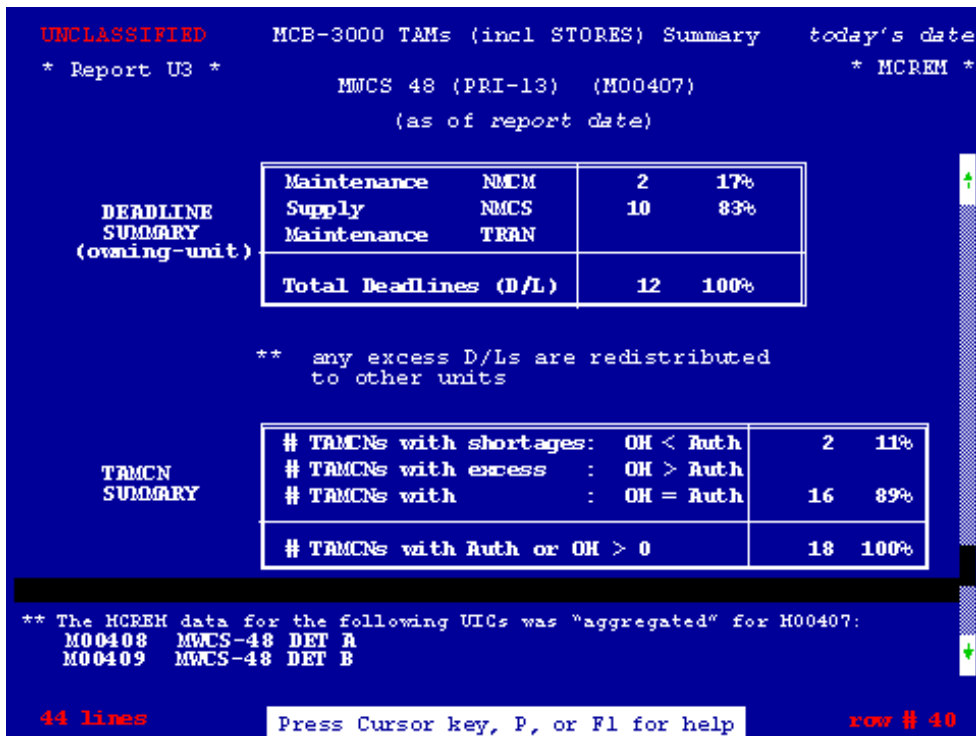
ONHAND SUMMARY:

Source of asset	Total OH		OpRdy		D/L	
Owning-unit	104	62%	100	70%	11	15%
Redistributed excess	11	7%	11	8%		
Stores (RFI/NRFI)	54	32%	31	22%	23	85%
Total	169	100%	142	100%	27	100%

44 lines Press Cursor key, P, or F1 for help row # 11

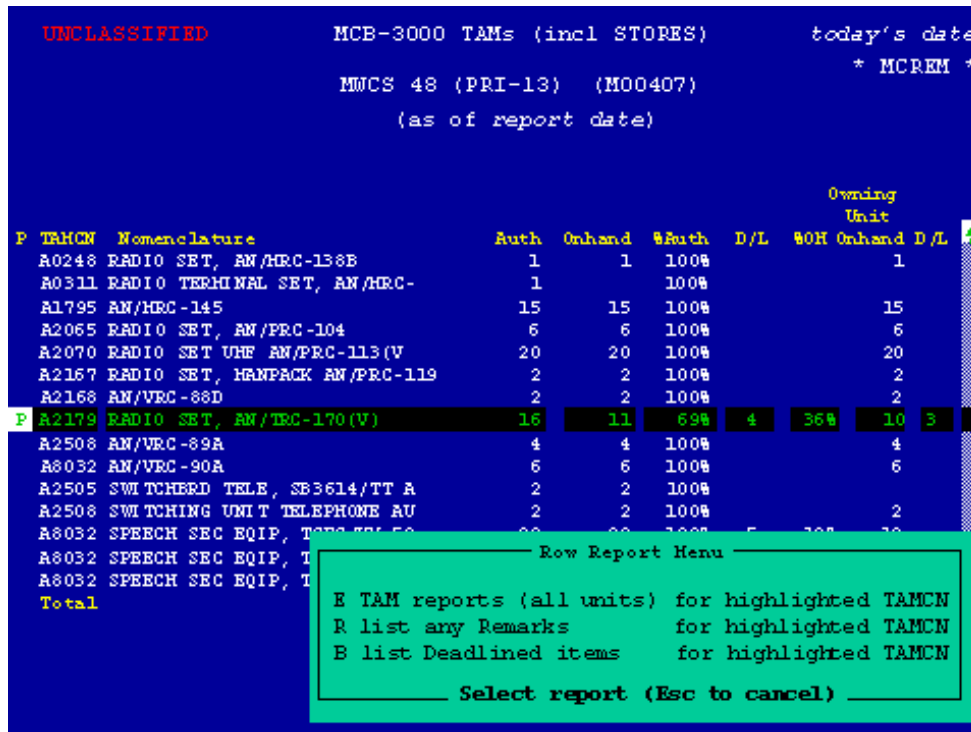
Figure 16.  
 MCREM-R MWCS 48 Unit Report  
 (First View)

Using either the down arrow or "page down" key will make the next group of information visible (Figure 17). The next block applies only to the owning unit's equipment and is a summary based on the general category for an item remaining on deadline (awaiting parts-NMCS, awaiting maintenance actions-NMCM, or it is in-transit to/from another maintenance activity-TRAN (to include the depots). The final block is used to identify what percentage of equipment (TAM) is resulting in deficiencies (or excesses) from the total amount applied to a unit. The final section is taken from the UIC Map file. This indicates which unit's LM2 rolls up to provide the SORTS reporting unit (normally a battalion or squadron) report in MCREM-R. For MWCS-48, the reporting LM2 reports are M00408 (Det A) and M00409 (Det B).



**Figure 17.**  
**MCREM-R MWCS 48 Unit Report**  
**(Second View)**

Having identified that the problem exists within a specific area (pacing) the next step is to determine what the item is. Pressing the 'Esc' key you return one menu. From the selections chose '4' TAMCN listing. This menu will provide those items that are "pacing" in the far left column (the column name is 'P' for pacing). Scrolling down will be a letter 'P' next to the TAMCN A2179. Highlight the row with A2179 in it and press 'Enter'. The next menu to appear is the Row Report Menu. There are three options available from this menu: 'E' provides a TAM report for all units with the A2179, 'R' lists any Remarks (RM4) for this reporting unit (which includes the remarks for both M00408 and M00409 LM2 reports), and the last choice is 'B' list the Deadlined items. In this example, chose 'R' to see the 'RM4' remarks.



**Figure 18.**

## MCREM-R M00407/A2179 Remarks Block

Figure 18 is the 'RM4' remark block by itself. The top line section is the 'RM4' remark from M00408. They listed an authorize amount of 16 (their T/E), a possessed or on-hand of 8 (transferred 8 to M00409 Miramar), from which one of those remaining is deadlined. The date that these 'RM4' remarks were created or modified creates a date stamp (981123). The serial numbers transferred (or command adjusted) are listed next. A quick review of those serial numbers transferred (use the 'Esc' key, 'Enter', and push 'B' for deadlined items) reveals that two of those serial numbers are deadlined.

The next section is M00409's 'LM2' remarks. The two deadlined items are listed on the as possessed and D/L (deadlined) with an appropriate remark requesting instructions. However the cause of the low readiness for this unit is due to the following issues. The total number of assets between M00408 and M00409 is 16. Eight on-hand at M00408 and 8 that are either in-transit or on-hand with M00409. Since this is an internal unit move the equipment should remain on the supply account and their LM2 until it is signed for. The lack of coordination left the unit at 62.5% (when 100% of their pacing assets are on-hand). This relates to an S-4 status (not operational). This same error also resulted in the application of a NRFI asset being applied to the unit (assets are applied when the unit's on-hand is less than their T/E allowance. The current operational (R rating) posture is 63.6% (seven out of 11 assets are operational), where actually the reported readiness should be 81.3% (13 out of 16 operational). The solution is to correct the report by coordinated dropping and adding of assets to the LM2 reports on the same day, and then review the MCREM/MCREM-R to ensure the information was accepted into the MIMMS/ATLASS archive data (Headquarters Maintenance Subsystem-HMSS).

An error that may occur because of the way that MCREM-R applies assets is when an individual unit's T/A exceeds their T/E. Those assets are put into a pool for distribution, following the priority list discussed earlier. For example: If a headquarters' battery from 14<sup>th</sup> Marines wanted to distribute assets to the Regiment's battalions for training. If those assets are "command adjusted" the headquarters' battery would be reduced by the amount that has been parceled out to the battalions. Additionally those units would pickup the same quantity on their T/A and report it on their LM2's. The problem occurs when MCREM-R stratifies the assets. Those assets above the battalion's T/E quantity are stripped from the unit and put into an "excess pool." Unless the headquarters battery was a high priority, those assets that "belong" to the regiment will be applied to other units. The battery would then have other excess equipment (or potentially NRFI) applied depending on the asset posture in MarForRes. A work-around is to have the battalions continue to report the equipment on the Headquarters' LM2 by using the "Owning UIC" as M14301 (Headquarters battery). The LM2 continues to reflect the "correct" owning unit, while allowing the most effective use the equipment.

## Creating Special Reports

This section will explain some of the advance functions that can be done using MCREM, MCREM-R and MCSAM, however the examples will use MCREM. The first example creates a special report combining several units. There are two ways to create a special report. The first way is when the report will be a non-recurring report. For this report we will put together a summary report for 14<sup>th</sup> Marines. Using the Unit Listing ('L' on the main menu), and then pressing 'U' (Change unit selection) the next choice can be done in two ways. The easiest since all the units for this report have 14 in their name, press 'N' (Name) and type '14' and then press 'Enter'. If at this point you are to run the report you would see "14<sup>th</sup> CSSD", "MAG-14", etc. To further refine it to only "14<sup>th</sup> Marines" press option '2' (major command), and select "4<sup>th</sup> Marine Division". Press 'Esc' and then 'G' (Go). You should you will now have a Regimental report for 14<sup>th</sup> Marines. The other way to create this report is to use the UIC's. Instead of choosing 'N' (Name) in press 'U' (UIC) and enter the appropriate UIC's for the 14<sup>th</sup> Marine units (Bn's and Headquarters Battery). This works for groups up to six UIC's.

```

UNCLASSIFIED                                today's date
UNIT LISTING                                * MCREM *
USMC, FOURTH MARDIV (MAJCOM=M14000)Unit Name contains 14

MCB-3000 TAMCNs
(as of report date)

```

VIC	Name	ST	HEF	TUC	MAJCOM	C	# TAMs	S%	R%
H14301	14 HMR HQ BTRY	TX	4	5	H14000	R	46	97.4	95.0
H14310	14TH HMR 1ST BN	CR	4	5	H14000	R	34	94.4	88.2
H14320	14TH HMR 2ND BN	TX	4	5	H14000	R	34	97.7	94.1
H14330	14TH HMR 3RD BN	PA	4	5	H14000	R	33	97.4	96.4
H14340	14 HMR 4TH BN	AL	4	5	H14000	R	36	97.6	97.8
H14350	14TH HMR 5TH BN	CR	4	5	H14000	R	36	99.1	95.4

6 units      Press Cursor key, P, or F1 for help      row # 1

**Figure 19.**  
**MCREM 14<sup>th</sup> Marines Regimental Rollup**  
**(by Unit)**

Using this selection of units we will now do a Regimental rollup of equipment. Press the Esc key until you are at the main menu. Press '1' (Equipment Status) and then 'G' (Go). The original unit selections are retained as you go from one menu to another. You now have a Regimental rollup of equipment. By sorting on specific fields you can quickly view excess equipment, 'S' rating deficiencies, 'R' rating deficiencies, changing the view from TAMCN to commodity provides each of the commodity chiefs (motor transport, engineer, ordnance) a quick view or their areas and where to focus their expertise.

```

UNCLASSIFIED                                today's date
Equipment Status                            * MCREM *
USMC, FOURTH MARDIV (MAJCOM=M14000)Unit Name contains 14

MCB-3000 TAMCNs
(as of report date)

```

TAMCN	Auth items	Onhand items	OH - Excess	S-rating (% Auth)	OpBdy items	R-rating (% OH)	MSC	PA
B1500	6	6	6	100.0%	6	100.0%	KU	29
B2085	12	12	12	100.0%	12	100.0%	MT	29
B2460	3	3	3	100.0%	3	100.0%	MO	23
B2462	1	1	1	100.0%	1	100.0%	7E	23
B2566	26	27	26	100.0%	25	100.0%	KV	26
B2567	2	2	2	100.0%	2	100.0%	Z2	23
D0209	20	21	20	100.0%	15	100.0%	QE	20
D0235	3	3	3	100.0%	3	100.0%	R2	25
D0376	22	25	21	95.5%	25	100.0%	QE	25
D0377	1	1	1	100.0%	1	100.0%	QE	25
D0378	4	4	4	100.0%	4	100.0%	QE	25
D0379	1	1	1	100.0%	1	100.0%	QE	25
D0380	34	26	34	100.0%	26	100.0%	Q6	25
D1002	6	6	6	100.0%	6	100.0%	SF	20
<b>TOTAL</b>	<b>2,505</b>	<b>2,493</b>	<b>2,456</b>	<b>98.0%</b>	<b>2,291</b>	<b>95.9%</b>		

52 TAMCNs      Press Cursor key, P, or F1 for help      row # 25

Figure 20.

### MCREM 14<sup>th</sup> Marines Equipment Rollup

The next example is for creating a recurring report. In the previous example 14<sup>th</sup> Marines consisted of typing in the individual UIC's. To create a permanent "Miscellaneous" report a directory (folder) needs to be created under the sub-directory "EQUSMC." Name the directory "User." This directory and the files that you place in there will not be overwritten when MCREM is updated. To create the database "getmisc.dbf" within the User subdirectory you can use either a database editor (such as Approach, FoxBASE, or Access) or a spreadsheet file (Lotus 1-2-3 or Excel) and save it as a database. For this example we will use Lotus 1-2-3 and open the current database "getuser.dbf" located in "Equsmc\bin". Save the file as a database in "Equsmc\user" so that any changes will not affect the original file. This file provides the basic database commands to manipulate data fields. Additional commands can be made from any database programming manual (remember plagiarism is encouraged to get the result you are looking for. The first field (column) is "type". The field will have either a 'U' (which means that the report title will appear in MCREM's Unit Miscellaneous selection, or an "E" for Equipment. To predetermine a selection of units (14<sup>th</sup> Marines) put the title that you want to appear in the title of the Miscellaneous Report in the PTITLE. The final field is the database commands to select 14<sup>th</sup> Marine UIC. Your worksheet should look like the example in Table 2. Attempt to run MCREM using 'L' Unit Listing, 'U' press 'U', Change Unit Selection and press 'M' Miscellaneous you will see a title "14<sup>th</sup> Marines". Highlight the selection and press 'Enter' (returns you to Change Unit Selection), press 'ESC' and then 'G' (Go). The report will now mirror the report produced in Figure 19 with the exception of the Report Title.

TYPE	PTITLE	PFILTER
U	14th Marines	uic\$'M14301,M14310,M14320,M14330,M14340,M14350'

Table 2.

### GETMISC Database (USER Subdirectory)

#### 14<sup>th</sup> Marines UIC Rollup

The final examples will focus on using other database files. In the first example 14<sup>th</sup> Marines has been designated as the lead for two specific missions (Operation Good Luck, and a Minor Police Action, Single Location). Based on the scenarios the CO has prioritized the equipment necessary to support each of these missions. The operation's planner provides the listing of equipment from MDSS II/TC AIMS. The list of TAMCN's are saved as a text file and converted into a database.

## Business Rules for the Module

### MCREM-R Production Process

The MCREM-R update process performs the following steps to generate the module and corresponding SORTS computations. The updated process first extracts non-zero T/E requirements from the reserve unit T/E quantities database (TEQTY.DBF). The next function "Maps" the units (using UICMAP.DBF), and aggregate requirements (i.e., consolidate smaller units into larger units for SORTS reporting). The following step then "Maps" the UIC's (using UICMAP.DBF) in the latest MCREM module and aggregate the current unit on-hand/deadline data. Corresponding unit on-hand and deadline quantities in MCREM-R are aggregated into the MCREM data. Additionally, the "pacing" status of each UIC/TAMCN requirement is set using pacing-item designation database (RES3000.DBF ) [Note: MCREM-R now contains the unit status before any distribution of Stores assets or re-distribution of

unit excess]. The subsequent process removes all "excess" unit assets (i.e., unit on-hand greater than unit requirement) into a separate excess "re-distribution" pool. Unit priorities are established using the asset-distribution priorities specified in Unit-priority database (UNITPRI.DBF) and the distribution of the Stores RFI/NRFI assets and unit excess are conducted according to the distribution algorithm described below. Finally, the S-level and R-level for each reserve unit are computed according to applicable SORTS rules.

## Stores/Unit-Excess Distribution Algorithm

The MCREM-R distribution process attempts to bring all units to the 80% fill-level in unit-priority order first. Then fill remaining unit shortages to 90% fill-level (again in unit-priority order), with a final distribution at 100% for remaining shortages (again in unit-priority order). Assets are distributed in the following sequence: Stores RFI first, followed by unit-excess items in operationally-ready condition, then unit-excess in deadlined condition, and finally stores NRFI assets. The key assumption is that "stores" NRFI items are in much worse condition than unit-excess deadlined items [Note that the current algorithm assigns no special priority to pacing items, and also removes all unit excess from the unit to an "excess pool"]. Thus, even if an excess item is unneeded to fill a shortage, the excess item is not returned to the original owning unit. This removal action might improve or degrade a unit's R-level depending on whether the item was deadlined or operationally-ready; however, the removal will have no effect on the unit's S-level.

The stores/excess distribution algorithm can be summarized as follows: All unit-excess are removed to an excess holding pool (unit deadlined items first, then operationally ready until there is no longer an excess). For each TAMCN, the "fill" process makes 3 passes through the data (80% fill, 90% fill, and finally 100% fill) and performs the following actions (process units in priority order, i.e., highest priority units first).

If TAMCN status for this particular unit is at or above the desired fill-level, the program skips this unit/TAMCN requirement, and moves to the next lower-priority unit requirement. The fill process allocates enough of any "remaining" stores or excess-pool items to bring the unit to the desired fill (in the following order): stores RFI items first, excess op-ready, excess deadline, and finally stores NRFI.

## MCREM-R Unique Data Sources

### **TEQTY.DBF – USMCR Table of Equipment requirements**

Defines all UIC's, TAMCN's, and UIC/TAMCN T/E requirements to be included in MCREM-R modules and computations. This is the most critical input source for MCREM-R since this database defines the universe of units and TAMCN's, and also the UIC/TAMCN T/E requirements. All UIC/TAMCN need to be included correctly; otherwise some unit assets will probably be treated incorrectly as excess items available for redistribution. Also, care must be taken not to introduce "duplicate" requirements records; otherwise requirements will be overstated.

MCREM-R combines the requirements' data contained in the T/E requirements' database (TEQTY.DBF) with the on-hand assets from the unit LM2 data (contained in the regular MCREM). The MCREM-R update process treats the T/E requirements' database as the "boss" file for defining units to be included in MCREM-R. If a unit does not have at least one TAMCN requirement in TEQTY.DBF, then none of that unit's MCREM assets will be included in MCREM-R. This visibility error occurs if "smaller" units in MCREM are aggregated to a "larger" unit in MCREM-R, and one of the smaller units is not included in the Unit Aggregation Mapping database (UICMAP.DBF). The total (reporting unit's) T/E requirements would be specified with the larger unit's AAC in TEQTY.DBF, and the smaller unit's assets (both required and excess) would be ignored by MCREM-R because the smaller unit's AAC does not appear in the file.

The only fields in TEQTY.DBF used are AAC, TAMCN, and TEQTY. Only those records in TEQTY.DBF with a positive TEQTY field (i.e.,  $TEQTY > 0$ ) are actually used in producing MCREM-R; all other records with  $TEQTY = 0$  are ignored.

**Note that TEQTY.DBF assumes requirements are specified with the unit's AAC rather than UIC. The AAC is later mapped to a UIC.**

**STORES.DBF – Stores depot assets available for USMCR units.** Defines the assets by TAMCN (RFI (ready-for-issue), NRFI (not-ready-for-issue) currently available in STORES for distribution to USMCR units. Only the fields TAMCN, RFI, and NRFI are used from this database. Any STORES assets that are not needed to fill a requirement specified in TEQTY.DBF are not distributed to units, i.e., these extraneous assets are ignored by MCREM-R. MCREM-R assumes the NRFI assets in stores are in worse condition than excess deadlined items at units, and thus distributes excess unit deadlined items before distributing an available NRFI stores item.

**RES3000.DBF – Pacing item designations for USMCR units.** Since the pacing item designation is unreliable in the HMSS LM2 database, the RES3000.DBF was developed to identify for each MCB 3000 TAMCN, those USMCR units for which that TAMCN is a pacing item. Only the fields TAMCN and AC are used in this database. The AC field contains a list of UIC's, separated by blanks, for which the corresponding TAMCN is a pacing item. This database must be updated each time MCB 3000 specifies a change to any pacing item designations. If an official UIC to T/E number mapping were available, the RES3000.DBF database would be unneeded. The pacing item designations could be generated directly from the MCB 3000 T/E listing for each TAMCN.

**UICMAP.DBF – Unit Aggregation Mappings.** This database contains units to be "mapped" to another unit to allow on-hand and requirements data to be aggregated to a larger unit for SORTS reporting. Usually detachments and separate companies are "mapped" to a battalion-size unit for SORTS reporting. This database contains a record for each unit that is to be aggregated to a larger unit. Both the AAC and the UIC must be specified for the mapping since the TE requirements are specified with AAC's, and LM2 data is specified in MCREM by UIC. Thus, the fields actually used in this database are AAC, UIC and pAAC (parent AAC), pUIC indicating that the unit represented by (AAC,UIC) should be aggregated to the unit represented by (pAAC,pUIC). For example, 4th LAAD BN, BTRY B (UIC=AAC=M04715) is "mapped" to 4th LAAD BN (UIC=M01207, AAC=M01209). UNITPRI.DBF currently contains about 63 sub-units that are aggregated to 26 larger units. Note that the unit names are also provided in UNITPRI.DBF, but are not used in the update process.

**UNITPRI.DBF – Unit Priorities.** This database specifies the unit priorities to use in distributing Stores and unit excess items. Priorities are specified 1 to 999 with "1" being the highest priority. See distribution algorithm discussion below for a description of how unit priorities are applied. This database also supplies the unit-name to be used in the final MCREM-R database. Fields used from this database are: AAC,UIC, PRI, and NAME.

**MCREM – LM2 on-hand and deadlined quantities data.** The LM2 data specifying the TAMCN on-hand and deadline assets for each unit are collected weekly in the regular MCREM. These MCREM on-hand/deadline quantities provide the current unit status (by TAMCN) against the corresponding T/E requirement (in TEQTY.DBF) and also provide assets available for excess re-distribution. "Excess" items are those quantities for which the current unit on-hand quantity exceeds the requirement specified in the T/E requirements database (i.e. TEQTY.DBF). Note that if a reserve unit does not have at least one non-zero TAMCN requirement in the T/E requirement database (TEQTY.DBF), then none of the unit's assets will be available for redistribution.

# Questions About the Module

The best way to learn MCREM is to use it. If you did not run your module while reading this guide, you might want to go back and recreate the screens included here. It is also helpful to go systematically through all the row and column choices, for familiarization. In doing so, you will probably find that many of them are not useful to you, but the next time you can concentrate on the displays that are meaningful to you. Since the Unit Status report was not demonstrated you should now return to the main menu and use your knowledge of MCREM to explore this series of reports.

We will be glad to answer any questions you have about the module. The point of contact at LMI is Michael Konvalinka (703) 917-7288. For comments on MCREM/MCREM-R and this manual the point of contact at HQMC is Major Pete Keating at (703) 695-5973/ DSN 225-5973 or Major Marty Bouveron (C4I) at (703) 607-5590/ DSN 327-5590.

## Terms and Descriptions

### Main Menu Selection Descriptions

**Equipment Status:** Equipment Status generates a series of reports that display the on-hand, authorized and operationally ready quantities of equipment in the inventory, without regard to unit.

**Unit Status:** Unit Status generates a series of reports that compare on-hand, authorized and operationally ready quantities by unit, at the unit identification code (UIC) level.

**D/L Summary (TAMCN's):** D/L Summary (TAM's) generates a series of reports that display the on-hand quantities of equipment, deadlined non-operationally ready quantities of equipment and the breakdown of the deadlined non-operationally ready quantities of equipment in the inventory by NMCM, NMCS and TRAN, without regard to unit.

**D/L Summary (Units):** D/L Summary (units) generates a series of reports that display the on-hand quantities by unit, deadlined non-operationally ready quantities by unit and the breakdown of the deadlined non-operationally ready quantities by unit by NMCM, NMCS and TRAN, all at the unit identification code (UIC) level.

**Unit Listing:** Unit Listing is intended to give the user an overview of all equipment in each unit.

**TAMCN Listing:** TAMCN Listing is intended to give the user an overview of all TAMCN's.

### Unit/Equipment Menu Selection Descriptions

**Unit/TAMCN Listing:** Unit/TAMCN Listing matches specific Units with TAMCN's and gives a combination of both the Unit Listing and TAMCN Listing report information, and also offers other menu options to view more information.

**D D/L Items Listing:** D/L Items Listing matches Uniformed Identification Codes (UIC's) with TAMCN nomenclatures and list the items that are deadlined and gives background information on the deadlined items.

**Unit Report:** Unit Report generates a report about a specific unit.

**TAMCN Report:** TAMCN Report generates a report about a specific TAMCN

**Change Unit selections ('U'):** User can restrict database search by selecting units to include and/or

exclude from the report for viewing purposes.

**Change Equipment selections ('E'):** User can restrict database search by selecting equipment to include and/or exclude from the report for viewing purposes.

**Go - compute report ('G'):** Computes the report after all of the selections and criteria for the report are specified. From all reports, typing "F1" (help key) provides various options to change the screen views (i.e., rows from commodity to Functional Area to TAMCN... etc.).

**Clear all unit/equipment selections ('C'):** Clears all selections specified earlier from the "U change Unit selections" and/or "E change Equipment selections" menu options, so that a search can begin again with a fresh non-restricted database.

**Return to Reports Menu ('Q' or 'Esc' key):** Returns the user to the Main menu

## Unit Selection Descriptions

**Component:** User can restrict the database search only "Active Units" or "Reserve Units".

**Major Command:** Computer lists every major command in the Marine Corps and user can choose a specific major command to restrict the database search to that MAJCOM only.

**MCGERR MEF Code:** User can choose a specific MCGERR geographic location to restrict the database search. The options are: I MEF - Camp Pendleton; II MEF - Camp LeJeune; III MEF - Okinawa; IV MEF - Reserve; Hawaii; MPF; and Blank (no MEF specified)

**MCGERR Unit Type:** User can choose a specific MCGERR Type Unit Code (TUC) to restrict the database search.

**S-Rating- Supply/Equipment On-Hand Rating Percentage:** User can specify a greater than or equal and/or less than or equal unit S-Rating range to restrict the database search. \_\_\_ < Unit S-Rating % < \_\_\_

**R-Rating- Equipment Operational Capability Rating:** User can specify a greater than or equal and/or less than or equal unit R-Rating range to restrict the database search. \_\_\_ < Unit R-Rating % < \_\_\_

**State/Country:** User can select a specific unit location to restrict the database search to by specifying a specific state or foreign country to view only.

**Miscellaneous:** User can select a choice from the list provided of miscellaneous items to restrict the database search.

**Name:** User can select units whose names contain a similar selection string to restrict the database search (This creates a local miscellaneous).

**UIC:** User can select up to six Unit Identification Codes (UIC) to restrict the database search.

**Define Your Own:** User can define unit selection criteria by entering either the title describing the unit selection criteria or by entering a DBASE-III filter condition to add to unit selection.

## Equipment Selection Descriptions

**Class/F. Area:** User can select a specific Equipment Class (Commodity) or Functional Area (Sub-commodity) to restrict the database searches.

**Pacing Items:** User can select/exclude Status of Resources and Training System (SORTS) Pacing-item TAMCN's to restrict database search. Pacing items are items of equipment whose availability is essential and indispensable for the execution of the mission of the unit. SORTS is an internal management tool which indicates at a selected time the status of a unit's personnel resources, the amount and condition of equipment relative to its prescribed mission requirements, and the level of unit training relative to service standards.

**Unit Cost:** User can specify a greater than or equal and/or less than or equal TAMCN replacement

cost range to restrict the database search. \_\_\_ < TAMCN Replacement Cost < \_\_\_

**NGRER- National Guard & Reserve Equipment Report:** User can select/exclude TAMCN's in FY98 National Guard & Reserve Equipment Report (NGRER) to restrict database search.

**Level A:** User can select/exclude Level-A TAMCN's to restrict database search.

**Miscellaneous:** User can select a choice from the list provided of miscellaneous items to restrict the database search.

**Name:** User can select TAMCN's whose name contains a similar selection string to restrict the database search.

**TAMCN:** User can select up to six TAMCN to restrict the database search.

**Define you own:** User can define equipment selection criteria by entering either the title describing unit selection criteria or by entering DBASE-III filter condition to add to unit selection.

## Report/Selection Field Descriptions

**Auth (authorized items):** Number of pieces of equipment that have been authorized for possession by UIC (i.e., unit or component) and TAMCN (type of equipment or equipment class).

**Component:** Components are classified as either "Active Units" or "Reserve Units".

**Condition- Deadlining Condition/Status:** Not mission capable supply (NMCS), Maintenance (NMCM), or is in transit status (TRAN).

**Cost-~~S~~:** Taken from the Logistics Management Info System (LMIS) item replacement costs.

**Date Of Condition:** The date when the piece of equipment was classified as D/L.

**Deadline (D/L):** To remove a vehicle or piece of equipment from operation or use for one of the following reasons: it is inoperative due to damage, malfunctioning, or necessary repairs; or it is unsafe and would be damaged by further use. The term does not include items temporarily removed from use by reason of routine maintenance and repairs, which do not affect the combat capability of the item. Deadline implies that the piece of equipment is non-operational/non-combat capable.

**DeadLine Date:** The date when the piece of equipment was reported as D/L.

**EOM- Echelon of Maintenance:** 3<sup>rd</sup> and 4<sup>th</sup> intermediate, 2<sup>nd</sup> organizational. 4<sup>th</sup> (with TRAN) indicates the item is probably at depot level repair (5<sup>th</sup> echelon) because depot does not use MIMMS.

**Equip ID-#:** ID number that groups equipment by National Stock Number/Model.

**Equipment Class:** A classification system for materials consisting of 5 general equipment classes (commodities):

Communications/Electronics ("A" - TAMCN's); Engineer ("B" - TAMCN's); General Supply ("C" - TAMCN's); Motor Transport ("D" - TAMCN's); and Ordnance ("E" - TAMCN's).

**ERO Num:** Equipment Repair Order Number

**FA- Function Area:** Sub-Category of the commodity reporting. Used for major groupings of like type equipment.

**Holder:** Unit doing the repair.

**L-A:** DLA level "A" managed system.

**Location:** The exact location where the unit is stationed (i.e. Camp Pendleton, Camp LeJeune, Fort Pickett, etc.).

**MEF- Marine Expeditionary Force:** Options are I, II, III, Reserves, Prepositioned Stores (MPS), Bases, Schools, etc. This information is derived from the MIMMS files that refer to Reserves as 4 MEF, Hawaii as '5', prepositioned equipment (to include NALMEB) as '6' and other organizations as '8'.

**MAJCOM- Major Command:** The higher command's code normally the Major Subordinate Command or MEF.

**Name:** The abbreviated acronym version of the unit's designated name. (i.e., 7th MT BN for 7th Maintenance Battalion).

**NGRER- National Guard & Reserve Equipment Report:** Indicates if TAMCN was listed within the most current NGRER report to Congress.

**NMCM- Not Mission Capable Maintenance:** It means the piece of equipment is non-operational because the tools/resources/mechanics to fix it are not available, even though the spare/replacement part(s) are.

**NMCS- Not Mission Capable Supply:** It means the piece of equipment is non-operational because spare/replacements part(s) are not available.

**Nomenclature:** System of names designated for various pieces of equipment or items (i.e. Radio set, Generator set, Forklift truck, etc.).

**NRFI - Not Ready for Issue:** Assets within the stores system in condition code F through M (funded and unfunded). NRFI assets are treated as non-operational (deadlined) for calculating Reserve readiness in MCREM-R.

**# of Units:** Number of units per component.

**# of TAM's:** Number of different types of table of authorized materials per equipment class.

**#TAMCN's (#TAM's):** Number of TAMCN's listed in that unit (not number of pieces of equipment). Units with only one TAMCN are heavily influenced when a system fails in fielding or in maintenance. For small quantity of TAMCN's it doesn't provide a very accurate picture of a unit's readiness.

**On-hand:** The measured physical valuation quantity, including on-loan quantities of an item of supply within the supply system. Number of items that is on-hand (the current possession of particular unit or component). Number of items that is on-hand per equipment class. In current possession of as compared to what has been authorized.

**OH - Excess:** TAMCN by TAMCN at the unit level, it provides only the authorized number for the "S" rating. This limits the "S" rating to 100% and for multiple TAMCN's prevents inflating unit readiness for supply deficient TAMCN's.

**OpRdy items- Operationally Ready Items:** Number of items that are operationally ready (not deadlined).

**P (PAC) - Pacing:** Item is listed as a Pacing (Mission Essential Item) in the MCBul 3000.

**%Auth:** Percentage of on-hand pieces of equipment compared to what has been authorized. Percentage of authorized pieces of equipment that are actually in possession

**%DL:** Percentage of deadlined items, which is non-operative because of NMCS/NMCM/TRAN.

**%OH (S-Rating): Percentage** of equipment on-hand to the authorized quantity.

**%OpRdy:** Percentage of on-hand items that are operationally ready (OpRdy items divided by on-hand items)

**%Poss:** Percentage of pieces of equipment that are in possession which are D/L.

**Poss:** Number of pieces of equipment which are in possession, currently have by TAMCN.

**PRI-# - Stratification Priority [MCREM-R only]:** The priority number is the stratified priority number used by MCREM-R to apply redistributed assets (from stores and other MarForRes units) to the reporting unit. File is prioritized by MarForRes and is based on maximizing readiness for the greatest number of Reserve units, and does not necessarily apply to operational or mobilization plans.

**RFI - Ready for Issue:** Assets within the stores system in condition code A through C (ready for issue). RFI assets are treated as operational for calculating Reserve readiness in MCREM-R. As a note all assets currently in the hands of the operating forces are considered in a RFI condition (including deadlined equipment) unless the item is pending retrograde to the depot or disposal.

**R-Rating (% OH)- Equipment Operational Capability Rating Percentage:** Provides the percentage of on-hand items that are operationally ready (operational ready items divided by on-hand items).

**R%-** Equipment Operational Capability Rating Percentage

**S-Rating (% Auth)- Supply/Equipment On-Hand Rating Percentage:** Percentage of equipment authorized that is on-hand (OH minus excess divided by auth items).

**S%-** Supply/Equipment On-Hand Rating Percentage

**Serial Number:** Manufacturer's identification number

**ST- State:** The state or country where the Unit is located (i.e. North Carolina, California, Japan, etc.).

**Stat Days:** Days that the equipment has been in that condition (NMCS/NMCM/TRAN) from the date of the report.

**TAMCN- Table of Authorized Materiel Control Number:** The Table of Authorized Materiel (TAM) Control Number consists of type and technical category of materiel, item number and class of supply.

**TRAN- Transit:** It means the piece of equipment is non-operational because it is being delivered to another activity to be fixed.

**TUC- Type Unit Code:** Codes used in MIMMS to designate units as Active, Reserve, Cadre, Prepositioned (MPS, NALMEB), DMFA, etc.

**UIC- Unit Identification Code:** Single designated unit identifier managed by PP&O (POE) and used in SORTS and MCGERR.

**Unit Listing** if you choose "Go -- compute report" from "L Unit Listing"

**Units:** Number of units reporting the TAMCN.

**Unit Name:** The abbreviated acronym version of the unit's designated name (i.e. HDQS BN 1ST MARDIV is Headquarters battalion 1st Marine division).

**WSC- Weapons Systems Code:** System management code used by MCLB Albany to provide system support and a point of contact.