Appendix 3

INTRODUCTION

This section presents step-by-step instructions on how to use the PressureMAP Data Entry Editor to create and edit the Positive Air Flow (PAF) office/device database used by PressureMAP. If the data preparation phase for the Positive Air Flow office is properly completed, data entry becomes a straightforward process. However, the degree of ease with which this function is performed depends upon the organization and accuracy of the information listed on the data preparation forms.

The following two sets of forms must be properly completed before data entry may begin:

- The Office Data Form
- The Device Data Forms

Make sure that the information on both sets of forms is accurate and legible. Difficulty in deciphering office and/or device data will significantly impede the data entry process and increase the possibility of making a data entry error. Because of this, it is extremely important that all of the procedures be carefully followed when preparing both the Office Data Form and Device Data Forms. Sections 3, 4, 5, 6, 7, 8, 14 and 15 of this manual describe the data preparation procedures for specific CPAMS monitors that can use the Positive Air Flow System.

The data entry process is a critical step in setting up the PressureMAP program. PressureMAP will function properly only if care is given to the entire setup process. This rule applies especially to Positive Air Flow office/device data entry. Lack of compliance with any of the PressureMAP setup procedures may result in an inoperative program or invalid report data.

Getting Started

In order to begin the data entry process, PressureMAP must be properly installed on your computer system. Once PressureMAP is installed and the system is booted up (started), you may proceed to the PressureMAP opening menu (the System Options Menu).

If you have trouble setting up the computer system, installing PressureMAP, or accessing the System Options Menu, please call the Technical Support Department at System Studies Incorporated.

THE SYSTEM OPTIONS MENU

Once the computer system is booted up and PressureMAP has been started, the System Options Menu will be presented (Screen A3-1). The System Options Menu consists of a heading, a list of system options, and the program **Choice**? prompt.

System Options	MAP Series XX.XX.XX
01/02/2010 11:14	System Studies Incorporated
System Options 1. Select MAP Program 2. Select MAP Data Entry 3. System Administration 4. Language Selection Q. Quit Choice?	

SCREEN A3-1: SYSTEM OPTIONS MENU

The System Options Menu offers several program functions. The first option on the menu is Select MAP Program. If you select this menu item, you will be brought to the MAP Programs Menu, where you can run one of the System Studies' Management Analysis Programs (MAP). For more information on running a particular Management Analysis Program, please refer to the Operations Manual for the program you wish to run.

Item #2 is the Select MAP Data Entry option. All MAP databases, including the PressureMAP database, are created and edited through this menu item.

Selecting Item #3 from the System Options Menu will cause the System Administration password prompt to be displayed. To access PressureMAP's System Administration function, enter the password for this program level.

The principal language for each User Account is usually assigned by the System Manager in the User Management program, but each individual user may also select Option 4, Language Selection, from the System Options Menu at any time when using the MAP program. The three language selections are English, Spanish, and French, with English being the default selection. While not all of the screens in the MAP programs will be translated from English to the selected language, the ones that are translated should enable you to quickly find device data and histories.

Quit, the last item, will exit the MAP system and log you off.

PRESSUREMAP DATA ENTRY

The PressureMAP data entry procedures begin from the System Options Menu.

Procedure:

 From the System Options Menu Choice? prompt, select Item 2 ("Select MAP Data Entry"), followed by <Return>.

After the data entry option has been selected, the screen will display the MAP Data Entry Menu, as shown in Screen A3-2.

MAP Data Entry 01/02/2010 13:05	MAP Series XX.XX.XX System Studies Incorporated
MAP Data Entry 1. PressureMAP Data Entry 2. ReportMAP Data Entry 3. CableMAP Data Entry 4. AlarmMAP Data Entry 5. DryerMAP Data Entry 6. Special Data Entry Q. Quit	
Choice?	

SCREEN A3-2: MAP DATA ENTRY MENU

2. The MAP Data Entry Menu contains six data entry options, each one providing an entrance into the data editor for a particular MAP database. Through this menu, any MAP database can be created or modified.

To create (or edit) the PressureMAP database, select the item which corresponds to the PressureMAP Data Entry Editor.

 From the MAP Data Entry Menu Choice? prompt, select 1, PressureMAP Data Entry, followed by <*Return*>.

If you do not wish to create or edit a MAP database, then you may return to the System Options Menu from the MAP Data Entry Menu by selecting **Q**, followed by *Return*.

PRESSUREMAP DATA ENTRY OPTIONS

Once PressureMAP Data Entry has been selected, the screen will display the PressureMAP Data Entry Screen (SCREEN A3-3), and you are ready to begin data entry. All of PressureMAP's editor functions begin and end at this screen. The first and second lines of the screen list the Data Entry Menu functions, after which is a status line that displays a message prompt.



Below the Data Entry Menu and associated prompt is the Offices Listing section. This portion of the screen lists all the PressureMAP offices in the order that they were entered into the PressureMAP database. When accessing the PressureMAP Data Entry Menu for the first time (as in SCREEN A3-3), no office names will appear in the Offices Listing section since no offices will have been entered into the system. However, once the data entry procedures has been completed, the Offices Listing section will contain the names of all the offices you have entered. In all the Offices Listing section may contain up to 25 different Positive Air Flow office names. If Office Extender has been enabled, up to 250 offices may be listed. If a system has more than 71 offices, the first 71 are displayed in the Offices Listing and line 72 displays the message *****MORE******. Selecting the "M[ore]" option will allow you to browse through a four-column list of offices.

The PressureMAP Data Entry Menu found at the top of the Data Entry Screen lists the functions that can be performed from the Data Entry Editor. From the **Choose an option:** prompt, enter one of the following selections to move to the function that you wish to execute:

- A Add a New Office
- I Information about an Office
- S Specific Device Information
- D Delete an Office
- R Recover from Hardware Failure
- M More Offices
- Q Quit Data Entry

After entering one of the above menu selections, hit the *<Return>* key. Entering something other than one of the command letters listed above will not be considered a valid response. If something other than a valid command is entered, the program will respond by producing another Choose an option: prompt. From here, you will be allowed to make a valid menu selection.

Notice that when first creating a new Positive Air Flow database, you will be using only the "Add a New Office" option from the Data Entry Menu. While all the other menu items are fully described in this section, you will not need to exercise these options until the Positive Air Flow database has been fully created and the PressureMAP program is up and running.

Add a New Office

Before any monitoring device information can be entered into the Positive Air Flow database, the office which the devices are associated with needs to be created. Add a New Office is the option that is used to create a new Positive Air Flow office. Accessing this option opens a new office data file and sets the data entry procedure into motion.

Creating a new office database entails entering information concerning both the office and the monitoring devices associated with the office. Because of this, choosing "Add a New Office" will automatically produce the editor options, "Information About an Office" and "Specific Device Information" for an office. Completing these two editor functions will fulfill the data entry procedures for one office, placing both the office information and associated device data into the Positive Air Flow database.

Before selecting this option, make sure that both the Office Data Form and the Device Data Forms have been completed and verified for the new office being created.

Procedure:

1. From the PressureMAP Data Entry Menu Choose an option prompt, enter the letter *A* to create a new office. Follow the selection with *Return>*.

When the Add a New Office command is selected, the program will respond with:

Name of office to add:

For a CPAMS office to be totally compatible with all of the MAP Programs, the office name of the CPAMS monitor must match the name in the list of PressureMAP offices.

With Chatlos systems, the compatibility requirement is very easy to meet. Essentially, the Chatlos monitor name MUST exactly match the name of the PressureMAP office name, as stored in the PressureMAP office database. This includes spaces and punctuation. With Sparton systems, meeting the compatibility requirement is just as easy, but it is slightly more involved. This is because a single Sparton system may represent multiple PressureMAP offices. (For more information on the unit structure of Sparton systems, please refer to Section 3 of the *MAP System Data Entry Manual*, entitled "Programming a Sparton CPAMS".)

For Sparton systems, the unit name of EACH individual unit must match the PressureMAP office name which the unit represents. When programming Sparton units, it is important that all units within the Sparton be given the name of the PressureMAP office that they represent, even if more than one unit monitors the same PressureMAP office.

2. Type the name of the office being created and press *Return>*. Office names may not include the following characters:

\ / | , . < > ? ; : " { } [] ! @ # \$ % & * () _ + = '

New Office Information

Once you have entered a new office name into the PressureMAP editor, the *Office Information Screen* will appear, as shown in SCREEN A3-4. The office name that you are working on will be automatically entered into the appropriate data field, and the cursor will be positioned in field labeled Monitor type waiting for input concerning the office CPAMS type.

Inter Office	Information				
File date:	05/24/2010	(175)	Last edited:	0	5/09/2010
Office name:	289H		Monitor type	:	289H LSS
Phone number: Office mode:	T9W555-5140 ENABLED		Access # typ	e:	289H LSS
Baudrate:	2400		User Defined Devices: ON		
Password 1:	HELLO		Trunk/Toll Tolerance: 80 ohms		
			MAP alert ba	udrate:	2400
MAP alert #: Remarks:			Alert sensit	ivity:	3
Aerial std:	2.0	Buried std:	3.0	Undgnd	std: 5.0
Delivery std:	7.5	Flow std:	1.25		

SCREEN A3-4: OFFICE INFORMATION SCREEN

The screen shots displayed in this section all reflect offices utilizing System Studies 289H LSS equipment. If your office uses a different manufacturer of CPAMS equipment, the screens you see may appear slightly different than the ones shown in this section.

The *Office Information Screen* is a program version of the Office Data Form. However, at the top of the screen, two fields are displayed which are not on the Office Data Form. The fields File date and Last edited do not require data entry, as these fields are programmed functions of the computer's clock/calendar and their values cannot be changed through keyboard input.

3. Enter the CPAMS monitor type into the Office Information Screen. Follow your selection with *<Return>*. The valid monitor types include: 289 LSS, 289H LSS, Chatlos L1, L2, L3, 600 and MPUZ, Hercules 740 and 940, Sparton 5301A, 5300B and 5318, and TMACS 1000.

Note that if you are entering data for a Sparton monitor, an extra data field will be displayed on the screen after you enter the monitor type. Located after the **Password** 2 field on the Office Information Screen, the data field **Units** takes into account the special setup of Sparton monitoring systems. For more information concerning this data field, please refer to the section on Sparton data preparation (Section 3).

4. Enter the information contained on the Office Data Form into the appropriate data fields of the Office Information Screen. After each correct entry, press <Return> to move to the next data field on the screen.

To edit data fields and move about the data entry screen, use the Editor Function Keys that are listed at the top of the screen. For a full explanation of the Editor Function Keys, please refer to the segment titled "Editor Functions Keys", found in the Preface of this manual.

If you wish to disable PressureMAP's automatic CPAMS backup and restore functions, place an asterisk * in the **Password** 2 data field. This instructs PressureMAP to NOT back up the CPAMS unit at its scheduled weekly backup time and disables PressureMAP's automatic restore function.

Note: A valid Password 2 value is required in order for PressureMAP to backdate the real time clock in the following monitors, which are not Y2K-compliant: Chatlos L2, 600, L3 and MPUZ; Hercules 740; Sparton 5301A; and TMACS 1000. Starting with MAP Version 20.01, this "timewarp" function resynchronizes the monitor's real time clock on or after December 1, 1999. If the password is invalid, an error message will be posted to the System Dispatch list. However, an asterisk flag prefixing the password will not prevent the timewarp feature from being applied.

Once you have entered all of the office information into the Office Information Screen, double-check the screen to make sure that the information is correct. After verifying the accuracy of the information, you may escape from the screen by pressing *Return* from the last data field on the screen (this would be the **Flow Std** field), or by pressing *Esc* from any other data field on the screen.

When you exit the Office Information Screen, the cursor will move up to the status line, displaying the following prompt:

```
Correct? (Y(es, N(o, T(hrow away entry)
```

This prompt is, in effect, asking if you are satisfied with the office data that you have entered into the Office Information Screen. If all of the information is correct, answer **Y** to the above prompt, followed by *Return*. The office information will then be saved to the data disk.

If you are not completely satisfied with the data entered, then enter an **N** at the prompt, followed by *Return>*. The cursor will return to the **Monitor type** data field, allowing you to edit the information on the screen. From this position, use the Editor Function Keys to move through the data fields and make the necessary corrections. Be sure to press *Return>* after each correct entry, as this will record your correction in the data record. Again, once you have completed the data screen, you may exit to the status line **Correct?** prompt by pressing *Esc>* (or press *Return>* from the last data field on the screen).

If you wish to completely discard all of the office information that you have entered into the Office Information Screen, enter the letter **T** and press **<Return>**, at the **Correct?** prompt. This entry will take you back to the Data Entry Menu **Choose an option** prompt and will abandon the data which you have entered into the Office Information Screen.

5. When all of the data fields are correct, return to the status line and enter a **Y** followed by *Return>* to complete the office information data entry.

Once a new office has been created, the monitoring device data for that office must then be entered into the PressureMAP system.

DEVICE DATA FOR A NEW OFFICE

After an Office Information Screen has been completed for a new office, PressureMAP will automatically present the Specific Device Information Screen. The cursor will be placed at the

Device# field, waiting for the input of individual device data associated with the office you have just created.

It is essential that the Device Data Forms be checked for accuracy before beginning the device data entry process. If the Device Data Forms have not yet been cross-referenced with the Master Transducer Log, stickmap, CPAMS printout, and OAU worksheets, the data entry operator should do so before proceeding.

Note: It is advisable **not** to pre-program PressureMAP with addressable transducer information before the jumpers are run. This can cause excessive time delays as the system attempts to read devices that do not yet "exist." If you are unable to follow this recommendation, then disable the devices in PressureMAP until the installation is complete. (Refer to the segment titled "Disabling a Device" later in this section.)

Primary Specific Device Information Screen

The *Primary Specific Device Information Screen* (shown in SCREEN A3-5) consists of three sections. The top two rows display the Editor Function Keys. Located below this display is the status line, where the program will issue messages and prompts. Underneath the status line and function key display is the main part of the Primary Specific Device Information Screen. This screen contains only fields that are device specific, so it is identical for all monitors. Note that an asterisk in the **Remarks** field indicates that the comments screen has additional information entered.

Add device to <OFFICE NAME>: <PgUp>, <PgDn> more, <Esc> finish screen <Return> next field, <Backsp> delete char, <Ctrl B> previous field Enter device number or <Return> to quit. -----Type: MF Range: 19.0 S-M: 6.8 Device #: 011-25 Address: MH102-NORTHWEST AND SOUTH STS Loc: 20 Pipe: A OAU: 8.5 Ref: 8.0 TD Type: RF Sheath(s): 01 03 748 32 Prim Pair: 1681 Sec Pair: TD13 Sort Key: RASE Cable: Plat #: RT UG 73 Stickmap: 3 Remarks:*MF ON ROUTE A IS ALSO USED IN NORTHWEST OFFICE IT IS DEVICE 025-15 IN THAT OFFICE Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4 Readings 7.5 7.5 7.5 8.0 8.0 7.5 7.5 7.5 8.0 8.0 15.5 7.5 7.5 _____ PressureMAP XX.XX.XX

SCREEN A3-5: PRIMARY SPECIFIC DEVICE INFORMATION SCREEN

The other three screens that complete the device data entry procedure are the Monitor Specific Device Screen, (Screen A3-6), Device Comments Screen, (Screen A3-7), and the Cable Readings Screen, (Screen A3-8). These screens are accessed from the Primary Specific Device Information by using the **PgUp** or **PgDn** keys if you are at the MAP Computer main console, or by entering the keystrokes **Ctrl F**, (forward one screen), and **Ctrl R**, (back a screen).

SCREEN A3 6: MONITOR SPECIFIC DEVICE SCREEN

Monitor Specific Device Screen

This screen includes data fields for recording the Office 1 and 2 Location, Distance, Field 1 and 2 Location, Latitude, and Longitude. Depending upon the type of monitor installed in the office, it may also contain one or more of the following: Unit Number, Line Number, Trigger, Module, Input, Phone, TP, Ckt, Priority, Level, and other monitor dependent fields.

SCREEN A3-7: DEVICE COMMENTS SCREEN

Field Accessible Device Comments Screen

This screen gives field crafts personnel the ability to input device-related remarks. These remarks, which can be entered from the PressureMAP Specific Device Information Menu selection as well as from data entry, are date/time stamped when entered and can contain up to two lines of text, which equals 124 characters.

```
Add device to <OFFICE NAME>: <PgUp>, <PgDn> more, <Esc> finish screen
      <Return> next field, <Backsp> delete char, <Ctrl B> previous field
Press <Ctrl A> to add a new set of readings.
            Device #: 011-25
                                    Type: MF Range: 19.0 S-M: 6.8
Manifold/PSI:
            8.0
           06/24/2009
       01
             4.3
       03
             5.2
      748
              4.0
            ----
                                              PressureMAP XX.XX.XX
```

SCREEN A3-8: CABLE READINGS SCREEN

Cable Readings Screen

The cable readings screen is only accessible if there is at least one sheath designation in the Sheath: field of the primary device screen. When full, it can contain six sets of manually input cable readings, with each set of readings containing a date stamp and a manual flow reading for each sheath. The sheaths match the sheaths entered on the primary device screen, and the single, manually input **Manifold/PSI** reading applies to all of the cable readings. These readings can be entered from the PressureMAP Specific Device Information Menu selection as well as from data entry.

The data fields shown on the all of the device information screens contain many of the same data categories found on the Device Data Forms. However, not all the fields located on the Device Data Form will be shown on a screen when it is first brought up. Depending on the values entered into the data screen, different data fields will appear as they are needed.

For example, the data field **Range** will be needed only if the device being entered is a flow monitoring device. When you specify a PressureMAP flow monitoring device in the **Type** data field, the field **Range** will automatically appear on the data entry screen.

The data fields which appear on the Monitor Specific Device Screen depend upon the CPAMS equipment used by the office and upon the information that is entered into the data screen. Sometimes, a data field will "pop up" on the data screen, requiring the input of information to complete the device data record. For example, when entering a flow device in a Positive Air Flow System office, the field **Ref** will pop up with the default value for the flow device type already inserted.

When entering device data, note that not all the data fields located on the four screens will require values for each device. For example, some devices may not have Office 2 Location or Secondary Pair data values. However, any pop-up fields that appear during the data entry process will require that you input data into the field.

When completing a data record for a specific device, it is critical that all the data contained on the Device Data Form be entered into the four screens. If the Device Data Forms have been completed correctly, each screen will produce a data field for each value that is entered on the form. If the data form contains information that does not correspond to a data field presented on the screen, or if

the information screen presents a data field that does not have a corresponding field on the Device Data Form, you should double check the Device Data Form to insure that it has been completed correctly.

SPECIAL PAF DEVICE TYPES

While the Positive Air Flow office will use the standard devices described in Appendix 1 of this manual, the three device types unique to this type of office are described below. The PressureMAP editor will accept these unique device types only if the Positive Air Flow capability has been enabled in the MAP System. If the editor will not accept one of these device types, please contact the System Studies Technical Support Department for assistance.

Return Air Pipe Manifold Flow Transducer

The Return Air Pipe Manifold Flow Transducer, or device type XR, measures the flow rates at return manifolds. One of these devices monitors each return manifold installed on the return air pipe.

When a flow device type is entered, the **S**-**M** field will pop up. This sheath mileage field is calculated by first adding the distances from this manifold to the supply manifolds on the CO and Field sides of the return manifold. This sum is then multiplied by the number of cables supplied by the manifold. If the **S**-**M** field is left blank, then **OAU** is set to BLANK. The sheath mileage can also be obtained from the OAU worksheets generated by the System Studies Engineering Department.

If you have not entered the device's sheath mile value in the **S-M** data field, then enter the OAU value into the OAU field and the S-M value will be automatically calculated. The minimum OAU value that PressureMAP will accept is one tenth (or ".1"). As a result, the PressureMAP editor will accommodate only one space to the right of the decimal point. If you were to enter ".17" for an OAU value, PressureMAP would record this entry as "1.7" (PressureMAP automatically places the last numeric digit one space to the right of the decimal point).

All flow transducers are calibrated to a delivery pressure of 10 PSI. Under certain circumstances, a transducer may operate with a higher or lower pressure. When the operating pressure is not 10 PSI, the flow needs to be calibrated to the actual PSI. The PSI **Ref** field in the editor allows input of pressure ranges from 0.0 through 99.9. The default PSI value for a XR device is 6.0 PSI, and 5.0 PSI for the SR device described below. The default value for SF, DF and RF devices is 10.0 PSI, the default for a MF is 8.0, and the default for a LF device is the underground standard, which is set in the Office Information Screen.

Return Flow Transducer

The Return Flow Transducer or SR, is connected to the return air pipe in the CO. This flow transducer measures the total flow rate of the CO return pipe. This measured flow should be the sum of all the XR devices on the pipe.

Return Pressure Transducer

The Return Pressure Transducer or ZP, is connected to the return air pipe in the CO. It measures the return air pressure in the CO.

Entering A New Device

The first procedure when first entering a new device in the Positive Air Flow System is to type the device number into the **Device#** data field. Then, if the office being completed has User Defined Device Numbers turned on, you will need to enter the device's access number. If User Defined Devices is not turned on, then there will be no **Access#** data field displayed on the screen.

Procedures:

- Complete the device data record by entering all the information on the Device Data Form into the corresponding data fields on the Primary Specific Device Information Screen. Start by typing the device number into the Device# data field.
- 2. When all of the data for a device has been entered into the primary information screen, move to the next data screen by using the *PgUp>* key if you are at the MAP Computer main console, or by entering the keystrokes *Ctrl><F>*, (forward one screen). Continue to enter data into the remaining screens, moving to the next one as the data for each screen is completed.

If you are entering a XR device, an *Extended Device Information Screen*, shown in Screen A3-9, is available when you are in the Cable Readings Screen. Use the *PgUp>* key if you are at the MAP Computer main console, or enter *Ctrl><F>*, to move to this screen. The screen allows you to enter the percentage of air the return manifold consumes from each of the other source manifolds. A single XR can be associated with two manifolds to its office side and two manifolds to its field side. PressureMAP assumes that each XR device has a number of cables equal to those being fed by the associated manifolds. However, if this is not the case, the extended screen allows you to define these percentages manually. The number of cables can be determined by studying stickmaps and construction plans. If no office or field locations have been defined, then PressureMAP will issue the following warning message:

No Office or Field Locations Defined

To edit the extended screen, move the cursor to the appropriate data field and make the desired entries.

SCREEN A3-9: EXTENDED DEVICE INFORMATION SCREEN

3. When all of the data has been entered into the four data screens, hit the *<Esc>* key to return to the status line of the primary information screen, or enter the keystrokes *<Ctrl R>*, (back one screen), until you are a the primary information screen. After you enter the *<Esc>* key in the primary information screen, PressureMAP will display the following prompt:

Correct? (Y(es, N(o, T(hrow away entry)

This prompt is, in effect, asking you to verify the information entered into the Specific Device Information Screens. Before responding, be sure to double-check all data on the Specific Device Information Screens with the Device Data Form to ensure that the data has been entered correctly.

Answering the prompt with a **Y** and **<Return>** saves all of the device data on the screen into the office data file. From this point, the cursor will be placed in the **Device#** data field on the Specific Device Information Screen so that you may continue to enter new device data into the office.

When all of the data fields for the device are correct, return to the status line and enter a Y followed by <*Return>* to complete the device data record.

If you escape from the information screen, and all of the data on the screen is not correct, answer the **Correct**? prompt with an **N** followed with **<Return>**. With this response, the cursor will return to the **Type** data field, where corrections to the device information can be made. Use the Editor Function Keys to move the cursor to the data fields that needs correction, and type in the correct information. Again, when the screen is completed, press **<Esc>** to move the cursor to the status line.

If, after completing a device information screen, you wish to throw away all the data that has been entered, then answer the **Correct**? prompt with a **T** and **<Return>**. This entry will erase all data from the screen without saving any information to the office data file. The cursor will then be positioned at the **Device#** field, where you may enter new office device data.

5. Repeat Procedure Steps 1 through 4, until all the devices have been entered into the PressureMAP office database.

When all entries have been made, hit <**Return>** from the **Device#** field without entering a new device number. From here, you will be returned to the PressureMAP Data Entry Menu.

The data entry process for an office is not completed until all information from the Device Data Form has been entered for each device in the office. Once device information has been entered into the office database, the database for that office will be completed.

Information About an Office

The menu item, "Info about an office," allows you to specify the communication and pressurization standards for a PressureMAP office. However, because this menu item is automatically accessed each time you add a new office to the PressureMAP database, this option seldom needs to be accessed directly. However, you may need to access this editor function to inspect or change

existing office data. In these cases, "Information about an office" comes in handy because it allows you to view and edit the data records which define the various PressureMAP offices.

Procedure:

From the Data Entry Menu Choose an option: prompt, enter *I* (for "Info about an office"), followed by *<Return>*. When this menu item is selected, a prompt will be displayed on the status line:

Information for which office?

2. Enter the name or number of the office for which you would like information, followed by *<Return>*.

To view the office list in spreadsheet selection format, enter **?**. You can then move through the spreadsheet and select the desired office by pressing *Return***>**. If the Browser is enabled in your system, the spreadsheet can be searched or sorted using the Pattern Search Keys as described in the Preface.

Once you have entered an office name, the screen changes to the Office Information Screen (shown in Screen A3-1) and the current data for the office chosen will be displayed. The status line will then provide the following prompt:

Change Office Information? (Y(es, N(o)

If, after viewing the data, you do not wish to change any of the office information, enter an **N** followed *Return*. This entry will return you to the Data Entry Menu **Choose** an **option:** prompt, where you can choose to perform a different data entry function.

If, on the other hand, you wish to amend some of the office data, then enter the letter **Y**, followed by *Return*.

3. Enter the letter **Y** and **<Return>** to edit the information concerning the selected office.

The cursor moves to the **Monitor** type field and the following prompt is displayed on the status line:

Enter Office Information

4. Proceed with the changes by using the Editor Function Keys shown at the top of the screen.

When the editing changes have been completed, press *<Esc>* to move back to the status line, or enter *<Return>* from the last data field on the screen. Once you return to the status line, the following program prompt appears:

Correct? (Y(es, N(o, T(hrow away changes)

Entering a **Y**, followed by *Return*, will confirm the changes made and save the new office information to the office data file. From here, you will be returned to the **Choose an option:** prompt at the Data Entry Menu.

5. Return to the status line, and enter a **Y** to save the changes you have made to the office data record.

By entering **N** and **<Return>** at the **Correct?** prompt, you will signal that the office information is still incorrect and that further editing needs to be done. The cursor will be moved back to the **Monitor** type field, and you can continue to edit the office data.

Entering a **T** and **<Return>** will disregard any changes you have made to the office data, and will move you back to the Data Entry Menu **Choose an option:** prompt without making changes to the office data record stored on disk.

Specific Device Information

Specific device information is used to view, change, add, disable, and remove device data from an office database. Each device within an office may be edited by using this option.

The screen presented through this menu option (shown in SCREEN A3-10) is identical to the one used during the "Add a new office" process (SCREEN A3-5), except for the addition of menu options listed at the top of the screen. These menu options were bypassed in the procedures for "Add a new office" because when creating a new office, only the "Add a device" function needs to be accessed.

```
Device Info for SPAR5300: V(iew device info, C(hange device info,
       A(dd new devices, R(emove old devices, D(isable a device, Q(uit
Choose an option:
               -----

        Device #:
        011-25
        Type: MF Range:
        19.0 S-M:
        6.8

        Address:
        MH102-NORTHWEST AND SOUTH STS
        Loc:
        20 Pipe:
        A
        OAU:
        8.5

TD Type: RF
                                         Ref: 8.0
Sheath(s): 01 03
                         748
             32 Prim Pair: 1681 Sec Pair: TD13 Sort Key: RASE
Cable:
Plat #: RT UG 73 Stickmap:
                                  3
Remarks:*MF ON ROUTE A IS ALSO USED IN NORTHWEST OFFICE
        IT IS DEVICE 025-15 IN THAT OFFICE
             Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
                         ---- ---- ---- ----
                                                 ---- ---- ---- ----
               ---- ----
Measured: 7.5 7.5 7.5 8.0 8.0 7.5 7.5 7.5 8.0 8.0 15.5 7.5 7.5
   _____
                                                          PressureMAP XX.XX.XX
```

SCREEN A3-10: PRIMARY DEVICE INFORMATION SCREEN

Procedure:

1. From the Data Entry Screen Choose an option prompt, enter *S* (for "Specific Device Info"), followed by *Return>*. The status line will then display the prompt:

Specific Device Info for which office?

2. Enter the name or number of the office which you want to inspect, followed by <**Return>**.

After the office name (or number) has been entered, the screen will change to the Specific Device Information Screen and the status line will display:

Choose an option:

The following options will be listed at the top of the Specific Device Information Screen:

- V View device info
- **C** Change device info
- A Add new devices
- R Remove old devices
- **D** Disable a device
- **Q** Quit
- 3. Enter the letter which corresponds to the Specific Device Information feature which you would like to perform. Follow your selection with *<Return>*.

Listed below is a description of each function initiated at the Specific Device Information Menu.

VIEW DEVICE INFORMATION

View Device Info is an editor option which allows you to inspect data pertaining to devices entered into the PressureMAP database. Note that this menu item does not allow you to edit device information. This option is a "look but don't touch" feature, which allows you to only inspect data that is associated with particular devices.

Procedure:

 From the Choose an option: prompt, enter V, followed by <Return>, to view the data concerning specific devices.

When you choose to view device data, the cursor will be placed in the **Device#** field and you will be prompted for the device number that you wish to view with the following status line display:

Viewing Device Info for <OFFICENAME>:

Enter device number or <Return> to quit.

2. Type the device number or the associated access number for the device you wish to view and press *Return>*.

Access numbers are entered with a leading sharp character (eg. "#001A") to distinguish them from device numbers, and may be abbreviated (except for addressable transducers). For example, "#1" is interpreted as "#P -001" for a Chatlos L2, "#T-001" for Sparton, and #001A for E2A. For 289H LSS devices, the device/access number is a card/pair combination. For example, "#2-1" is interpreted as "002-01". However, to look at a device with access number 001-02, you could enter either "#1-2" or "#2" since if you only specify the pair, the program assumes card 1.

It is important to note that the sharp (#) is already allowed as a valid character in user defined device numbers, and continues to be allowed in these numbers. All user input entered with a leading sharp that **exactly** match an existing device number (leading sharp included) are NOT treated as access numbers, but reference the matching device number.

The four screens that comprise the data for each device are the Monitor Specific Device Screen, (SCREEN A3-6), Device Comments Screen, (SCREEN A3-7), and the Cable Readings Screen, (SCREEN A3-8). These screens are accessed from the Primary Specific Device Information by using the *PgUp>* or *PgDn>* keys if you are at the MAP Computer main console, or by entering the keystrokes *Ctrl>F>*, (forward one screen), and *Ctrl>R>*, (back a screen).

If you are viewing a XR device, you may access the extended device information screen by pressing *<Ctrl><F>* at the Cable Readings Screen. After inspecting the device data, to view another device from the selected office, type the desired device number into the Device# field, and press *<Return>*.

When you are finished viewing specific device data, press *Return>* without typing a new device number, and you will be returned to the Specific Device Information Screen. From here, the **Choose an option:** will be displayed.

 Type a new device number to inspect, or press <*Return>* to regain the Specific Device Information Menu.

CHANGE DEVICE INFORMATION

Unlike the View a Specific Device option, this item actually allows you to edit the data concerning a specific device.

Procedure:

1. From the Specific Device Information Menu, enter *C*, followed by *<Return>*, to change the data associated with a specific device.

When you choose to edit device information, you will be prompted for the device number that you wish to edit with the following:

Enter device number or <Return> to quit.

2. Enter the device number or the associated access number for the device number that you wish to edit, followed by *Return>*.

Access numbers are entered with a leading sharp character (eg. "#001A") to distinguish them from device numbers, and may be abbreviated (except for addressable transducers). For example, "#1" is interpreted as "#P -001" for a Chatlos L2, "#T-001" for Sparton, and #001A for E2A. For 289H LSS devices, the device/access number is a card/pair combination. For example, "#2-1" is interpreted as "002-01". However, to look at a device with access number 001-02, you could enter either "#1-2" or "#2" since if you only specify the pair, the program assumes card 1.

It is important to note that the sharp (#) is already allowed as a valid character in user defined device numbers, and continues to be allowed in these numbers. All user input entered with a leading sharp that **exactly** match an existing device number (leading sharp included) are NOT treated as access numbers, but reference the matching device number.

At this point, enter the desired device number, and *Return*>. The screen will display the device data for the device selected and the cursor will be placed in the **Type** data field.

3. Once a valid device number is entered, the status line will change to:

Enter device information.

Move the cursor to the appropriate data field (or fields) and make the desired changes. The same Editor Function Keys that are used in the other PressureMAP data entry screens can be used here.

- 4. The four screens that comprise the data for each device are the Monitor Specific Device Screen, (SCREEN A3-6), Device Comments Screen, (SCREEN A3-7), and the Cable Readings Screen, (SCREEN A3-8). These screens are accessed from the Primary Specific Device Information by using the *PgUp>* or *PgDn>* keys if you are at the MAP Computer main console, or by entering the keystrokes *Ctrl><F>*, (forward one screen), and *Ctrl><R>*, (back a screen). If you are viewing a XR device, you may access the extended device information screen by pressing *Ctrl><F>* at the Cable Readings Screen.
- **Note:** To remove an entire Comment, including the date and time stamp, move the cursor to that comment and press **<***Ctrl D***>**.
 - 5. Correct the device data, and press *<Esc>* to return to the status line.

Once you have made the desired changes to the device data, return to the status line by pressing *<Esc>* (or press *<Return>* from the last data field on the screen). The following prompt will then be displayed:

Correct? (Y(es, N(o, T(hrow away changes)

When all of the data fields for the device are correct, return to the status line and enter a **Y** followed by *Return* to save the new device data record.

From here, the cursor will be placed in the **Device#** data field, and the following prompt will be displayed:

Enter device number or <Return> to quit.

If you wish, you may continue to edit additional device information. To do so, enter the desired device number into the **Device#** field, and the device information will be presented for editing.

6. To exit this function, press *Return* when the cursor is in the **Device#** field without entering a new device number.

Typing an **N** and **<Return>** from the **Correct?** prompt indicates that the device data needs further editing. The cursor will move back to the **Type** data field, allowing you to re-edit the displayed device information. Again, when you are finished editing the device data, press **<Esc>** to regain the status line prompt.

If you wish to abandon the changes you have made to the device data, enter a *T* followed by *<Return>* at the Correct? prompt. The changes you have made will then be disregarded and the cursor will move back to the Device# field. The status line will display the prompt:

```
Enter device number or <Return> to quit.
```

From here, you may enter the same device number if you wish to re-edit the original device data. Or, enter a new device number to edit or press *Return>* to regain the Specific Device Information Menu.

ADD NEW DEVICES

Add New Devices is used to add a new device and its data to an existing PressureMAP office.

Procedure:

From the Choose an option prompt at the Specific Device Information Menu, select A, followed by <Return>.

The cursor will move to the **Device#** field on the Device Information Screen and a prompt will be issued, asking for the device number that you wish to add.

2. Type the number of the device to be added, and then press <Return>.

If you enter a device number that already exists in the office data file, PressureMAP will display the data concerning that device number and the status line will issue the prompt:

Device <DEVICE #> already exists. Change anyway? (Y(es, N(o)

Responding with a **Y** to this prompt will confirm your request to add the new device, even though the device number you entered was already in use. The cursor will be positioned in the **Type** data field, and you may then edit the data that was established for the previous device.

An **N** response to the **Change**? prompt will re-position the cursor to the **Device#** data field and the existing device data will not be changed. The screen will clear and the status line will prompt:

Enter device number or <Return> to quit.

The cursor will then be waiting for you to enter a valid device number. To create a new device data record, enter a new device number, or press *Return* to return to the Specific Device Information Menu.

Once you have successfully created a new device number, enter the appropriate device information at each data field location (for the specifics on entering new device data, please refer to the segment titled "Device Data for a New Office," listed earlier in the section).

 Complete the new device data record. When all of the data for a device has been entered into the primary information screen, move to the next data screen by using the *PgUp>* key if you are at the MAP Computer main console, or by entering the keystrokes *Ctrl><F>*, (forward one screen). Continue to enter data into the remaining screens, moving to the next one as the data for each screen is completed. If you are adding a XR device, you may access the extended device information screen by pressing *Ctrl><F>*, from the Cable Readings Screen.

When all of the data for a device has been entered into the four screens, hit the <*Esc>* key to return to the status line of the primary information screen, or enter the keystrokes <*Ctrl R*>, (back one screen), until you are a the primary information screen. After you enter the <*Esc>* key in the primary information screen, PressureMAP will display the following prompt:

```
Correct? (Y(es, N(o, T(hrow away entry)
```

This prompt, in effect, allows you to verify the new device data entered. A **Y** response will save the new device information to the office database and the cursor will be returned to the **Device#** data field. The status line will issue:

Enter device number or <Return> to quit.

From here, you may continue to add new device information to the office. If you wish to do so, enter a new device number and press *<Return>*, then the screen will clear.

When all of the data fields for the device are correct, return to the status line and enter a Y followed by <*Return>* to save the new device data record.

An **N** response to the **Correct**? prompt will move the cursor back to the **Type** data field, where you will be able to edit the device data that you have just entered.

Also, from the Correct? prompt, you may throw away the new device record by pressing *T*, followed by *<Return>*. This command will clear the data screen, and the new device information you have just entered will be abandoned. The cursor will return to the Device# field and the status line will read:

Enter device number or <Return> to quit.

From here, entering *Return* without typing a new device number will clear the screen and return you to the Specific Device Information Menu.

6. Continue to add new devices by following Procedures 2 through 5 outlined in the preceding pages. When all of the new devices have been entered for the current office, press <*Return>* from the Device# data field, without entering a new device number.

REMOVE A DEVICE

This menu item is self-explanatory. When a device in the pressurization system has been removed, you must make sure that you remove the device record from the PressureMAP database.

Procedure:

1. To remove an existing device from the office data file, press *R* from the Specific Device Information Menu prompt. Follow your menu selection with *<Return>*.

When you choose to remove a device from the office data file, you will be prompted for the device number that you wish to remove:

Removing devices from <OFFICENAME>: Enter device number or <Return> to quit.

2. Type the device number or the corresponding access number of the device you wish to remove, followed by *Return>*.

Access numbers are entered with a leading sharp character (eg. "#001A") to distinguish them from device numbers, and may be abbreviated (except for addressable transducers). For example, "#1" is interpreted as "#P -001" for a Chatlos L2, "#T-001" for Sparton, and #001A for E2A. For 289H LSS devices, the device/access number is a card/pair combination. For example, "#2-1" is interpreted as "002-01". However, to look at a device with access number 001-02, you could enter either "#1-2" or "#2" since if you only specify the pair, the program assumes card 1.

It is important to note that the sharp (#) is already allowed as a valid character in user defined device numbers, and continues to be allowed in these numbers. All user input entered with a leading sharp that **exactly** match an existing device number (leading sharp included) are NOT treated as access numbers, but reference the matching device number.

At this point, the device information is displayed on the screen, and a confirmation prompt is issued on the status line:

```
Remove <Device #>? (Y(es, N(o)
```

Examine the device data record on the screen to be sure that it is displaying the device that you wish to delete.

3. Type **Y** to delete the device shown on the screen.

By typing a **Y** (and **<Return>**), the device will be removed from data file and all the device information shown on the screen will be cleared. The cursor will return to the **Device#** field and the program will reissue the prompt:

Removing devices from <OFFICENAME>: Enter device number or <Return> to quit.

Typing an **N** at the **Remove** <**Device#**>? prompt will abandon your request to remove the device from the data file, and the cursor will return to the **Device#** field. The screen will be cleared and the status line will display:

Enter device number or <Return> to quit.

 Continue to remove devices from the current office by following Procedures 2 and 3 outlined above. To return to the Specific Device Information Menu, press <*Return>* without entering a new device number.

DISABLING A DEVICE

With PressureMAP, you have the ability to disable a device without actually disconnecting it from the CPAMS unit. Disable a Device provides you with the capability of withdrawing a device from one or more of PressureMAP's daily functions without actually removing it from the PressureMAP office data files. The disabled device will appear in the complete office history list with a set of parentheses around it. The Disable/Enable function makes it possible to:

- Enter data for devices not yet installed in the field while you are performing normal data entry. The assigned devices can then be disabled until they are installed.
- Selectively disable dispatches, indexes, or both for a specific device.
- Enable PressureMAP functions for disabled devices.

Procedure:

1. Disable/Enable PressureMAP functions for devices in <OFFICENAME>:

Enter device number or <Return> to quit.

Enter the number of the device or the corresponding access number for the device that you wish to Disable/Enable, and press *Return>*.

Access numbers are entered with a leading sharp character (eg. "#001A") to distinguish them from device numbers, and may be abbreviated (except for addressable transducers). For example, "#1" is interpreted as "#P -001" for a Chatlos L2, "#T-001" for Sparton, and #001A for E2A. For 289H LSS devices, the device/access number is a card/pair combination. For example, "#2-1" is interpreted as "002-01". However, to look at a device with access number 001-02, you could enter either "#1-2" or "#2" since if you only specify the pair, the program assumes card 1.

It is important to note that the sharp (#) is already allowed as a valid character in user defined device numbers, and continues to be allowed in these numbers. All user input entered with a leading sharp that **exactly** match an existing device number (leading sharp included) are NOT treated as access numbers, but reference the matching device number.

At this point, the data for the selected device will be displayed on the Specific Device Information Screen.

- 2. Select the desired Disable/Enable function from the option prompt line. There are three different functions which you may disable or enable. These are:
 - Dispatch Priorities
 - System Indexes
 - All PressureMAP Functions

When you disable a particular PressureMAP function, a set of parentheses will be placed around one of the device data fields to indicate which function has been disabled. Depending on which selection you make, the parentheses are placed around one of the following fields:

- Disabling the Dispatch Priorities function will place parentheses around the entry in the Type data field.
- Disabling System Indexes will place parentheses around the entry in the Pipe device data field.
- Disabling All PressureMAP functions will be shown by parentheses placed around the entry in the Device# field.
- **Note:** The Disable/Enable device option acts as a toggle, and the parentheses will appear or disappear accordingly. To enable a function once it has be disabled, select the appropriate entry from the option prompt line and hit *<Return>*. The parentheses will then be removed from the corresponding data field. SCREEN A3-11 shows a device that has all functions disabled.

After you have disabled (or enabled) a device, press *Return* to regain the device number prompt.

3. If you wish to Disable/Enable another device, enter a new device number or press *Return>* to regain the Specific Device Information Menu.

```
Disable/Enable PressureMAP functions for devices in <OFFICE NAME>:
D(ispatch Priorities, S(ystem Indexes, A(11 functions, <Return> to quit:
     _____
                                   Type: MF Range: 19.0 S-M: 6.8
Device #: (011-25)
Address:MH102-NORTHWEST AND SOUTH STSLoc:20Pipe:AOAU:8.5TD Type:RFRef:8.0Sheath(s):0103748
Cable: 32 Prim Pair: 1681 Sec Pair: TD13 Sort Key: RASE
Plat #: RT UG 73 Stickmap: 3
Remarks:*MF ON ROUTE A IS ALSO USED IN NORTHWEST OFFICE
      IT IS DEVICE 025-15 IN THAT OFFICE
          Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
Readings
-----
                        ---- ---- ---- ---- ---- ----
            7.5 7.5 7.5 8.0 8.0 7.5 7.5 7.5 8.0 8.0 15.5 7.5 7.5
 _____
                                               PressureMAP XX.XX.XX
```

SCREEN A3-11: SCREEN FOR DEVICE WITH ALL FUNCTIONS DISABLED

QUIT SPECIFIC DEVICE INFORMATION

Procedure:

 To return to the PressureMAP Data Entry Menu from the Specific Device Information Menu, enter *Q* followed by *<Return>*.

This command effectively quits Specific Device Information and returns you to the **Choose** an option: prompt on the Data Entry Menu.

Deleting an Office

As the function name indicates, Delete An Office will erase all data pertaining to a specific PressureMAP office. Extreme care must be taken when using this function, for the obvious reason that an incorrect or "accidental" office deletion could necessitate the re-entry of all office and device data (especially if you do not have a current backup of the office data).

One reason why you may wish to erase an office is that removing unwanted data will create extra room on the disk where the PressureMAP database is stored.

Because deleting an office has such a final effect, the data entry operator must acknowledge the delete function by answering a precautionary prompt before an office can be deleted. Take the extra time to double-check your action before you actually delete the office specified.

Procedure:

1. At the Data Entry Menu Choose an option: prompt, enter **D** (to delete an office) and press <**Return**>.

When this option is selected, the following prompt will display:

Delete which office?

 Enter the name or number of the office you wish to delete from the Office Listing section on the Data Entry Screen. Hit *<Return>*.

To view the office list in spreadsheet selection format, enter **?**. You can then move through the spreadsheet and select the desired office by pressing *Return*. If the Browser is enabled in your system, the spreadsheet can be searched or sorted using the Pattern Search Keys as described in the Preface.

A prompt will be displayed, asking for a confirmation on the office deletion:

Are you sure you want to delete <OFFICE NAME>? (Y(es, N(o)

Before answering "Y" or "N" to the prompt, double-check to see that the office name you wish to delete appears as the <OFFICENAME> on the prompt line. If there is any discrepancy, enter the letter **N** followed by a <**Return>**. This will discard the delete request and produce the **Choose an option:** prompt from the Data Entry Menu without affecting the PressureMAP database.

If the office name is correct, enter the letter **Y** and press *Return* to delete the office from the PressureMAP office list.

If you answer "Y" to the prompt, all office and device data will be deleted from the PressureMAP database and the office name will be removed from the Offices Listing on the Data Entry Screen. The screen will then display the **Choose an option:** prompt, waiting for you to make another selection from the Data Entry Menu.

Recover From Hardware Failure

The Recover from Hardware Failure menu item makes it possible to restore a file that is corrupted after a hardware "crash" has occurred. For example, if a power outage occurs during data entry, the computer will "crash" leaving open the current office data file. This, in turn, may corrupt the data file, leaving it in a non-readable state. However, with the help of the recover feature, all or part of the corrupted data file may be recovered.

By searching for lost device data and removing duplicate device numbers, a large percentage of lost devices may be recovered. Note that even after a data file recovery, it is still necessary to cross-reference all data entries in the recovered file against the original Office and Device Data Forms. This is to ensure that all data has been correctly recovered.

After a system crash, the system must be booted up and the PressureMAP program restarted. After PressureMAP is running, the Data Entry Editor must be accessed in order to run the Recover option. Once selected, the program will prompt for the office that you wish to recover and PressureMAP will then restore as much of the lost data as possible.

Procedure:

1. From the **Choose an option:** prompt at the Data Entry Menu, press **R**, followed by *Return* to recover a corrupted office data file.

When the Recover from Hardware Failure option has been selected from the Data Entry Menu, the following prompt will be displayed:

Recover data for which office?

2. Enter the name or number of the office that requires recovery, and press <Return>.

To view the office list in spreadsheet selection format, enter **?**. You can then move through the spreadsheet and select the desired office by pressing *Return***>**. If the Browser is enabled in your system, the spreadsheet can be searched or sorted using the Pattern Search Keys as described in the Preface.

At this point, Screen A3-12 will be displayed:

Are you sure you want to recover info for SPAR5300? (Y(es, N(o)
This option: -deletes duplicate devices. -deletes devices with invalid device numbers. -disables devices with access number NONE. -removes illegal characters from device numbers. -removes control characters. -adjusts pipe names. -adjusts location codes. -adjusts stick map codes. -adjusts access numbers.
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A prompt will then ask for confirmation of your function choice:

Are you sure you want to recover info for <OFFICENAME>? (Y(es, N(o)

Entering an **N**, followed by *Return*, will discard your recover request, returning you to the Data Entry Menu.

3. Enter **Y** and **<***Return>* to proceed with the office recovery procedures.

If you go ahead with the data recovery operation, the following message will be displayed, indicating that PressureMAP will begin the data recovery procedures. After a couple of minutes, the following message will be displayed, indicating that the recovery process has been completed:

```
RECOVERY COMPLETE. Hit <Return> to continue.
```

Once this message is displayed, press *Return* and you will be brought to the Data Entry Menu **Choose an option:** prompt. Remember, cross-check the recovered office data with the data records to ensure that all the office data has been correctly recovered.

Quit Data Entry

Quit Data Entry is the command that is used to exit the PressureMAP Data Entry Editor. When all PressureMAP editing functions have been completed, this option returns the user to the MAP Data Entry Menu.

The final editor option is self-explanatory. It is important, however, that you exit the PressureMAP editor properly before leaving the terminal. Never leave the computer before you have performed the exiting procedures described below.

Procedure:

 When all editing functions have been completed, and you are at the Data Entry Options Menu, type *Q*, followed by *<Return>*.

When the "Quit" option is selected from the PressureMAP Data Entry Menu, you will be returned to the MAP Data Entry Menu. Continue to exit the MAP System by selecting the last item on this menu, "Quit".

2. From the MAP Data Entry Menu, select Item **Q** to return to the System Options Menu.

Once you have returned to the System Options Menu, you may completely exit the MAP System by selecting Item Q, "Exit MAP System".

3. Select **Q** from the System Options Menu to completely exit the MAP System.