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**14. ABSTRACT**  
This manual provides specific procedures for using the software. It also helps units to process and submit their after-action reports in accordance with Marine Corps Order (MCO) 5000.17. Although outdated, this manual provides good reference material on the old system. Appendix F also provides good information on the lesson learned formats.

**15. SUBJECT TERMS**  
MCLLS, Lessons Learned
MARINE CORPS
LESSONS LEARNED SYSTEM
(MCLLS)

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FOREWORD

The Marine Corps Lessons Learned System (MCLLS) User's Manual (Version 4.0), dated 20 August 1993, was prepared by the Institute for Simulation and Training of the University of Central Florida, in support of the Warfighting Development Integration Division (WDID). This manual provides specific procedures for using the software. It also helps units to process and submit their after-action reports in accordance with Marine Corps Order (MCO) 5000.17.

Questions regarding software operation should be directed to the MCLLS Data Base Section, WDID, at DSN 278-4387/4429 or commercial (703) 640-4387/4429.

The MCLLS Data Base Section welcomes comments, constructive criticism, or suggested changes as a means to improve future editions of this manual and the applicable software. Forward suggestions to -

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CHAPTER 1 - UNDERSTANDING MCLLS SOFTWARE

1. SCOPE

Identification. This manual applies to the Marine Corps Lessons Learned System (MCLLS), Version 4.0, issued by the Marine Corps Combat Development Command, Warfighting Development Integration Division (WDID) (C 391).

MCLLS is a stand-alone data base management system that enables units throughout the Marine Corps to use the Marine Corps master lessons learned data base, and to build their own lessons learned data base. The system allows Marines to easily and quickly add lessons and observations from training exercises and real-world operations to the data base. MCLLS also accepts lessons learned that have been written through the use of the pre-formatted MCLLS Instructional Input Program (MIIP). MIIP is available upon request from WDID.

MCLLS reports are fully compatible with the Joint Uniform Lessons Learned System (JULLS) reporting system and can be submitted via the Amphibious Task Force Commander or the Joint Task Force Commander, if one has been designated for an exercise or operation. Accordingly, lessons learned that are written using either MIIP or MCLLS are formatted in accordance with Joint After Action Reporting System (JAARS) requirements. Marines will therefore be able to avoid having to create the same after action information twice.

2. SYSTEM OVERVIEW

a. The Reason for MCLLS. MCLLS provides the answers to several questions: How do we learn from our past exercises and operations? How can we avoid making the same mistakes again? How can we efficiently and rapidly develop our next exercise objectives? Finally, how do we track our Remedial Action (RA) items within the Remedial Action Program (RAP)?

b. What MCLLS Does. MCLLS allows you to quickly access and manipulate the information stored in a large lessons learned data base. The MCLLS options include adding information to the data base, modifying the information in the data base, and deleting information from the data base. You can also generate any of the 7 pre-formatted reports, each summarizing specific information contained in the data base. You can search the data base for specific information by a number of different methods. For example, you can conduct a search using the record number or the MCLLS number associated with each lesson learned, or you can perform a keyword search, or you can use a string of text from narrative discussions, or the fields in the administrative data, or a combination of all of the above. After a search, you can
review administrative data about a MCLL, read the narrative description of the lesson, view all of the keywords associated with it, or review current milestones or sources for a RAP item.

c. The Two Types of a MCLL. There are two distinct types of a MCLL. One is a SUMMARY Lesson Learned and the second is an INDIVIDUAL Lesson Learned. The two types are slightly different in both the required administrative information and the narrative text items to be reported; they have correspondingly different structures and format. Routinely, an after action report has a single SUMMARY lesson learned (although it may be in two or more parts because of its length) and a large number of the INDIVIDUAL type. Appendix F provides formats for both the SUMMARY and the INDIVIDUAL lesson learned.

3. DOCUMENT OVERVIEW. In writing this manual, we have assumed that the MCLLS user can operate a computer at a basic level. By basic level, we mean that the user can turn the machine on and off, insert a diskette or find the directory that contains the program, and press the ENTER key.

a. Purpose. The purpose of this manual is to provide Marines with an easy-to-read tutorial and reference manual. The content is presented in a manner consistent with this purpose. The examples shown in the manual will have the following conventions when entering commands.

(1) Text surrounded by the less than symbol "<", and the greater than symbol, ">", represent commands you should type or keys you should press. To enter a command, simply use the keyboard to type whatever is between the "< >". For example, to follow these directions,

\[
\text{type } \langle \text{MCLLS} \rangle \text{ and press } \langle \text{Enter} \rangle,
\]
you would type "MCLLS" and then press the ENTER key.

(2) If a single key is listed between the "<" and the ">", then press that particular key. If two keys are listed between the "< >", then you should hold down the first one while pressing the second key. For example, <Alt-Q> is the key combination to exit (or Quit) MCLLS. To exit MCLLS, hold down the "Alt" key and press the "Q" key.

NOTE: Function keys such as F1, F2, F3, F4, remember, are separate keys, usually located across the top of the keyboard or in a group at the left hand side of it.
NOTE2: There are two keys that can be used in almost every screen in MCLLS. If you remember that the <F1> key will almost always provide you with HELP about that specific part of the program, and that <Esc> will almost always back you up one screen, you will find MCLLS to be a genuinely easy-to-use software program.

4. Referenced documents.

a. MCO 5000.17, 5 March 1990 - THE MARINE CORPS LESSONS LEARNED SYSTEM (MCLLS)

b. Joint Pub 1-03.30, 15 April 1991 - JOINT AFTER ACTION REPORTING SYSTEM (JAARS)
1. Initialization. As indicated in Chapter 1, MCLLS is a stand-alone data base management system. The INSTALLATION DISK that accompanies the MCLLS system disk contains the necessary files to install MCLLS (and other software such as a MCLLS spell checker) onto a hard drive computer. The files are too large to run on a floppy drive system. To install all of the MCLLS software, i.e., the program and spell checker, requires at least 2½ Megabytes of available disk space. This manual also presumes you are using a color monitor. MCLLS will work perfectly well with a monochrome monitor as long as you tell the system that that is what you have. If you are using a monochrome monitor, you should disregard comments in this manual pertaining to color monitors.

NOTE: The version 4.0 software MUST be installed onto a hard drive. If your computer has only floppy drives, you CANNOT install MCLLS 4.0 and must continue to use Version 1.3.

The following steps will walk you through the installation of MCLLS onto your computer.

a. Ensure that your computer is turned on.

b. Place the MCLLS INSTALLATION disk in your floppy drive, change to that drive, and type <INSTALL>. The Installation program provides you with information regarding the amount of disk space required to complete the installation.

c. After reading the information screen, press <Enter>. The program asks you on which drive to install MCLLS. Type in the desired drive and press <Enter>.

After the Installation program initializes the MCLLS directory, you will see a screen that lists the MCLLS components. Highlight the component you intend to install and press <Enter>. The install program will then ask you to insert the correct disk and press <Enter> to begin installing. After the highlighted component has been properly installed, a check (✓) will appear indicating that the installation is complete. Continue this process for each component that you want to install.

NOTE: Because of the size of the MCLLS program files, it may take a little while to install on older, slower computers. Installing the spell checker will take several minutes on most computers.
When you have installed all of the MCLLS components that you want to install, choose the last option on the menu Finish Installation. This option will properly configure your AUTOEXEC.BAT and CONFIG.SYS files to ensure that the MCLLS system functions as designed.

2. Conventions Using MCLLS. Each screen in MCLLS has helpful information across the top and bottom of it. Also, "hot keys" are shown along with a word or two to tell you what those keys do when activated in that particular screen.

   a. Whenever you see an option that is shown in an "off yellow" color of print rather than the combination of red and black lettering, that option is "disabled" and will not work at that particular moment. Additionally, the one red letter associated with any menu choice is the "hot" letter for that choice. Pressing it alone (drop down menu) or in combination with the "Alt" key (main menu) will activate that menu selection.

   b. MCLLS also permits you to use the arrow keys to move from one menu choice to another. Whenever the choice that you want to activate has the darkened background, the <Enter> key will activate it. Using a mouse to move to and click on your choice will do the same thing, but the mouse will not function when you are in the narrative text fields of any individual MCLL. Use of a mouse is also not possible in the Modify/Edit or Modify/Add options, because these are administrative data fields that require information.
CHAPTER 3 - WORKING WITH MCLLS

1. The MCLLS Main Menu. Once the INSTALLATION has been completed, typing `<MCLLS> <Enter>` at the C:\ prompt will activate the program and take you to the Main Menu. The Main Menu is across the top of the screen, and the File function automatically provides a drop down window with four active and three disabled options. Note that the Delete, Copy, and Rename options are disabled.

   Note: If you have a monochrome monitor, at the C:\ prompt, type `<MCLLS M> <Enter>`.  

2. The MCLLS File Function. When activating MCLLS, it will always insist that you Use an existing data base or Build a new data base before you are allowed to perform any of the other functions dealing with lessons learned. The File Function does permit you to Exit or pull up an information screen (About MCLLS). Otherwise you need to access an active data base to do anything with MCLLS. Note at the bottom of the sample screen that there is no data base name specified and there are zero records in the current selected list.

   ![File Function Menu](image)

   - **File**
     - Browse
     - Modify
     - Search
     - Reports
     - Import/Export
     - Other
   - **Use an existing data base**
     - Build a new data base
   - **Delete an entire data base**
   - **Copy an entire data base**
   - **Rename an entire data base**
   - **About MCLLS**
   - **Exit MCLLS**

   Current selected list : ( 0 of 0 )

   Name of data base :

   <F1>-Help | Locate and open an existing MCLLS data base for use.

   Figure 1

3. Use an existing data base. Pressing the `<Enter>` key when the Use an existing data base option has the darkened background will provide a pop-up window for selecting an existing data base on which to work. The darkened background will continue to be visible as you move to additional menus and decision points throughout MCLLS.
Converting an older version data base. Because of a change to the MCLLS programming language, data bases created using prior versions of MCLLS (1.3 or earlier) will have to be converted to be run in Version 4.0. Whenever you tell MCLLS to select one of those data bases, MCLLS will automatically convert the data base. It will not have any visible effect on any of your data.

Note: The Conversion may take time depending on how fast your computer runs and how large your data base(s) is/are. MCLLS will tell you that the automatic conversion is in progress.

Figure 2

Note that the example shows that the Drive is D: \ rather than the C:\ drive where the Installation Program told you to install MCLLS. Because a MCLLS data base may be classified or, at least sensitive, this manual will sometimes use the D:\ drive for the examples. It represents a removable drive or a Bernoulli drive, or some similar external drive that you can lock up in a secure container. One additional reason for this is to emphasize that MCLLS does not care whether the system and the data base are on the same drive or not.

4. Build a new data base. Selecting this option merely enables you to start building a group of lessons learned from scratch. MCLLS will ask you to enter on what drive and in which directory to build the new data base. Then, MCLLS requires that you give the new data base a name up to five characters long.
5. **Delete an entire data base.** This is not an option you are expected to use very often, but discussion of it points out two conventions you will see throughout MCLLS. First, you cannot delete data in a single step; the program consistently requires you to confirm a decision to delete data. Second, it reminds you that once you delete data it cannot be recovered. Third, MCLLS will not let you delete the data base in which you are working. If you try, MCLLS will give you a message telling you that you cannot, and require you to press <Esc> to continue working. If you choose to delete another data base, MCLLS will give you a confirmation message with "No" as the expected answer. You can only delete an entire data base after you change the N to a Y, then press <Enter>.

Once deleted, you cannot recover the deleted data base.

Figure 4
6. **Copy an entire data base.** Copying an entire data base is an extremely useful option. (It is the equivalent of a DOS Copy function). Because in many cases copying may be to a 3½ or 5½ inch diskette (in the A:\ or B:\ drive), always be certain to pay attention to the size of the data base you want to copy. Your master data base, for example, will be—in most cases—too large to fit on a diskette.

Note: While the data base is copying, MCCLLS will provide you with a message that copying is in progress. That, too, is a common feature of MCCLLS. If you had chosen the Build a new data base option at the outset, you would have seen windows telling you that MCCLLS was making files for the new data base to utilize.

![Image](image.png)

7. **Rename an entire data base.** To **rename a data base** does nothing else to it and changes none of the data within it. It is useful if you have made a mistake (such as calling the Team Spirit 92 data base, "TS-93," for example). MCCLLS reminds you which data base you are going to rename and asks you to enter the new five (or fewer) character name. MCCLLS then asks you to confirm the change to make sure that is what you really want to do. The confirmation window is pre-set to "N" so <Enter> alone will not execute the Rename option. As with other "fail safe" features of MCCLLS, this option requires you to change the "N" to a "Y" to rename the data base.

8. **About MCCLLS.** This option merely gives you a single screen that tells you the point of contact (after exhausting the available help at your own command) if you have a question or require assistance using the system.
9. **Exit MCLLS.** The final File function is to exit the program. Typically, MCLLS asks you to confirm even that choice of action. You do not have to return to the File function to end a MCLLS session. At almost any point in the program, pressing the `<Alt-Q>` key combination will bring up a screen asking you to confirm that you want to Quit MCLLS. Pressing `<Enter>` will end the MCLLS session at that point.
1. **MCLLS Browse Function.** In previous versions of MCLLS the BROWSE Function was called DISPLAY. Browse permits you to scroll through a data base in a display only manner. It is the **safest** function to use when familiarizing yourself with MCLLS. Browse permits you to view all aspects of each lesson learned, such as the Administrative Data, the Narratives, the Keywords, etc. In Browse, you activate the various parts of each record with several of the same "hot keys" as in the Modify/Edit and Modify/Add options. This allows you to gain real familiarity with the organization of the data as well as the functioning of the MCLLS software. In fact, using Browse in combination with Searching the data base can make you fairly expert in handling the system without ever taking a chance of corrupting good data.

2. **The Browse administrative data screen.** Unlike the Modify/Edit & Add options, Browse activates both Lessons Learned and RAP administrative data screens automatically. Viewing them at the same time makes it quicker and easier to run through a **current selected list** of records that you have no intention of changing or adding to.

![Figure 6](image-url)
3. **Browse and the Current Selected List.** Whether you are using BROWSE or any other Main Menu Function, always keep in mind the phrase "**current selected list.**" In MCLLS, the actions you choose to execute are normally on an individual record (the administrative data, narrative paragraphs, and associated keywords of an individual lesson) or an entire group of records. This group is called the **current selected list** and it appears at the bottom left of the Main Menu screen. At the bottom right of the screen, the name of the data base you are about to display is also shown. These messages are visible most of the time in MCLLS.

4. **<Alt-A> and <Alt-U> "Hot Keys" in Browse.** The "hot keys" in *Browse* are also slightly different. At the bottom of Figure 6, you will see seven of them. The five that are common to the **Modify/Edit or /Add** options will be discussed in the next part of this manual. Two are unique. Neither **<Alt-A>** nor **<Alt-U>** are shown in the **Modify/Edit or /Add hot key window** (although they are viable, "hidden" options there just the same). The **<Alt-U>** option provides the ability to remove a particular record from a **current selected list.** This is useful if you have searched a data base to establish a subset of records for a particular area of interest. For instance, it might be all the lessons learned with "HLZ (HELO LDNG ZN)" as a keyword. Then, when you read both of those lessons in detail, you might decide that one of them really does not relate to your current work. Pressing **<Alt-U>** would drop the inappropriate lesson from the **current selected list.** If you change your mind right away, the **<Alt-A>** permits you to **Add** it back to the **current selected list.** The "right away" idea is important because once you go on to another lesson learned in the list, the **<Alt-A>** can not override the **<Alt-U>** because MCLLS does not know which previous record was "UNSELECTed." It should be understood that **UNSELECTing** only removes from the **current selected list.** It does not alter the **UNSELECTed** record and it does **not** delete it, or remove it from the data base.
CHAPTER 5 - UPDATING AND MODIFYING AN EXISTING DATABASE

1. MCLLS Modify Function. There are three options under the MCLLS Modify function. The first is to edit, which means to update or change data already in the system. The second is to add new lessons learned to the data base. The third is to remove or delete lessons learned or other information from the data base, such as individual keywords associated with a lesson learned. (The Edit option also permits adding lessons learned to the end of the data base as well as marking lessons or keywords for deletion.) These capabilities will be explained in the appropriate sub-paragraphs that follow.

![File Browse Modify Search Reports Import/Export Other]

Current selected list: (2 of 20)
Name of data base: MSMAL
<F1>-Help | Modify the administrative data, narrative and keywords of a Record

Figure 7

NOTE: The arrowhead "►" symbol shown to the right of the Delete option indicates that option has two or more sub-options and that pressing the <Enter> key when the option is highlighted will result in an additional menu appearing.

2. The Modify/Edit Option. Selecting Edit allows you to make changes to records already contained in the data base. Changes include adding information as well as correcting erroneous information in those records. Procedurally, you have to move to the relevant field; the system is then ready for you to begin typing.

NOTE: Because there are several administrative data fields that require information in every lesson learned record, you cannot use a mouse to jump from field to field in the Modify Function.

a. Administrative data. Experience has shown that most editing of the administrative data fields will be to enter additional information, so the system "defaults" to the insert mode as opposed to the typeover mode. If you want to correct an old misspelling, for instance, pressing the <Insert> key would switch you to the typeover mode, and pressing the <Insert> key a second time would return to the insert "default."
b. Modifying Lessons Learned Administrative Data. When the administrative data screen appears, a blinking cursor will be evident at the beginning of the title field.

(1) Pressing either the <Tab> or the ←→ keys will move the cursor ahead to the next field. (The ↔ and ←→ keys only move the cursor one space ahead or back within a data field.) You can make corrections or additions at whichever data field you choose.

(2) If you want to change one of the entries on the last line of the administrative data screen, pressing the <F8> key at that point will provide a window of acceptable entries. Whenever you see an asterisk (*) beside a MCLLS data field, a complete list from which to select an acceptable entry will pop up. Using the arrow keys, you can move to your chosen entry and press <Enter> to accept your entry.

NOTE: The back facing arrowhead in Figure 9 is pointing to the "F" at the "Type" field. It blinks on and off to point out that the active pop-up window is associated with that particular data field.
c. Choosing not to Enter RAP Administrative Data.
Information provided on this screen is normally provided by CG, MCCDC (C391). However, you may find other in-house uses for this screen at your command. When the administrative data screen appears, the bottom half of the screen will be empty. Pressing the <Page Down> key will pop up a window asking you if you want to enter RAP (Remedial Action Program) information. Similarly, pressing either the <Page Down> or the <Enter> key after reaching the ECHelon data field will pop up the same question. MCLLS anticipates that "No" will be the most frequent answer. If you do intend to enter RAP information, you have to change the default of "N" to a "Y" then press <Enter>.

![Figure 9](image)

For fields marked with an '*', press <F8> for a list of acceptable values.

Make changes and press <PgDn>

Figure 9

d. Modifying the Contents of Existing Lessons Learned.
After modifying administrative data or choosing to by-pass those fields, pressing the <Enter> key when the "N" is visible (as shown in Figure 8) will bring up a "Hot key" window at the bottom of the screen for you to modify the remaining contents of the lesson learned. The "Hot key" window is a listing of the keys that are active for this screen. From this window you can modify keywords, narrative descriptions, add a new lesson learned, mark this lesson learned for deletion, move to the next lesson learned, moved to the previous lesson learned, return to the menu or return to the administrative data screen.

![Figure 10](image)

Figure 10
e. **Modifying Keywords.** Pressing the `<Alt-K>` keys will bring up the list of keywords associated with the current lesson learned. MCLLS then provides you with additional hot keys giving you more options. Essentially your choices are to remove keywords previously assigned to that lesson learned, or to assign additional keywords to that lesson learned. In effect, that is what you are doing when you change all the "II MAF" keywords to "II MEF", if you change "LVT" keywords to "AAV" keywords, or when you change "RTL-7" to "RLT-7".

(1) If you wish to remove a particular keyword from the list, simply MARK it by pressing the `<Delete>` key when the highlight bar is over that keyword. An asterisk appears to the right of that keyword and it remains "MARKed" until you actually delete it or remove the mark. "UnMARKing" can be done by pressing the `<Delete>` key a second time when the asterisk that marks the keyword is highlighted, or by pressing the `<Esc>` key and backing up without saving. (The deletion process is completed in the **Modify/Delete** option explained later in this chapter.) Then press the `<Enter>` key to confirm that you wish to remove the MARKed keyword(s) from the list. Note at Figure 11 that MCLLS will show that the highlighted keyword is MARKed and also indicate which keyword of the total number associated with that lesson learned that it is. Both of these messages are at the bottom of the window.

---

**Figure 11**
(2) If you wish to assign an additional keyword, press the <Insert> key and a highlight bar will appear at the end of the keyword list. At that point, pressing the <Alt-T> will pop-up the Marine Corps Automated Keywording System (MCAKS) keyword Template (see Appendix F) or pressing the <Alt-L> will pop-up an alphabetical listing of the most common keywords. (Many of the same keywords are in both lists. The Template organizes them according to functional area responsibility; the List is alphabetical.) Choose from either the Template or the List by the same process, that is, moving the highlight bar to the desired keyword, then pressing the <Space bar> to select the keyword. After you have selected all of the keywords you want to add from the Template or the List, press <Enter> twice to accept them and then to save them. If the keyword you wish to assign is not included in either the Template or the alphabetical List, you may type your chosen keyword in that same highlighted field at the end of the currently active keywords.

Figure 12

Note: There are nine phrases included in the Template that are "marked" by three asterisks before and after the phrase. Those phrases are counted in the 222 total Template keywords even though they are NOT keywords and are included only to give the Template proper organization.

f. Modifying Narratives. If you press the <Alt-N> key combination to indicate a desire to Modify/Edit the narrative text paragraphs of your lessons learned, MCLLS "jumps" you to a screen showing paragraphs 5 through 12 of an Summary MCLL or paragraphs 5 through 9 of an individual MCLL of the "MCLLS Long Report" format. (Remember, paragraphs 1 and 2 are administrative data, keywords are in paragraph 3, and paragraph 4 is the title of the lesson learned.) In addition, the window is not very large, and only a small portion of the entire narrative shows at
any given time. The lines "roll up" to enable you to get from the start to the finish. Note the <Insert> at the bottom right of the window. To change to typeover simply press the <Insert> key for editing in that mode.

Figure 13

(1) Pressing the <Alt-S> key combination at any point is helpful if you are making a lot of changes to a long narrative. That way, you can save the changes without leaving the narrative you are editing. Whenever you finish with any particular lesson learned, pressing the <Ctrl-W> will both save your work, and return you to the hot key screen.

(2) To check the spelling of your work, and provided that the spell checker component is installed, the <F5> key will check each word from the location of the cursor to the end of the present narrative. Similarly, if you choose to employ the text (string) search, pressing the <F7> key will do that for you beginning at the location of the cursor and going through to the end of the narrative. If you want to employ either of those features, you should be at the beginning of the narrative. One thing to remember about the spell check feature is that it will
know if you have misused a word, only that you have spelled
something in a way it does not recognize. Accordingly, if you
wrote include when you meant exclude the checker will not catch
it. Similarly, if you wrote "their" in place of "they’re" the
system will not highlight the error.

NOTE: Pressing <Shift-F7> will repeat the last in-narrative text
search, and <Ctrl-F7> will "toggle" upper and lower case sensitivity.

NOTE 2: After modifying the narrative of a MCLL and when you return to
the MCLLS Main Menu, the program will pack the narratives automatically.
Packing gets rid of duplicate copies of narratives and saves electronic
storage space on your disk.

3. Adding a Lesson Learned in the Modify/Edit Option. At the
same administrative data screen shown at Figure 10, pressing the
<Insert> key will permit you to add a new lesson learned to the
end of the current data base. The screen will first ask you if
it is a Summary MCLL, and the expected answer is "No." For
simplicity’s sake we shall discuss the expected answer because
only the format changes between the two types of a MCLL.

a. In Figure 14 you will see that the new Record Number
will be at the end of the current data base, and that certain
administrative data will be carried forward to the new record.
Importantly, MCLLS will have already assigned a MCLLS NUMBER to
the new lesson learned. Next, you should see that the
CLASSIFICATION is not carried forward. Whether or not a lesson
learned is classified is totally dependent on the contents of
that lesson learned alone. MCLLS does assume, however, that the
same exercise and the same units, etc. should be carried forward.
When the screen at Figure 14 appears, all you have to do is begin
to enter the necessary information.

MODIFY MCLLS NUMBER 41651-36445, RECORD NUMBER 00021

TITLE: Each Lesson Learned Also Has a Distinct Descriptive Title

Nickname: YF 07-1 Date: 06/05/89 Sponsor: Ill MAF
Submitted by:
ORG: C.D. 11TH MAU POC: DSN: Conn: ( )
*Type: *Classification: *Subject: Lesson? Echelon: MCCOC (HF)

For fields marked with an '*', press <F8> for a list of acceptable values.
Make changes and press <PgDn>

Figure 14
b. After completing the administrative data entry, pressing the <Page Down> key twice and pressing the <Alt-N> key will take you to the appropriate individual item lesson learned format for the narrative. After you finish entering the text, pressing <Ctrl-W> will complete the action and return you to the Hot Keys shown at Figure 10 all over again.

Figure 15

4. Marking a Lesson Learned for Deletion in the Modify/Edit Option. Because (for instructional purposes), Figures 14 and 15 indicate that a new MCLL (Record #21) has been added to the data base, it will be convenient to use that MCLL to demonstrate the MARKing for deletion feature of MCLLS. Pressing the <Del> key from the same Hot Key window as shown at Figure 10 will result in the appearance of a flashing message at the top and bottom left of the MCLLS screen. The message says simply, "Marked for Deletion." Until you either DELETE the record or UNMARK it, the message will remain flashing at the top left. (The one at the bottom may disappear depending on what additional screen you activate.) Remember, MARKing the record will not DELETE it. DELETing it requires additional action on your part.

5. Jumping to the Next Record and Returning to the Previous Record. When the <Page Down> and the <Page Up> Hot Keys are visible, pressing one of them will either move you ahead or back one lesson learned in the current selected list. Pressing either
of those keys on the alternate screens, remember, anticipates your modifying data in that lesson learned and pops-up the window asking if you wish to change RAP data. Pressing <Page Up> at the first record or <Page Down> at the last, will return you to the Modify/Edit main menu screen. The <Esc> key will return to the menu screen whether or not the Hot Key message says so. The <Tab> will either move you ahead one field when there is no Hot Key message on the screen, or take you back to the Title field awaiting your action to Edit the record when that message is visible.

6. The Modify/Add Option. This option is normally the one to use when adding a complete after action report, or any other series of "original" lessons learned to your data base. Just as in the Modify/Edit/Add process, MCLLS will jump to the end of the data base, bring up a window asking you if you want to add a SUMMARY MCLL, and show you the administrative data that is routinely carried forward from one lesson learned to another.

---

a. If you answered "Y" to whether or not you were adding a SUMMARY MCLL, you will see "SUMMARY" (along with a hyphen) show up in the Title field. The administrative data screen will otherwise look exactly like the screens for the Modify/Edit procedures. The narrative data screens will show a different format, however, and MCLLS will not ask you if you want to enter RAP data if you are ADDing a SUMMARY MCLL.
b. The Hot Keys described in the preceding pages and paragraphs explaining the Modify/Edit options are identical in the Modify/Add option. What is otherwise very slightly different is that in ADDing administrative data to those fields marked with an asterisk (the bottom line), pressing the <Enter> key to accept the previous data field entry will pop up a window of acceptable entries automatically.
c. A Final Note on Modify/Add. Although this black and white manual cannot replicate changes in screen color, when you do enter a classified record the NO CLASSIFICATION message at the top and bottom of the screen changes to the appropriate classification and the data field has a noticeable change in background color. Further, the colors for UNCLASSIFIED, CONFIDENTIAL, SECRET, and TOP SECRET are each distinct. The background color for CONFIDENTIAL is a light green, for example, and for SECRET it is bright red. Please note that this discussion applies to the classification administrative data field; it does not automatically take care of classifying the paragraphs and sub-paragraphs in the narrative text field entries, and MCLLS does not change background color in those narrative fields, either. Ensuring that each paragraph that needs a classification has the proper one entered is the responsibility of the person entering the MCLL.

7. The Modify/Delete Option. This option enables you to get rid of records or parts of records (such as keywords) that no longer belong in your MCLLS data base. It is also the option for "cleaning up" your data base. This "cleaning up" is a necessity from time-to-time if you do much editing. As noted earlier, the right arrowhead indicates a sub-menu. By pressing the <Enter> key with the Modify/Delete option highlighted, a menu of four additional choices is presented on the screen.

![Menu Options]

File Browse Modify Search Reports Import/Export Other
Edit Add Delete x
Mark Unmark Delete all marked items Pack narratives

Current selected list: (1 of 21) Name of data base: MSMAL
<F1>-Help | Mark for deletion all selected Records

Figure 19

a. Modify/Delete/Mark. The first choice on the sub-menu is to MARK what you intend to delete. MCLLS makes this option a multi-step procedure. The simple reason for that is because once data is deleted it is gone for good. Accordingly, MCLLS requires you to MARK what you intend to delete as a separate preliminary step to any actual deletion.
(1) MCLLS will remember what you have MARKed, however, and the records, milestones, or keywords you MARK remain MARKed until you either UNMARK or actually DELETE them. That capability demonstrates the importance of the Search function, and the importance of conducting a proper search. (Search is discussed in the next section.)

(2) It is also important to remember that MCLLS will MARK everything in the current selected list. Because MCLLS remembers what you have MARKed for deletion from session to session, remedies are built in to help you avoid deletion errors.

b. Modify/Delete/Unmark. UNMARKing is a simple action that can be done repeatedly with no adverse effects whatsoever. It is well for you to remember, however, that you are UNMARKing only within the current selected list. If you MARKED an entire data base on Tuesday, for example, and then on Friday narrowed to only numbers 19 and 20 before choosing to UNMARK, you would UNMARK only numbers 19 and 20.

c. Delete Marked Items. This option will remove the data you have marked for deletion from your data base. It will be gone and unrecoverable. For that reason, pressing the <Enter> key at this option presents you with a window that shows you what is MARKed for deletion. When you confirm that you intend to delete what is shown in the window by pressing the <Esc> key, MCLLS again asks you if you really do intend to delete. The "default" answer is that you do NOT want to delete, and you must change the N to a Y before pressing the <Enter> key to complete the deletion. Note also that MCLLS reminds you of the permanence of deleting data with that message conspicuously centered at the bottom of the screen. When you insert the "Y" and press <Enter>, MCLLS also tells you that it is reindexing and packing. These are automatic actions that help to "clean up" your data base whenever you choose to delete data.
d. **Pack Narratives.** The larger your data base and the more often you edit your narratives, the more important it is to PACK the narratives. PACKing is necessary because MCLLS is written in a compiler that makes an entirely new narrative every time an existing one is edited. It then points to the most recently edited narrative as the "active" one, at the same time that there may be a half dozen previous "copies" of that lesson learned narrative elsewhere in the data base. In some cases, PACKing can reduce the amount of disk space that the data base uses very significantly. Even though MCLLS PACKs automatically when you Modify narratives, the option is important enough to be left on the menu for you to implement.
1. **MCLLS Search Function.** The Search capability is the key to exploiting the characteristics of a computerized data base. Indeed, MCLLS permits you to search through literally thousands of "pages" of information almost instantaneously and with great accuracy. This is done with the Search Function in which you specify that you want access to only those records meeting criteria of interest to you at any given moment. Virtually everything you do with MCLLS requires that you first establish the proper current selected list.

**The Current Selected List.** The current selected list is probably the most important concept that you need to understand in order to use MCLLS effectively. When you select Use an existing data base immediately upon bringing MCLLS up on your computer, that entire data base is the current selected list. You must be able to set specific criteria to reduce the size of such a data base for effective work to get done. You need to set, or establish, the current selected list to coincide with only those records in which you have immediate interest. MCLLS not only provides you with powerful search capabilities, it also permits you to combine search criteria in a variety of ways to make your searching both rapid and accurate. For convenience, we call one group of capabilities search METHODs, and another the search TYPEs.

![Figure 21](image)

2. **The Three Search Methods.** As indicated immediately above, the choice of the word "method" is not a functionally required choice. It is made because MCLLS permits users to combine one of three kinds of searching with one of six other ways to search at
the same time. You can, in addition, combine several searches sequentially, with each iteration providing a new current selected list with which to work. The six "types" of search do not change when you change the "method" of searching; they remain constant whether you NARROW, EXPAND, or EXCLUDE the list.

a. Narrow the Current Selected List. Each time that you NARROW the current selected list, you are using logic that combines two or more specified criteria to form a new, NARROWer list. Even if you begin with the entire data base and give your search only one criterion, you have NARROWed the data base from the whole data base to a subset of it. To NARROW is to demand that each record in the new current selected list meet criterion A and criterion B and criterion C, etc. Logically, it is possible the new list could be exactly the same size as the former one; it could not be larger.

b. Expand the Current Selected List. In each iteration of EXPANDING the current selected list you are giving the computer "OR" logic with which to work. Obviously, you cannot begin an EXPAND action if your current selected list is already the entire data base. Provides that all records require one criterion to be either "A", "B", "C", or "D", you could EXPAND the current selected list to include all those records containing criterion A, OR criterion B, OR criterion C. EXPAND is a useful method for people who like to build a current selected list from NONE or from some BASELINE requirement such as beginning with all the records that have MAGTF as a keyword.

c. Exclude from the Current Selected List. This method of searching is based on an "AND NOT" treatment of the current selected list. The method, in effect, searches by telling the system that the user wants all the records that are NOT associated with some criterion, such as "D". Including all records that are "A" or "B" or "C" would give the exact same result as excluding all records that are "D". To exclude is useful, for example, if you wish to investigate all the "desert warfare" lessons learned from training exercises, but not those for Operations DESERT SHIELD and DESERT STORM.

3. The Six Search Utilities. Again, there is nothing to require the use of the word, "utilities." At the same time, several of them are much like computer program "utilities" in general.

a. The First Three Search Function "Utilities". The six options beneath the NARROW, EXPAND, and EXCLUDE choices are mostly self-explanatory. Reset to All, for example, resets the current selected list to 100 per cent of the records in the current data base. Reset to none does exactly the opposite. Restore last search is particularly useful if you know you have made an error of choice, e.g., EXCLUDIng records with the keyword
INTELLIGENCE instead of EXPANDING to include them; it is equally helpful if the result of the most recent search is unexpected and unwanted and you wish to back up one search to try another criterion.

Figure 22

b. **The Second Three Search Function "Utilities".** To **Save search to disk** is simply to "set aside" the records of your **current selected list.** It is particularly useful if you must establish the same search criteria frequently, or if any particular search is a long or a difficult one to remember. To be valuable to you, the new **current selected list** should be one that you anticipate you will need to use again. To **Restore search from disk** is the inverse action of saving one to disk.

(1) In both Saving and Restoring searches, MCLLS has default names for the files which will be the name of the current data base with a suffix ".SAV". Accordingly, if you want to save more than one "permanent" search, you should give them similar names rather than permitting MCLLS to assign the default name, in effect writing over previous ".SAV" files and retaining only the very most recent. You might have one "MSMAL.SAV" file, for example, and one MSMLX.SAV file. When you choose to **Restore search from disk**, MCLLS asks you to make a choice of what you wish to do with that search as a next step.

(2) The second screen that follows asks you to select the saved file that you want to restore. Pressing the <Enter> key at the **Display search criteria** will pop up a window listing the criteria for both the method and the type of the current search.
4. The Six "Types" of Searches. The second-level search menu lists these six options, and you should note that they are identical whether the menu is activated from the NARROW, EXPAND, or EXCLUDE "methods" in the primary Search menu.

a. The Keyword Search. There are several reasons why KEYWORDing is the first option on the menu. First, KEYWORDS are logical "pointers" to narrative subject matter. Second, they are of sufficient importance that an artificially intelligent subsystem (MCAKS) has been developed to make KEYWORDing accurate and consistent. MCAKS is used to keyword all lessons learned in the master data base Marines receive from MCCDC (see Appendix E for a listing of MCAKS generated keywords). Third, MCLLS stores KEYWORDS in a separate, indexed file that makes searching with KEYWORDS extremely fast.
The Importance of Consistency in Keywording.

Experienced Marines will choose at least slightly differing KEYWORDS from each other whenever asked to assign KEYWORDS to the same lesson learned narrative. Moreover, the same "expert" occasionally will choose different KEYWORDS for the same lesson learned on different days, or when assigned to a different organization that has a different daily emphasis than that person's previous organization. (It should not be difficult to imagine a different daily "mindset" in the same Marine when the workplace is the Pentagon or recruiting duty in Chicago as opposed to the Fleet Marine Force.) A "computer system" such as MCAKS certainly lacks many of the best qualities of human expertise, but it is indeed more consistent than human beings. Moreover, the system will always spell a KEYWORD exactly as it is designed to do. In dealing with military jargon, acronyms, weapons systems, tactics, etc., that spelling consistency is every bit as important as consistency in the substance of KEYWORDing.

How a Computer "thinks" regarding spelling. First of all, computers deal in absolutes. Everything within them is arranged by a series of ones and zeros, electrical charges that are either "on" or "off". For that reason, computers see an exact match or no match at all.

(a) In MCLLS, keywords are limited to 25 characters. That limit prevents the use of many full names such as, "SECOND MARINE AIRCRAFT WING," or "1ST MARINE EXPEDITIONARY BRIGADE," or all sorts of tactical phrases, weapons, or names of other equipment. Each must be abbreviated (or truncated) in exactly the same way for the computer to be an efficient tool in finding it again.

(b) Accordingly, the efficient way to exploit the power of a computer is to program it to find and read all the acceptable variations of a "keyword" that it finds in "free" text, then assign it a standard spelling in the indexed (keyword) file that is used to sort the data base. (Which is part of what MCAKS does.) To go along with that, MCLLS is programmed to show users exactly how MCLLS spells common keywords by incorporating pop-up choices for them to select alphabetically or in accordance with functional area.
(c) At Figure 25 is a sample of the keyword template that is built into MCLLS. It was activated by pressing <Alt-T> from the same Hot Key choices as were shown throughout the discussion on Modify. Clearly, the MCAKS truncation of MPS (MARITIME PREPOS SHP) could have a large number of variants. By building one variant into MCLLS the system permits you to select the "accepted" one. Later, when you search, doing it with the same template guarantees accurate retrieval of all lessons learned with MPS as one central idea to the narrative. If you had pressed <Alt-L> for the keyword List, you would have found "MPS (MARITIME PREPOS SHP)" in alphabetical order. If your desired keyword is not included in either the Template or the List, a printed list of over 2650 MCAKS recognized keywords is at Appendix E.

(d) The Importance of Indexing the Keyword File. To the computer, KEYWORDS really are nothing more than "pre-processed text strings." As such, they can be treated in a distinct manner from words we have not "pre-processed". In MCLLS, these KEYWORDS are assigned to their own file (which contains a "pointer" back to the appropriate narrative record), and then they are indexed. Indexing puts them in order so that MCLLS can go to that file and find them instantly. If the
KEYWORDS were not pre-defined and stored in their own indexed file, the only way to provide this sort of search would be to index every word in every narrative. That would also require that the ability to Modify MCLLS be eliminated, an alternative that is not always acceptable. Accordingly, the KEYWORD search is the best option to create a current selected list that matches the subject matter of interest to you at any given time. Nonetheless, the KEYWORD search alone is not likely to answer the mail very often. Normally, it will be used in conjunction with other search criteria.

NOTE: Since the Master MCLLS data base is on CD-ROM and cannot be modified, each (meaningful) word is indexed. In spite of that, the Keyword Template is still a very useful organizational tool for your searching of a CD-ROM data base of MCLLS.

b. The Administrative Data Search. In a single search you can apply the whole range of administrative data categories, or, as is most likely the case, just one or two. You will probably want to search by some administrative data fields a lot more than by others. It does not seem likely, for example, that you would attempt to search for a lesson learned by "Title" unless you were working with a printed Title Report in hand.

(1) It is extremely common, however, to search for all the lessons learned from a previous exercise in the same series as that in which you are about to participate. It is equally common to want to inventory lessons learned from a standpoint of TYPE (of training exercise) or SUBJECT because your responsibilities require you to keep track of intelligence issues that are reported from joint exercises and compare them with all intelligence issues that are reported from Marine field exercises.

(2) Figure 26 shows such an administrative data search being made using the three data fields that respond to the <F8> key with a fixed, pop-up list. The user could just as easily have entered COBRA GOLD or OCEAN VENTURE in the exercise Nickname field.
(3) Administrative data searches can combine one acceptable entry from each different data field in a single search; they cannot search for multiple choices within each field in a single search. If, for example, you wanted to select all the (Type) CPX and FTX lessons learned from Cobra Gold, you would have to make two separate searches.

(4) After your search criteria are entered, MCLLS asks you whether or not your search must be for TYPE = FTX (for example) and SUBJECT = INTELLIGENCE both in the same record (Option 1), or searching for all records that meet either criterion (Option 2).

c. The Text String Search. A text string search is a search for several sequential characters within a narrative. It is an extremely useful and helpful technique to access those records of immediate interest.

(1) Many occasional users of MCLLS tend to want to use this technique far too soon in the SEARCH process, and you may
find yourself having to explain to them why they should not. As an example, think of a database with thousands of records and the boss, thinking of Maritime Prepositioning, says, "Find me all the lessons learned about MPS." MCLLS will do that in a text string search, but will take "forever" doing it because it will read every narrative looking for those three letters in that exact sequence. MPS, however, is fairly unique. (Just the same, you might get a lesson learned about MCCRES and Mission Performance Standards (MPS)).

(2) How about CAS? Substitute "CAS" for "MPS" in the above statement and your search would not only be painfully slow, it would also certainly be inaccurate. If you meant to find all lessons concerning the Crisis Action System, you probably would, but you would also find all of them having to do with Close Air Support, Combat Air Speed, Combat Ammunition System, and Cost Accounting Standards. In addition, you'd get all the records including the word "CASualty" as well as the occcasional use of numerous inconsequential words.

(a) The Most Efficient Use of the Text String Search. For the sake of consistency with numbers, presume that you had narrowed a data base of 5,000 lessons learned to a current selected list of only 500 by a combination of FTX (Type) and COBRA GOLD (Nickname) from the administrative data fields, then further narrowed to only 20 records by keyword searches for tactical mobility and maintenance, but your real interest is narrower yet. You want to prevent deadline time of rolling stock in the next COBRA GOLD. At this point it may make sense to you to search by (air or fuel) "filter", or take another approach and search on "contamination," "contaminated," or "contaminants." In a text string, the experienced user would probably search on "contamina" and get each variant of "contaminate" with the single effort. The manual has already talked about how to "spell" unit designations. Does equipment always get written with a hyphen? If so, where? How about M1A2, M1 A2, M-1A2? Importantly, when looking for the M1A2 try ORing the several variations of acceptable use. The AAV used to be called the LVT. Try text string searching for AAV OR LVT after you have reduced the current selected list to a manageable volume of narratives.

(b) Leading and Trailing Blanks, Spaces and Underscore Characters. In a text string search, what follows the text string that you specify does not matter unless you end your text string with the ", _", the underscore character. In that case, your string must end with the final letter you type, and be followed by a blank space. Similarly, if you open or begin the text string with the underscore character, you are insisting that there be a space immediately before your chosen text string. You would not have "casualty" returned as a "CAS" induced keyword if
you had typed "CAS_", that is if you had typed the underscore key following the "S". Furthermore, even though blank spaces do not matter at the end of your text string, they do matter if you precede your text with them. In that case, your text string must begin a word and "space CAS" would return for CASualty, but would not return for the word, "ocCASONially."

d. **Searching by a Range.** MCLLS permits you to search for a range of lessons learned. The screen below will show that the data base has returned to the "original" 20 records. That is because, following the discussion of Modify/Edit and Modify/Add, a RANGE of records from 21 to 21 was established, MARKed, and DELETEd. The RANGE is always the SEQUENCE or RECORD number within the current selected list, also. It is never a range of MCLLS numbers. The MCLL number remains with the same lesson learned for as long as it is in existence.

```
RANGE SEARCH (NARROW)

Use the following range of record numbers 1 to 20

Enter beginning and ending record numbers
<Enter>-Accept  <ESC>-Abort  <PgDn>-Begin Search
```

Figure 28

e. **Search by Sequence Number.** The sequence, or record, number of a MCLL is a temporary number associated with the order of the current selected list. Naturally, it can also serve as a lineal number for the entire data base so long as you are using the entire data base, and you might even remember the contents of a specific MCLL by its "Seq_num" by virtue of working with a relatively small and fairly stable data base. Nonetheless, think of the Sequence Number as a temporary number. Pressing the <Enter> key to select this option enables you to toggle to your selection on the pop-up screen. If you NARROW or EXCLUDE, MCLLS will start you with the current selected set. If you EXPAND, MCLLS will process your choices based on the entire data base.
f. **Searching by a MCLLS Number.** Unlike the Sequence Number which is a temporary identifier, the MCLLS number is permanent. It is associated with a specific lesson learned until that lesson is terminated from the data base. Accordingly, and because the number itself has no particular sensitivity let alone security considerations, searching by a MCLLS number may be a more common undertaking than you might expect. Whenever you define a small (or moderate) current selected list of lessons learned that you want to bring to the attention of a higher, adjacent, or subordinate command, you can effect this search and MCLLS provides you with a sequential listing of the appropriate MCLLS numbers. All you then need to do is communicate the MCLLS numbers and the other command can replicate your current selected list. The quickest secure way to get the appropriate MCLL or MCLLS in your counterpart's hand is by reference to the MCLL number. Remember, just as in searching by a Sequence Number, if you NARROW or EXCLUDE, MCLLS will start you with the current selected set. If you EXPAND, MCLLS will process your choices based on the entire data base.
CHAPTER 7 - CREATING A REPORT

1. The Reports Function. MCLLS provides for seven pre-defined reports. Three are categorized as BASIC Reports and four are RAP Reports. MCLLS enables you to create them, view them on screen, and send them to a printer. All reports are also saved to disk, and each type has a "RPT" suffix. There are two pop-up menus associated with the Create Reports Function because the BASIC and RAP reports each have a distinct sub-menu.

   a. Basic Reports. The three Basic Reports begin with the Long/After Action Report which is a complete record of each MCLL including administrative data, keywords, and narratives. Next, the Title Report lists the titles of all the records in the current selected list, and the Keyword List Report is a listing of all the keywords associated with the current selected list along with a raw number of occurrences and the percentage of lessons learned in which each one appears.

   b. RAP Reports. Again, these reports are used by the Remedial Action Section at MCCDC. You may, however, may find uses for them within your command. There are four Remedial Action Program reports. The Full Report is the first of these and is analogous to the MCLLS Long Report. It contains all the information associated with any lesson learned for which formal Remedial Action has been initiated. In addition to the expected lessons learned narrative information, the Full Report contains information on sources, milestones (by-dates for the management of corrective action), and funding costs. The Office of Primary Responsibility (OPR) Report is analogous to the lessons learned Title Report; in fact what it does is tie the RAP Title to the appropriate OPR and individual Point of Contact. The Validation Report is a schedule of sorts, and ties each RAP to the future activities where the corrective action will be tested. The Status Report is a RAP management summary that provides the number of open and closed RAPs for any current selected list, as well as the percentage of RAPS in that range that are closed.
2. Creating, Viewing, and Printing Reports. Whenever you choose to CREATE a report, the MCLLS sub-menu will ask you to choose the report you wish to create. MCLLS creates your chosen report in a text file format, using the name of the report type and an ".RPT" suffix.

   a. You can overrule that default name and extension, but if you wish to have several different Long/After Action Reports (for example) stored on your computer, it is recommended that you name them LONG1.RPT; LONG2.RPT, etc. If you then press <F4>, a screen showing you the entire library of previously created REPORT files with the ".RPT" extension will appear. If you change the extension, the <F4> will not find your "unique" report.

   b. In addition to advising you that an identically named report file may already exist, (such as "VALID.RPT") MCLLS also responds to a command to create the report by providing a screen enabling you to "tailor" your new report. This is called the PRINTER OPTION screen, discussed in somewhat more detail below.

   c. When you press <Page Down> to tell MCLLS to create the report, MCLLS will flash status information across the screen until the report is printed. As soon as the report is created, MCLLS will begin printing it. When printing is complete, MCLLS will return you to the menu. If your computer does not have a printer hooked up, a message will appear telling you that the printer is not on-line.

   d. If you wish to VIEW the report before PRINTing, simply disconnect your printer (or turn off the printer power) before executing the PRINT command, go through the regular process to print a report, press the <Esc> key when the message about your printer not being on-line appears, then press the <↓> key to highlight the View option, and press <Enter>. The report will be "printed" to your monitor's screen.
3. The Printer Option Screen and Special Printing Considerations. The Printer Option capability gives the user additional control over the possible classification of the report before printing is begun. You will notice that the default classification is UNCLASSIFIED, but pressing the <F8> key enables you to change that easily. Additional options are shown for your tailoring of the report with or without page numbering or with or without a cover sheet. The Print Option Screen also gives you a final chance to "sort" your current selected list with the bottom three data fields. This is an opportunity to have the report order the records based on the data fields that the <F8> key will pop-up. Within each category, however, the order is fixed. That order is from lower to higher numerically and from "a" to "z" alphabetically. When your selections are complete, pressing <Page Down> sends the report directly to your printer.

**Figure 33**

NOTE: MCLLS defaults printing to the parallel port (LPT1). If you do not have a parallel port, the first course of action is to seek help from a computer technician at your location. If and when you have exhausted all reasonable, local efforts to solve the problem, call the MCCDC POC or the Chief Programmer named in the "About MCLLS" screen.

NOTE 2: For most serial printers the following commands entered EXACTLY as shown at the DOS prompt BEFORE starting a MCLLS session, will allow MCLLS to print reports via the COM1 port:

```
MODE COM1:96,N,8,1,P<Enter>
MODE LPT1:=COM1<Enter>
```
1. The Import/Export Function. This function provides ways to transport, update, and copy MCLLS data bases. Specifically, MCLLS provides three export and four import options. The export options include: (1) Creating an export file (for ease of transportability); (2) Writing narratives to a text file (for editing with a word processor); and (3) Cloning (copying) the entire current data base. The import options include: (1) Importing data (MCLLS records) from an export file (created for ease of transportability); (2) Revising (Update) narratives from a text file (edited in a word processor); (3) Appending another data base to the current data base; and (4) Updating the current data base with lessons learned that have been edited in another data base.

a. Create an Export File. Since an export file is the most compact way to transmit all or part of a data base, this option is the most commonly used Import/Export operation. After selecting a data base and (if desired) narrowing the current selected list, selecting this option will produce a screen asking you to give the file a name. Note that MCLLS provides both a default path and file name. Pressing the <F4> key also provides a list of already existing export files (designated by the suffix ".ASC"). This option at least suggests you will copy the ".ASC" file to a diskette for transport to someone else, and you might choose to CREATE it directly to the A:\ drive by changing the path in the screen below.

```
(1) Normally, the user simply presses the <Enter> key to accept the existing default file name, or positions the cursor to overwrite and create a new, distinct file name. If any selected file name already exists when the user presses <Enter> to
```
select it, MCLLS will ask to confirm your decision to overwrite it or not. Pressing <Enter> will create the file.

(2) Typing "N" in place of the "Y" and then pressing <Enter> will return you to the previous screen. Simply pressing the <Esc> key will do the same thing. Normally, at that point, you would give a unique name to the report you have just created.

Note: If you intend to transmit data via the message center or a telephone modem, you must generate an export file and transmit the export file rather than the data base itself.

NOTE 2: Even though the export file is an ASCII text file, DO NOT attempt to edit that file. Loss of data is almost certain to result if you do.

b. **Import Data from an Export File.** IMPORTing is the opposite of the Create an export file option. Selecting it will produce a window asking you to identify the file name of the export file to be IMPORTed into the current data base. Once again, the user can either accept the default filename "EXPORT.ASC" or use <F4> to select an alternative. Once the file name is selected, pressing the <Enter> key will complete the process.

(1) If the information in the EXPORT file already exists in the current data base, it will be updated automatically. If the information does not already exist, new records will be added to the end of the current data base.

(2) Naturally, if someone has given you an export file to IMPORT from a 3½ or 5¼ inch diskette, you may IMPORT straight from the A:\ drive by typing over the default information.

**NOTE:** After IMPORTing data from an export file, MCLLS will Pack the narratives automatically, removing old copies of them.
c. Write Selected Narratives to a Text File. This is procedurally very similar to the Create an export file option described earlier. After activating a data base and (if desired) narrowing to a new current selected list, selecting this option will prompt the user to name the file of narratives to be created.

(1) In this case, note that the default name for such a file is the current data base name with the suffix ".TXT." A list of already existing ".TXT" files will appear if you press the <F4> key. Pressing the <Enter> key will accept the default name, or pressing <Enter> after changing the name, will create the file. Once again, the smaller window asking you to accept or cancel an overwrite action will appear should there be an existing ".TXT" file of the same name.

(2) Because you will use this EXPORT option principally to edit the narratives, you may wish to change the path to your word processor directory, such as "C:\WP\DOCS," while retaining the "SMALL.TXT" filename MCLLS creates.

![File Browse Modify Search Reports Import/Export Other](image)

<table>
<thead>
<tr>
<th>Create an export file</th>
<th>Import data from an export file</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write selected narratives to text file</td>
<td>Revise narratives from a text file</td>
</tr>
</tbody>
</table>

NARRATIVE WRITE TEXT PROCEDURE

Enter the name of file to create.

D:\MCLLS\SMALL.TXT

Press <F4> for a directory of files.

Current selected list: (20 of 20) Name of data base: MSMAL
<Enter>-Accept <Esc>-Abort

Figure 36

d. Revise Narratives from a Text File. This is the converse of the Write selected narratives to a text file option described immediately above. Selecting it will produce a screen that asks the user to name the text file to be "read" into the active data base. The default name will be the name of the current data base, with the suffix ".TXT." Accepting the default name is normally the best choice since you are replacing narratives with edited copies of themselves. Pressing <Enter> at the naming screen will result in the narratives being read into the current
data base. MCLLS keeps track of the records by Sequence Number, separating each individual narrative with a string of three asterisks, the Sequence Number, and another three asterisks. Therefore, it is very important that your Writing to and Revising from actions do not get the file name confused.

NOTE: If you edit the text file in a word processor, you must save the edited file as an ASCII text file, that is, without any control characters whatsoever. The ASCII text file must be set to no more than 63 characters per line.

NOTE 2: If the file contains Sequence Numbers that do not exist in the current data base, they will be ignored.

e. **Clone (Copy) the Current Data Base.** This option is used to make a copy of all or a specific part of the current data base. All administrative data, narratives, keywords, milestones, and sources are copied to the new data base. The default location for the new data base is in the current directory. Accordingly, if you intend to clone to the current directory, you must provide a new and unique data base name. If you desire to keep the same data base name, the clone must be created in a different directory or on a different drive.

```
Figure 37
```
f. **Append a Data Base to the Current Data Base.** This option simply adds a MCLLS data base to the end of the current one. Having one data base already activated, this option provides a window from which another data base can be selected. The user simply highlights the data base to be appended to the current one, and presses <Enter>. In the window, for example, selecting the MSMLX data base would result in the 22 MSMLX lessons learned being appended to the 20 lessons learned in MSMAL. The result would be a 42 lesson learned MSMAL data base. Note that the MSMLX data base will remain unchanged (i.e. a data base is not "consumed" when appended to another--the records are simply copied).

![Figure 38]

Current selected list : (20 of 20 ) Name of data base : MSMAL

File Browse Modify Search Reports Import/Export Other

Create an export file
Import data from an export file
Pick a Data Base

Drive/Directory
D:\MCLLS\ Data Bases

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANDY</td>
<td>Mar 9, 1993</td>
<td>229</td>
</tr>
<tr>
<td>MSMLX</td>
<td>Mar 5, 1993</td>
<td>22</td>
</tr>
<tr>
<td>MSMAL</td>
<td>Mar 9, 1993</td>
<td>20</td>
</tr>
</tbody>
</table>

File Browse Modify Search Reports Import/Export Other

Pick a Data Base

Drive/Directory
D:\MCLLS\ Data Bases

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANDY</td>
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<td>229</td>
</tr>
<tr>
<td>MSMLX</td>
<td>Mar 5, 1993</td>
<td>22</td>
</tr>
<tr>
<td>MSMAL</td>
<td>Mar 9, 1993</td>
<td>20</td>
</tr>
</tbody>
</table>

Current selected list : (20 of 20 ) Name of data base : MSMAL

<End>-Help | Enter the drive and directory where to find the desired data base.

**Figure 38**

---

g. **Update Current Data Base with Another Data Base.** This function is used to update the lessons learned in the current data base with the same lessons from another (source) data base. It finds identical MCLLS Numbers in the current data base and overwrites the record wherever a duplicate MCLLS Number is encountered. Its purpose is to "fix" a data base that might have been corrupted, or to replace certain information based upon other reasons such as having had a single person edit and "fix" a range of lessons learned from the master data base at your headquarters. If there are lessons learned in the other data base in addition to those contained in your current data base, they will be APPENDEDed to the end of your current one. UPDATing simply replaces records already in existence and APPENDS records that are not already in the data base. While updating, MCLLS gives you an advisory message.

Updating 31744-43005 : 00001 with 00001 from D:\MCLLS\MSMLX

**Figure 39**
CHAPTER 9 - OTHER MCLLS FUNCTIONS

1. The Other Function. This function provides the user with the capability to perform operations that are needed only infrequently. The operations include conducting searches that allow the user to verify that a MCLLS data base meets certain administrative or security requirements; file management functions involving ordering and indexing; and, non-MCLLS computer operations including diagnostics and the use of a DOS shell.

a. Special Searches. MCLLS provides five special search options. Each is explained below.

<table>
<thead>
<tr>
<th>File</th>
<th>Browse</th>
<th>Modify</th>
<th>Search</th>
<th>Reports</th>
<th>Import/Export</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Special Searches</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Order</td>
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<td>Index</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Diagnostics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DOS Shell</td>
</tr>
</tbody>
</table>

Verify Overall/Narrative classifications
Determine Highest Class. for selected list
Search for MCLLS without keywords
Search for overdue milestones
Search for upcoming milestones

Current selected list: (20 of 20) Name of data base: MSMAL
<F1>-Help | Search for all MCLLS without keywords

Figure 40

(1) Verify Overall/Narrative Classifications. This option searches the current selected list comparing the classification of each narrative paragraph of each MCLL with the overall classification of that MCLL recorded in the administrative data. At the end of the search, the selected list will be set to reflect only those MCLLS that have a possible classification conflict (e.g. the overall MCLL classification is UNCLASSIFIED, but the classification of a paragraph in the narrative is CONFIDENTIAL). The option should be executed before releasing a data base in order to verify the accuracy of the classification markings.

(2) Determine Highest Classification for Selected List. This option determines the highest classification contained in the current selected list of records. The option is to help you determine the required level of protection of the data for transmittal or storage. If you are mailing a data base somewhere, you should run this option immediately following the previous classification verification option.
(3) **Search for MCLLS without Keywords.** Keywords are such an important part of a MCLLS data base that this function should be used to verify that all MCLLS have keywords. At the end of the search, MCLLS will change the current selected list to reflect only those records without keywords. At this time the user can either use the pop-up keyword template, available in the Modify/Edit function, to keyword the selected list, or clone the selected list to another data base (perhaps called "NOKEY") and run MCAKS on the clone. After running MCAKS, the user must run the Update current data base from another option (Import/Export function), in order to update the original data base with the "NOKEY" records which now have keywords.

(4) **Search for Overdue Milestones.** This operation searches the current selected list to determine if any MCLLS contain overdue RAP milestones. After the search, MCLLS will change the current selected list to reflect only those records with overdue milestones.

(5) **Search for Upcoming Milestones.** This option presents the user with two date windows. To conduct the search enter the "from" date and the "to" date in the boxes, and press <Enter>. It is a convenient way to summarize Milestone information for the next 30 or 90 days as a matter of managing your own time and effort. It is particularly helpful if you or some other Marine involved with RAP anticipates an upcoming absence, and you need to "plan around" that absence. This search also resets the current selected list automatically to include only those lessons learned with RAP Milestones coming due between the dates you specified.

b. **Order.** Ordering permits the user to have keywords appear in alphabetical order, and certain numeric values appear in ascending or descending order. The addition of new keywords, milestones, etc., will take place at the end of the data base, thus requiring repetition of the function to keep the data ordered consistently. You may order KEYWORDS alphabetically, and order MILESTONES in either ascending or descending order from a baseline date.

**NOTE:** The ordering process is irreversible, and the data cannot be "unordered".
c. **Index.** MCLLS uses the index files (.NTX files) to speed up access to lessons learned, keywords, milestones, and sources. If the index files are not properly formatted, MCLLS may not be able to find the desired information quickly, or in some cases may not be able to find the needed information at all. Even though MCLLS updates the indexes automatically in connection with some routine functions, periodic (i.e. weekly) indexing is recommended.

d. **Diagnostics.** The diagnostics function provides database, computer system, and path information, as shown on the following screen:

![Figure 41](image)

**Figure 41**

e. **DOS Shell.** The DOS shell temporarily exits MCLLS in order for the user to perform simple DOS commands such as DIR, COPY, or FORMAT. Memory resident programs should not be executed from the shell as MCLLS data could be lost. Upon completing DOS work, the user types `<EXIT>`, and presses `<ENTER>` to return to MCLLS.
APPENDIX A - ERROR MESSAGES

Error Messages. The following is a list of all possible error messages or warning messages that could appear in MCLLS. For each error and warning message, there is a recommended solution to the error or warning. For this chapter, FILENAME is the name of a non-database file name; DATABASENAME is the name of a data base; MCLLSNUM is the unique 10-digit number that is assigned to each MCLL; and SEQ_NUM is the 5-digit record number that is assigned to each MCLL within a data base.

a. ERROR : Cannot create FILENAME.
   RECOMMENDATION : Make sure that the FILENAME you specified is in the proper DOS format, that there is enough disk space on the drive where you want to create the file, and that the drive you specified actually exists.

b. ERROR : Cannot find FILENAME.
   RECOMMENDATION : Make sure you specified the correct FILENAME, drive and directory.

c. ERROR : Cannot open FILENAME.
   RECOMMENDATION : Make sure you specified the correct file name, drive and directory.

d. ERROR : Cannot update a file from itself.
   RECOMMENDATION : You cannot append the current data base to the end of the current data base. You need to specify another data base as the source data base.

d. ERROR : Cannot write to file.
   RECOMMENDATION : Ensure that there is sufficient disk space on the drive containing the data base.

e. ERROR : Data base DATABASENAME is not complete.
   RECOMMENDATION : Select DATABASENAME as the current data base. When you try to do this, MCLLS will create the missing files for you. Then you can return to the old data base and proceed normally using the DATABASENAME data base.
f. ERROR : Error writing to file : FILENAME.
RECOMMENDATION : Make sure you did not run out of disk space on the disk drive containing FILENAME.

g. ERROR : FILENAME file is not available.
RECOMMENDATION : Make sure the FILENAME you specified is in the data base directory and that you spelled the FILENAME correctly.

h. ERROR : Incompatible search file.
RECOMMENDATION : The search file you specified was created by an old version of MCLLS and is no longer able to be read by MCLLS. If you know the search criteria, re-do the search from beginning.

i. ERROR : Invalid drive or directory.
RECOMMENDATION : Either the drive or the directory you specified for the data base does not exist. Enter an existing drive and directory.

j. ERROR : MCLLLs number MCLLSNUM is not in this data base.
RECOMMENDATION : The MCLLLs number that is part of the source of the current MCLL is not in the current data base.

k. ERROR : No data bases/files in this directory.
RECOMMENDATION : Make sure you are referencing the correct drive and directory.

l. ERROR : No MCLLLs were selected.
RECOMMENDATION : You need to go the MCLLS SEARCH FUNCTION screen to select specific MCLLLs or a range of MCLLLs to use.

m. ERROR : No keywords for this MCLL.
RECOMMENDATION : If you know there are keywords for this MCLL, then return to the main menu, select the Other Function and execute the Index Option.
n. ERROR: No milestones for this MCLL.
RECOMMENDATION: If you know there are milestones for this MCLL, then return to the main menu, select the Other Function and execute the Index Option.

o. ERROR: Not enough disk space to pack narratives.
RECOMMENDATION: Exit MCLLS and erase any unnecessary files on the drive containing the MCLLS data base. You need at least as much space as the _J.DBT and the _J.DBF files combined.

p. ERROR: Part of data base DATABASENAME already exists.
RECOMMENDATION: You can not create a cloned data base that has the same name as an existing data base. You must specify a unique data base name for the cloned data base.

q. ERROR: Printer is off-line.
RECOMMENDATION: Check to ensure cables are connected and power is on. Ensure the printer is properly installed.

r. ERROR: The file MCLLTEMP.DBF is not available.
RECOMMENDATION: MCLLS is looking for the file MCLLTEMP.DBF to display the template of keywords. The MCLLTEMP.DBF file must be in one of the following directories: the \MCLLS directory, the directory containing the data base you are currently using, or in the directory you called MCLLS from.

s. ERROR: The files MCHELPS.DBF and MCHELPS.DBT are not available. MCLLS is looking for the files MCHELPS.DBF and MCHELPS.DBT to get the help information. The help files must be in one of the following directories: the \MCLLS directory, the directory containing the data base you are currently using or in the directory you called MCLLS from.

t. ERROR: There is no help available for this item.
RECOMMENDATION: Consult the Users Manual for any helpful information.
u. **ERROR:** There is no search to restore.  
**RECOMMENDATION:** You have no searches saved in the directory containing the data base you are currently using. If you have saved a search make sure it is in the directory containing the data base you are using.

v. **ERROR:** Warning: The narrative is nearing the maximum size allowable. This is a message to tell you that the narrative you are currently modifying is nearing 10K bytes. To check how large the narrative is, you need to save the narrative (press <Ctrl-W>) and then press <Alt-N>). On the top line of the narrative window you will see the size, in bytes, of the narrative. You need to make sure that no narratives exceed 10K bytes.

w. **ERROR:** You have not selected any filters.  
**RECOMMENDATION:** You must enter at least one criterion for MCLLS to search.
APPENDIX B - MCLLS DICTIONARY

1. **ADMINISTRATIVE INFORMATION**: Information relative to a lesson learned that is not necessarily a part of the lesson itself. It includes information such as dates, sponsoring or reporting commands or individuals, the exercise or operation in question, information to track corrective action, and other such data. Importantly, administrative data can also be used for searching the MCLLS data base.

2. **AUTOEXEC.BAT**: The file DOS uses to find those commands to load into the ENVIRONMENT SPACE of your computer. For example, both the SET CLIPPER= and PATH commands are found in the AUTOEXEC.BAT file.

3. **BUFFERS=**: A command in your computer’s CONFIG.SYS file which tells DOS how many 512 byte blocks of memory are to be reserved to speed up processing. MCLLS requires that the BUFFERS= command be set to BUFFERS=20.

4. **CLIPPER**: The programming language in which MCLLS is written.

5. **CONFIG.SYS**: The file DOS uses when it configures your computer. For example, both the FILES= and BUFFERS= commands are found in the CONFIG.SYS file.

6. **CURRENT DATABASE**: The data base that you are using at present.

7. **DOS**: The Disk Operating System under which your computer runs. All users of MCLLS must be using either MS-DOS or IBM DOS. The DOS version must be 2.0 or later for stand-alone systems and 3.3 or later for Local Area Networks.

8. **ENVIRONMENT SPACE**: A part of memory reserved by DOS to store information that can be used by all programs. For example, PATH= and CLIPPER= is stored in the environment space.

9. **FILES=**: A command in your computer’s CONFIG.SYS file which tells DOS how many files can be open at the same time. MCLLS requires that the FILES= command be set to FILES=30.
10. **HOT KEY WINDOW** : The list of keys that are active for the current screen. The window is at the bottom of the screen and is highlighted with the colors red on grey.

11. **HOT KEYS** : The set of keys that MCLLS recognizes. Some HOT KEYS are active only for certain screens and other HOT KEYS are active for every screen. See also HOT KEY WINDOW.

12. **JAARS (Joint After Action Reporting System)** : The directive that states the requirement for all after action reporting, stipulates the procedures for the reporting, and outlines the format in which lessons learned will be submitted.

13. **JULLS (Joint Universal Lessons Learned System)** : This program is used to summarize the results of a JCS exercise or military operation. It contains information on who participated in the exercise, what was attained and learned during the exercise or operation, and where, when, and why it was held.

14. **MCAKS (MCLLS Automated Keywording System)** : A program that reads each narrative of a MCLL and automatically selects the appropriate keywords associated with the narrative and places the keywords in the keyword file of the data base. MCAKS also allows the user to oversee the systems picks and manually insert and delete keywords as needed.

15. **MIIP (MCLLS Instructional Input Program)** : A separate, stand-alone program that can be used to facilitate input of properly formatted lessons learned.

16. **MCLL** : The summary or lesson learned from a single exercise or operation. It has five parts: administrative information, narratives, keywords, milestones and source information.

17. **MCLLS (Marine Corps Lessons Learned System)** : A lessons learned system designed to be compatible with the JULLS to ensure that Marines have an appropriate library of lessons learned available to them. MCLLS is designed so as to avoid an additional requirement to submit different reports to the JCS, CINC, or other commander's after action reports.
18. **MCLL NUMBER**: A unique 10-digit number that is assigned to each MCLL to distinguish it from MCLLS in the same data base and in other data bases. No MCLL will have the same MCLL number and MCLL numbers will not change when a MCLL is cloned or appended.

19. **KEYWORD**: A word or phrase(s) that identifies the content of a lesson learned. The word or phrase(s) is limited to 25 characters.

20. **LESSON LEARNED NARRATIVE**: Discussion of some activity that occurred during an exercise or operation. The narrative describes what lesson(s), if any, were learned from the activity and lists recommendations to solve specific problem(s) if any occurred.

21. **MILESTONE**: Dates associated with intermediate sub-actions for an action. There are three dates for each sub-action: the baseline date, forecast date for when the sub-action is to be completed, and the actual date the sub-action is completed.

22. **NARRATIVE DESCRIPTION**: A free form text description of an observation during an exercise or operation. There are two formats for narrative descriptions. See SUMMARY NARRATIVE and LESSON LEARNED NARRATIVE. Both formats are limited to 10,000 characters in length.

23. **PATH**: A list of alternative drives and directories where DOS looks to find programs when the program is not in the directory from which you called it. The MCLLS directory must be in your path for MCLLS to work.

24. **RECORD NUMBER**: See SEQUENCE NUMBER.

25. **SCROLL WINDOW**: In the Modify/Edit and Modify/Add functions, the window that appears when you press the <Alt-K> is called the scroll window.

26. **SELECTED LIST**: The current group of MCLLS, either a range or a selectively chosen set, which will be used by MCLLS when performing a function, such as Browse, Modify or Import/Export. The selected set will remain until a new selected set is created.
27. **SELECTED SET**: See SELECTED LIST.

28. **SEQUENCE NUMBER**: A 5-digit number, padded with leading zeros, which distinguishes each MCLL within a single data base and also ties the administrative data, keywords, milestones and sources together. A sequence number will change when a MCLL is appended or cloned to a new data base. Same as the RECORD NUMBER.

29. **SET CLIPPER=v008;r051;f030**: A command stored in the environment space which MCLLS uses to execute more efficiently. This command is put in your AUTOEXEC.BAT file by the MCLLS installation program.

30. **SUMMARY NARRATIVE**: Summary of the objectives for and limitations of participants in an exercise or operation. It also discusses when and where the exercise or operation took place and the major units that participated in it.
APPENDIX C - COMMONLY ASKED QUESTIONS

1. Why is it that every time I mark a MCLL, keyword, or milestone for deletion it is not deleted when I check at a later time?

EXPLANATION: Marking a MCLL, keyword, or milestone does not delete it. Marking sets a flag to TRUE for the record that has been marked. If the flag is TRUE, then the delete option actually deletes the marked item.

RECOMMENDATION: After you have marked all of the items you want to have deleted, choose Modify/Delete/Delete all marked items. This option will display all items that have been marked for deletion for you to verify. If you agree with everything that has been marked, then continue to execute the delete option.

2. Even though I know I have keywords and milestones for a specific lesson learned, why is it that every time I press ALT-K or ALT-M to pull up the respective item, a message stating "No keywords/milestones." is displayed.

EXPLANATION: MCLLS uses index, .NTX, files to more efficiently and effectively reference the keywords and milestones stored in the respective .DBF files. If the index files are out of order, then MCLLS will not know where the respective items are to be found in the appropriate .DBF file.

RECOMMENDATION: To update the index files, return to the main menu, select the Other Function and execute the Index option.

3. How come when I press the direction keys, (Up, Down, Left and Right arrows, Page Up, Page Down, Home and End) nothing happens?

RECOMMENDATION: Make sure the NUM LOCK key is off.

4. When I am adding a new MCLL why won't the cursor move past the classification field?

EXPLANATION: Each MCLL MUST have a classification! MCLLS is waiting for you to enter a valid classification for the MCLL.
RECOMMENDATION: Simply press <F8> for a display of acceptable classifications. Arrow down to the appropriate selection and press the <Enter> key.

5. I have a monochrome monitor, but MCLLS thinks I have a color monitor because I have a color card inside my computer. How can I tell MCLLS that I have a monochrome monitor?

RECOMMENDATION: If you want to tell MCLLS that you have a monochrome monitor, enter the following command at the DOS prompt:

<MCLLS M> <Enter>
APPENDIX D - MCLLS ENHANCEMENTS AND CHANGES

With Version 4.0 of MCLLS (Marine Corps Lessons Learned System) the user will see the following enhancements and changes from Version 2.0

1. The program was rewritten in CLIPPER 5.0.

2. The menus have changed to a more conventional drop-down methodology.

3. For each menu item, there is one line of help at the bottom of the screen to help the user determine the purpose of the menu item.

4. For each menu item, when the user presses <F1>, he will get detailed help for that individual menu item.

5. Throughout most of the program, the user can use a mouse to move through the program.

6. The "Display" menu item has been changed to "Browse".

7. All of the previous "hidden" functions, i.e., Alt-V - View reports, Alt-P - Print reports, Alt-O - Order data base, and Alt-I - Index data base, are now menu items.

8. There are now two options for selecting a data base to use. The user can either open an existing data base or create a new data base.

9. The program changes the cursor size depending on whether you are in insert or overwrite mode. Insert is the regular (underscore) cursor; overwrite is the larger "blob" cursor.

10. When at the hot key window after editing the administrative data, the user can press <TAB> to return to editing the administrative data.

11. When editing or displaying a narrative, the user can press <F7> to perform an in-narrative text string search. The search begins at the location of the cursor and goes to the end of the narrative.

12. When editing a narrative, the user can press <F5> to enable a spell checker. Because of its size, the spell checker is not embedded in MCLLS, but is a separately installed program.
13. Added an option, under the File Menu that allows the user to see a window displaying the names of the people to contact if they have questions about the program that their local chain of command cannot answer.

14. Modified the "Display Search Criteria" screen to display the information in a more organized fashion.

15. Added a new routine that allows the user to order milestones in descending order.
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APPENDIX F - LESSON LEARNED FORMATS

1. The following general rules MUST be followed when typing an after-action report:

   a. Acronyms must be spelled out the first time they appear in any MCLLS record. The acronym "CAS", for example, can apply to either "CAS (Close Air Support)" or "CAS (Crisis Action System)". To avoid ambiguity, accompanying the acronym with the full meaning facilitates clear understanding. Once "defined" for that lesson learned or summary, the acronym can be used by itself in subsequent paragraphs.

   b. Command designations must be explained the first time they are used in a narrative.

   c. Each lesson learned must stand alone (i.e. it must make sense without reference to any other lesson learned).

   d. Each lesson learned should be written so that it can be understood and properly interpreted by personnel from all services and all theaters.

   e. See Appendix F for a long list of current MCLLS keywords and their spellings, especially the truncated words and phrases.

   f. Enter narrative data in standard upper and lower case, rather than in all capital letters.

   g. Clarity and brevity are important. Each lesson learned narrative is limited by the MCLLS software to 10,000 characters.

2. MCLLS Exercise or Operation Summary Format Requirements. For each exercise or operation summary, the following paragraphs must appear in the narrative description:

   5. (?) GENERAL DESCRIPTION:
   Short description of the operation or exercise, including general statements of the scope and purpose.

   6. (?) DATES:
   As a minimum, dates of actual or simulated combat operations. Paragraph will also include mobilization, deployment, redeployment or other significant dates.
7. (?) LOCATION OF OPERATIONS:
A short but meaningful list of actual or simulated locations of combat operations. An exhaustive list is not necessary, but "Western Hemisphere" is too vague.

8. (?) LOCATION OF PERSONNEL:
Locations(s) of participants, especially if different from the location of actual or simulated combat operations.

9. (?) OBJECTIVES:
A short but meaningful list of operation or exercise objectives. A detailed list of all objectives is not necessary, but "improve force readiness" is too vague.

10. (?) LIMITATIONS:
Specific operation or exercise limitations, including geographic limits to operations, simulation of forces or other significant limitations.

11. (?) MAJOR PARTICIPANTS:
A short but meaningful list of the major participants. An exhaustive list is not necessary, but "US Army" is too vague. Identification should be understandable to personnel from other services.

12. (?) COMMANDERS COMMENTS:
The commanders comments specifically identify significant innovations and lessons learned as well as areas in which deficiencies exist in doctrine, organization, training and education, and equipment. Commander's comments that recommend the inclusion of a Remedial Action (RA) item in the Marine Corps Remedial Action Program (RAP) should be supported by a detailed individual lesson learned.

NOTE: The (?) represents the location where the classification for the paragraph is placed. Every paragraph MUST have a classification entry, even if "U" for Unclassified.

3. MCLLS Lesson Learned Format Requirements. For each of the individual lesson(s) learned that follows the exercise or operation summary, the following paragraphs must appear in the narrative description(s):

5. (?) OBSERVATION:
A short statement of the problem. Paragraph will identify the problem, not just one of its symptoms (e.g., a shortage of 155mm ammunition--the symptom--could result from ammunition being misplaced, destroyed in transit, not scheduled for shipment, or not purchased in sufficient quantities). It is important to identify the problem because
the required corrective action and action agency may be different for each problem. The symptom, a shortage at the user level, can be misleading. Try to limit each lesson learned to a single problem or successful action. Multiple problems in one lesson learned create confusion, thereby making it more difficult to identify each individual problem.

6. (?) DISCUSSION:
Amplified problem statement and answers to the "who, what, where, when, why and how" questions about the problem. If the lesson learned describes the positive actions taken to work around the problem, explain those actions in detail. If the problem could not be solved by the participants, explain why.

7. (?) LESSON LEARNED:
The lesson learned states how to work around the problem, which other commanders can use while a permanent solution is being achieved. Avoid restating or rephrasing the problem, concentrating instead on the positive actions that overcame the problem.

8. (?) RECOMMENDED ACTION:
Statement on how to correct the problem permanently and who should make the correction (e.g., "the Joint Chiefs of Staff should develop a systematic process to identify and resolve joint doctrine problems"). The action could result in requiring new or modified publications, procuring new equipment, changing force structure, revising command relationships, improving training, etc. If no corrective action is necessary, enter "None required" in the recommended action paragraph.

9. (?) COMMENTS:
Other information the submitting organization wishes to add.

NOTE: The (?) represents the location where the classification for the paragraph is to go. Every paragraph MUST have a classification entry, even if "U" for Unclassified.

4. Each lesson learned should describe a problem that was encountered and the positive actions the participants took to bypass or alleviate that problem, a problem that was encountered for which no solution was found, or those successful actions that should be noted for future operations or exercises.

5. In the narrative descriptions, the highest paragraph in a hierarchy of paragraphs MUST have the same classification as the highest classification of any paragraph in the hierarchy.
For example:

6. (?) DISCUSSION: During the exercise, the following problems were found regarding cold weather gear:

   a. (?) ...
   b. (?) ...
     (1). (?) ...
     (2). (?) ..
   c. (?) ..

Assuming sub-paragraphs (a) and (c) are Unclassified, if the sub-paragraph (1) has a classification of Confidential, then sub-paragraph (b) and paragraph 6 MUST be classified Confidential even if the paragraphs do not have any Confidential material in them.

6. The classification of the MCLL must be equal to the highest classification of any paragraph in the narrative descriptions.

   NOTE: Paragraphs 1-4 contain administrative data and keywords.