

Chapter 5

INTRODUCTION

As custodian of the MAP System, the System Administrator has numerous powers and responsibilities. Those responsibilities include initial installation of the system and occasional updating when new versions become available. The System Administrator is also responsible for keeping system data, such as office names, phone numbers, and priority levels current. Maintenance and security of the system are the primary duties of the System Administrator.

Using the System Administration software, the System Administrator can determine who can access the system and how much control each user will have. The administrator can set up a network tie-in using the Network Administration option. The System Administrator can make additional backups and restore a file or a system. The administrator can rebuild the original computer, or restore the system on a backup computer. S/he can set variables such as the time and date, the system name that is displayed with the login prompt and on each alarm and dispatch report, and turn certain functions on and off, or pause them for a period of time. The System Administrator can also initialize the modems attached to the MAP computer, an operation that often cures many of the common system access problems caused by fluctuating power supplies or user error.

The System Administrator can troubleshoot the system if problems occur. In the unlikely event of a major system failure, an additional login and series of passwords has been created to give the System Administrator, with the help of System Studies Technical Support, direct access to the operating system shell. To ensure complete system security, the passwords required by this login change both daily and hourly.

Finally, the System Administrator, or anyone given the proper authorization, can use a special login and password to view output of the Alarm Receivers, the Scheduler, and the System Status. This capability, once available only at the PressureMAP System console, is now possible from a remote computer.

Most of the system administrative functions mentioned above are initiated by accessing the System Administration Menu and selecting the desired option. Each of the menu options is described in detail in the following pages. The process of remotely logging on to a PressureMAP system and viewing the system logs (Alarm Receiver Log, Scheduler, and System Status Log) is described at the end of this section.

SYSTEM ADMINISTRATION PROCEDURES

This section of the *PressureMAP System Administration Manual* provides an easy-to-follow series of procedures for performing specific PressureMAP administrative functions. These procedures describe the System Administration operating methods keystroke-by-keystroke and illustrate all of the pertinent screens and menus. All but two of the options on the System Administration Menu are discussed in this section. Option 15, User Management, are addressed in section 6 of this manual, and Network Administration, option 19, is covered in section 7.

Accessing the System Administration Menu

Before you can begin working with any of the System Administration options, you must bring the System Options Menu to your screen. This procedure explains how to do that. Where you start in this procedure depends upon where you are in the MAP System.

If you log in at the System Options menu, begin at Step #2. Note that if you pause too long during the entry process, the Time Default function may back you out through the menus until you reach the MAP Programs Menu. If you find yourself at the MAP Programs Menu, begin at Step 1. If you have trouble gaining access to the MAP System, refer to the “Multi-User MAP System Installation” section of the MAP System Installation Manual.

```
MAP Programs                                     MAP Series XX.XX.XX
11/10/2013 12:42                               System Studies Incorporated
-----
MAP Programs
-----
 1. PressureMAP
 2. ReportMAP
 3. CableMAP
 4. AlarmMAP
 5. DryerMAP
 6. MAP Diagnostics
 7. User Initiated Operations
 Q. Quit

Choice?
```

SCREEN 5-1: MAP PROGRAMS MENU

Procedure:

1. From the MAP Programs Menu, select the last option. Press **Q <Return>**.

Note: If the Menu Level assigned to your User Account brought you into the PressureMAP System at the MAP Programs Menu, you cannot get into the System Options Menu. If you feel you need access, please contact your System Administrator.

After selecting "Quit," or if you logged into the System Option Menu, you should see:

```
System Options                                     MAP Series XX.XX.XX
11/10/2013 12:53                               System Studies Incorporated
-----
System Options
-----
 1. Select MAP Program
 2. Select MAP Data Entry
 3. System Administration
 4. Language Selection
 Q. Quit

Choice?
```

SCREEN 5-2: SYSTEM OPTIONS MENU

- From the System Option Menu, select "System Administration". Press **3** <Return>. You should see:

```

System Administration                                MAP Series XX.XX.XX
11/10/2013  13:31                                System Studies Incorporated
-----
Password:

```

SCREEN 5-3: SYSTEM ADMINISTRATION PASSWORD PROMPT

- Type in the System Administration password followed by <Return>. The password will not show on the screen.

You should see:

```

System Administration                                MAP Series XX.XX.XX
11/10/2013  13:32                                System Studies Incorporated
-----
System Administration
-----
 1. Set Default Daily Backup Resource    13. Stop Process
 2. Backup MAP System Files              14. Pause Process
 3. Restore MAP System Files             15. User Management
 4. Update MAP System                    16. Set Idle Logout Time
 5. Shutdown the Computer                17. Set the System Name
 6. Shutdown and Reboot the Computer     18. Tape Administration
 7. Set the Date and Time                 19. Network Administration
 8. List Users Currently Logged In        20. BackupEDGE
 9. Reset File Permissions                21. Restart Web Services
10. Modem Administration                  22. Display System Uptime
11. Printer Administration                23. Renew System Registration
12. Start Process                         Q. Quit

Choice?

```

SCREEN 5-4: SYSTEM ADMINISTRATION MENU

Automatic Backup Resource Selection

The MAP system stores and continually updates seven days of office data and four weeks of weekly device reading averages. This information, plus any customized files, are automatically backed up each night by the PressureMAP Scheduler. In the event of a system failure, PressureMAP data may be retrieved from the default tape cartridge backup source, which is the traditional method that has been used for years by PressureMAP systems.

Beginning with the release of PressureMAP Version 26, a third party application called BackupEDGE™ was made available to offer the added capability of backing up system data to other storage resources of sufficient capacity, including DVDs, USB flash drives, and network backup computers via file transport protocol (ftp). Like the traditional backup method, BackupEDGE can also be used to back up data onto tapes, although this method is less practical and less favorable than the other options available. Once the BackupEDGE software has been loaded onto the PressureMAP computer, by following the installation instructions supplied with the product, BackupEDGE can be

accessed from the System Administration Menu (option 20) and used to configure one or more of the available backup resources. Please refer the documentation that is supplied with the BackupEDGE software for configuration instructions.

PROCEDURE TO SET DEFAULT DAILY BACKUP RESOURCE

As stated above, PressureMAP is set to back up system data to a tape cartridge automatically. If you intend to use this traditional backup method, there is no need to set the Default Daily Backup Resource as described below. If the BackupEDGE application has been installed on the PressureMAP computer, however, you also have the option of selecting one of the backup media that has been configured for this application to use as the default backup resource.

Procedure:

1. From the System Administration Menu, select "Set Default Daily Backup Resource." Press **1** and **<Return>**. The menu shown below displays. Notice that the menu title line indicates the current setting for the default backup, either *Traditional* or *EDGE*.

```
Select a default Backup type (currently set to TRADITIONAL)
11/10/2013 13:41      *Schedule Off*      System Studies Incorporated
-----

Select a default Backup type (currently set to TRADITIONAL)
-----
1. Traditional Backup Method
2. BackupEDGE Backup Method
Q. Quit
```

SCREEN 5-5: DEFAULT BACKUP RESOURCES SELECTION MENU

2. To change the default backup resource from tape to one of the configured BackupEDGE resources, press **2** and **<Return>**. Please note that if BackupEDGE has not yet been installed on your system, the following prompt displays:

```
** BackupEDGE **
```

```
BackupEDGE is currently not installed!
If you already have BackupEDGE media, please refer to the
BackupEDGE incremental update instructions or call tech support
for more information.
```

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

3. If the application has been installed, however, the program displays the Current Backups Menu for BackupEDGE (SCREEN 5-6). Initially, this menu displays four options that allow you to activate or deactivate the BackupEDGE resource(s) through PressureMAP .

```

Current Backups for BackupEDGE (disabled)                                MAP Series XX.XX.XX
08/27/2013 12:49                *Schedule Off*                System Studies Incorporated
-----

Current Backups for BackupEDGE (disabled)
-----
  1. Set BackupEDGE slots by device type
  2. Enable backups in the schedule
  3. Disable backups in the schedule
  4. Add BackupEDGE backup to the schedule
  Q. Quit

Choice?

```

SCREEN 5-6: CURRENT BACKUPS FOR BACKUPEDGE MENU

The first option allows you to specify the number of backups, or *slots*, that will be retained for each backup resource that has been configured in the BackupEDGE software. By default, all resources except optical devices or tape drives are set to seven (7) slots. Optical and tape drive resources are each set to one (1).

Note: A slot is the designation for one backup. The maximum number specified depends upon the storage capacity of the backup resource. On a network server (url resource) with a large storage capacity, for example, the default slot setting of seven would allow a week's worth of daily backups to be retained. Once a backup to the last designated slot (7) is written, the next scheduled backup overwrites the oldest, or first slot, followed by the second one, the third, etc.

4. Press **1** and **<Return>** to check or change the slot designations for your backup resource(s). A menu similar to the one shown in SCREEN 5-7 displays. It lists all of the backup devices that have been configured for your PressureMAP system.

```

Slots using BackupEDGE Device:                                MAP Series XX.XX.XX
10/24/2013 14:52                *Schedule Off*                System Studies Incorporated
-----

Slots using BackupEDGE Device:
-----
  1. # of backup slots for url
  2. # of backup slots for sdrive
  3. # of backup slots for optical
  Q. Quit

Choice?

```

SCREEN 5-7: BACKUP SLOT DESIGNATION MENU

Note: The resource selection options displayed on your screen could vary from those shown above, depending upon your BackupEDGE configuration settings. Option 20 of the System Administration Menu provides an access point through PressureMAP for launching

BackupEDGE. From the application's Configuration Menu, you can select any additional backup resources that might pertain to your equipment and/or operation. Please refer to the documentation supplied with BackupEDGE for instructions on how to configure the desired resources.

- To check or change the number of designated slots for a url device, for example, press **1** and **<Return>**. Information similar to the following displays:

```
BackupEDGE current setting for type url is 7
This means the backup will occur daily and 7 backups will be kept.
How many backups would you like to keep for type url (7)?
```

Press **<Return>** to accept the default value of seven slots, or enter the desired number of slots and press **<Return>**. Please note that the fewest slots that can be entered is one, and the maximum number allowed is 50. If you make a change, you will be prompted for a confirmation.

```
You entered "6". Is this correct (y or n)?
Successfully modified /var/map/EDGE_BKUP_GEN.TXT with url:6

Hit <Return> to continue.
```

ADDING BACKUP RESOURCES TO THE PRESSUREMAP SCHEDULE

Once you have confirmed the default slot designations for your configured backup resources, or manually changed the number of slots to be used, you can specify up to four resources to be used for your daily backups. The scheduled backups will be performed each day during the time periods listed below. A system backup using the first resource added to the schedule will be performed between 11:00 p.m. and midnight, followed by a backup at 1:00 a.m. using the second resource added, etc.

```
Backup #1 — 23:00 to 24:00
Backup #2 — 01:00 to 02:00
Backup #3 — 02:00 to 03:00
Backup #4 — 03:00 to 04:00
```

Procedure:

- To add backup resources to the PressureMAP schedule, select option **4** and **<Return>** at the Current Backups for Backup Edge Menu (SCREEN 5-6). Next, the BackupEDGE Configured Device Resource Menu below displays.

```
BackupEDGE Configured Device Resources                                MAP Series XX.XX.XX
10/25/2013  14:40                *Schedule Off*                System Studies Incorporated
-----

BackupEDGE Configured Device Resources
-----
 1. Backup to url using resource skidoo_sco
 2. Backup to sdrive using resource sdrive0
 3. Backup to optical using resource optical0
 Q. Quit

Choice?
```

SCREEN 5-8: CONFIGURED DEVICE RESOURCE MENU

2. To add a resource to the schedule, select the desired option number and press **<Return>**. The software then prompts you confirm you selection, for example:

```
Add backup resource optical0 to the schedule Y[es], N[o] y
Backup resource optical0 added!
Press <enter> to continue.
```

Notice that once you add backup resources to the PressureMAP schedule, the Current Backups for BackupEDGE Menu (SCREEN 5-9) is repopulated with options for Editing, Disabling and Enabling them. You can also remove them from the schedule entirely.

```
Current Backups for BackupEDGE (enabled)                MAP Series XX.XX.XX
08/27/2013 12:49                *Schedule Off*        System Studies Incorporated
-----
Current Backups for BackupEDGE (enabled)
-----
 1. Set BackupEDGE slots by device type
 2. Enable backups in the schedule
 3. Disable backups in the schedule
 4. Add BackupEDGE backup to the schedule
 5. Edit backup #1 device resource skidoo_sco
 6. Edit backup #2 device resource sdrive0
 7. Edit backup #3 device resource optical0
 8. Remove backup #1 device resource skidoo_sco
 9. Remove backup #2 device resource sdrive0
10. Remove backup #3 device resource optical0
 Q. Quit

Choice?
```

SCREEN 5-9: CURRENT BACKUPS FOR BACKUPEDGE MENU

Note: When using the ftp (url) resource, some additional setup requirements will be required on the remote server end—specifically, setting up a distinct directory structure where the archives will be stored.

If a distinct directory is not specified for each PressureMAP system, backups from multiple systems could be saved to the same target directory. When this occurs, it is possible that a system archive from one PressureMAP system could inadvertently be restored to an entirely different PressureMAP system. Additionally, concurrent backups from two or more systems to that same target directory could also conflict, potentially corrupting one another.

Setting up a directory structure on the target network equipment, similar to what is shown below, should prevent potential problems from occurring:

```
/pmap_backups/sys123
/pmap_backups/sys456
```

/pmap_backups/sys789, etc.

Software Release Note 87, available on the System Studies website (www.airtalk.com/reference3.html), provides additional information about setting up distinct folders for use with the BackupEDGE url (ftp) resource. It also includes an explanation of how to designate the ftp (url) resource to use for your system backups.

EDITING SCHEDULED BACKUPS

In order to change a selected resource in the PressureMAP schedule, there must be at least one BackupEDGE-configured resource available that has not yet been added to the schedule. If all resources are being utilized, the *Edit* options appear on the Current Backups for BackupEDGE Menu, but there will be no editing capability possible. In this case, it would be necessary to configure one or more new backup resources in the BackupEDGE software before editing an existing resource. Alternatively, you could 1) remove all of the scheduled resources and add them again in the desired order, or 2) remove one or more of the designated backups and then use the Edit function to change the remaining, scheduled resource(s).

Procedure:

1. Select the desired backup resource from the Current Backups for BackupEDGE Menu and press **<Return>**.

The program displays the following prompt:

```
Edit backup to <your selected resource: e.g. skidoo_sco>
```

2. To proceed, press **Y** to confirm.

Next, the BackupEDGE Device Resource Options Menu displays (SCREEN 5-10). Notice that it only provides options for configured backup resources that are currently not in the PressureMAP schedule.

```
BackupEDGE Device Resource Options                                MAP Series XX.XX.XX
10/25/2013 14:40          *Schedule Off*          System Studies Incorporated
-----
BackupEDGE Device Resource Options
-----
 1. Change skidoo_sco backup to url1 using resource url0
 Q. Quit
Choice?
```

SCREEN 5-10: BACKUPEDGE DEVICE RESOURCE OPTIONS MENU

3. In the example above, press **1** and **<Return>**. The following prompts display:

```
Choice? 1
```

```
Item changed from skidoo_sco to url0 successfully!
Press <enter> to continue.
```

4. Press **<Return>** and the BackupEDGE Device Resource Options Menu redisplay. You can then press **Q** and **<Return>** to back up one screen to the Current Backups for BackupEDGE Menu.

Select any of the additional options available and follow the program prompts as required.

Manual Backup Procedures

The backup procedures described in the following pages allow the system operator to manually perform a MAP system backup, which is especially useful when the MAP system is going to be updated or if hardware needs to be replaced. (Even when a current nightly backup is available, it is a good idea to make a manual backup on such occasions.) When the system operator initiates the backup process, the PressureMAP Scheduler is stopped automatically. The Scheduler controls most MAP operations, such as directing data acquisition, updating device histories, developing daily dispatches and system quality indexes, and distributing reports. It should be noted that while a manual backup is in progress, the PressureMAP operations normally scheduled during that time period will not take place.

The System Administration user-initiated backup process consists of one of the functions described below:

- Creating a backup copy of all customized system files and all office files to tape (traditional backup menu).
- Creating a backup copy of these system and office files to one of the other possible backup resources available through BackupEDGE. This may entail configuring the backup medium using the BackupEDGE application if this procedure was not completed during the installation of the software.

These operations can be controlled from a remote terminal but, in most cases, they will be performed on the drives of the computer on which the MAP System is running.

ACCESSING THE BACKUP MAP SYSTEM FILES MENU

This procedure begins at the System Administration Menu. If you cannot find this menu, refer to the "Accessing the System Administration Menu Procedure" described on page 5-1.

Procedure:

1. From the System Administration Menu, select "Backup MAP System Files." Press **2 <Return>**. You should see the Manual Backup Resource Selection Menu shown in SCREEN 5-11.

```

Select the backup type                               MAP Series  XX.XX.XX
11/10/2011 14:15                                *Schedule Off*   System Studies Incorporated
-----
Select the backup type
-----
 1. Traditional Backup Menu
 2. BackupEDGE Backup Menu
 Q. Quit

Choice?

```

SCREEN 5-11: MANUAL BACKUP RESOURCE SELECTION MENU

2. Select the desired method by pressing the appropriate option number and hitting **<Return>**.

Please note that the explanations presented below describe the screens and procedures for manually backing up your PressureMAP office and data files using the two methods offered in SCREEN 5-11. The Traditional Backup Method is described first, followed by the BackupEDGE Backup process beginning on page 5-11.

TRADITIONAL BACKUP MENU FUNCTION

To access the Backup MAP System Files Menu and perform one of the two procedures displayed in the initial entry screen, follow the procedures described below.

Backing Up MAP System Files to Tape:

Procedure:

1. From the Manual Backup Resource Selection Menu shown in SCREEN 5-11, press **1** and **<Return>**. This produces the Backup MAP Systems Files Menu (SCREEN 5-12).

```

Backup MAP System Files                               MAP Series XX.XX.XX
11/10/2011 14:15                                     System Studies Incorporated
-----
Backup MAP System Files
-----
 1. Backup MAP System Files to Tape
 2 Create Linux Migration Tape
 Q. Quit

Choice?

```

SCREEN 5-12: BACKUP MAP SYSTEM FILES MENU

2. Select "Backup MAP Systems Files to Tape." Press **1 <Return>**. You will see the message:

```
Do you wish to back up MAP System files to tape? Y[es], N[o]
```

3. Make sure you have a magnetic tape cartridge in place, and press **Y <Return>** to start the backup. If you do not have the tape cartridge installed, this message displays:

```
Insert The Tape In the Tape Drive... C)ontinue Q
```

Place the cartridge in the drive and press **C**. The message:

```
Retensioning the tape, please wait...
```

will appear on the screen. Then after a few minutes you will see:

```
Writing the backup, please wait...
```

The backup may take up to ten minutes. When the backup is complete, the system will automatically verify the accuracy of the backup and print the message:

```
Verifying the backup, please wait...
```

When the verification is complete, the message:

```
Backup Complete
Hit <Return> to continue.
```

will confirm a successful backup. Hit **<Return>** to go back to the Backup MAP System Files Menu.

Creating a Linux Migration Tape:

The next option on the Backup MAP System Files Menu is a hold-over from PressureMAP Version 27, where it was possible to run the PressureMAP application on an SCO UNIX 5.0.7. operating system. The Linux Migration Tape made it possible for System Administrators to easily export their entire PressureMAP system to Linux. Since PressureMAP Version 28 only runs on a Linux platform, option #2 of the Backup MAP System Files Menu is no longer applicable. It will be removed from the menu structure once all PressureMAP systems have been updated to Version 28.

BACKUPEDGE BACKUP MENU FUNCTIONS

Follow the procedures described below to access the BackupEDGE MAP System Files Menu and perform a manual backup of the PressureMAP system using one of the configured backup resources available. Once again the Linux Migration Backup function does not pertain to PressureMAP Version 28, although some of the PressureMAP Version 27 menu structure remains.

Please note that procedures are not provided in this documentation for all of the possible backup resources that can be used with the BackupEDGE application. Two of the more commonly used system backup resources, DVD and remote computer backup via file transport protocol (ftp), are explained below for reference.

The procedures for using other resources available from the BackupEDGE Resource Selection Menu to manually back up the PressureMAP system are similar. Simply follow the screen prompts provided.

Procedure:

1. At the System Administration Menu, press option **2**, "Backup MAP System Files," followed by **<Return>**. PressureMAP then displays the Manual Backup Resource Selection Menu shown below.

```
Select the backup type                                MAP Series  XX.XX.XX
11/10/2011 14:55                                     *Schedule Off*   System Studies Incorporated
-----

Select the backup type
-----
 1. Traditional Backup Menu
 2. BackupEDGE Backup Menu
 Q. Quit

Choice?
```

SCREEN 5-13: MANUAL BACKUP RESOURCE SELECTION MENU

- Press **2** and **<Return>** to access the BackupEDGE Resource Selection Menu. If BackupEDGE has not yet been installed on your system, the following prompt displays:

```
** BackupEDGE **
```

```
BackupEDGE is currently not installed!
```

```
If you already have BackupEDGE media, please refer to the
BackupEDGE incremental update instructions or call tech support
for more information.
```

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

- If BackupEDGE has been installed, however, a screen similar to the one shown below displays.

```
Backup MAP system files using BackupEDGE                                MAP Series XX.XX.XX
11/10/2011 14:56                *Schedule Off*                System Studies Incorporated
-----

Backup MAP system files using BackupEDGE
-----
1. Backup MAP system files using Device: tape0 (type: tape)
2. Backup MAP system files using Device: dvd0 (type: dvd)
3. Backup MAP system files using Device: url0 (type: url)
4. Create Linux Migration Backup using Device: tape0 (type: tape)
5. Create Linux Migration Backup using Device: dvd0 (type: dvd)

Q. Quit
```

SCREEN 5-7: BACKUPEDGE RESOURCE SELECTION MENU

Backing Up MAP System Files to DVD

Procedure:

- Assuming that you are using a MAP Engine computer with a DVD-ROM drive and this device has been set up using the BackupEDGE software, select the option for this device from the BackupEDGE Resource Selection Menu. In the example above, press **2** and **<Return>**. PressureMAP displays the following prompt:

```
Do You Wish To Backup MAP system files using Device:
Dvd0 (type:dvdrom)? Y[es], N[o]
```

- If you wish to proceed with the backup, first make sure that you have a writable DVD in the MAP Engine computer's DVD drive, then type **Y** and **<Return>**. (Typing **N** and **<Return>** will redisplay the BackupEDGE Resource Selection Menu.)

The software initiates the backup process with the selected BackupEDGE *dvd0* device and displays the first three lines of text shown below. After a successful backup has been made onto the DVD, which may take several minutes depending upon the number of offices and devices in your system, the next two text lines shown below display on the screen. Please

note that a numerical code display of zero (0) indicates that the backup has been performed successfully. (Please consult your BackupEDGE installation document for an explanation of other possible codes.)

```
Begin edge_backup script

Scheduler is off!

Backup is processing, please wait..
File include list completed, starting backup..
End edge_backup script with code = 0

Hit <Return> to continue.
```

3. Press **<Return>** to go back to the BackupEDGE Resource Selection Menu (SCREEN 5-14). From this menu you can select *Quit* to back through the various menus until you reach the System Administration Menu.

Backing Up MAP System Files to a Remote Computer via FTP

The method of backing up the MAP System files to a remote computer via ftp is essentially identical to the procedure described above. In order for the backup to be accomplished, IP networking requirements for both the MAP Engine computer and the remote computer must be fulfilled. If necessary, consult your company's IT personnel to assist in setting up the IP Addresses, Gateway and Subnet, etc.

In addition, it will be necessary to create a distinct target directory on the network computer or storage device for each PressureMAP system, and define this target directory in BackupEDGE when configuring the ftp (url) resource. Please refer to page 5-7 for additional information.

Procedure:

1. Choose the desired backup resource option from the BackupEDGE selection menu and press **<Return>**. For example, if you were to select option **3** in the example above to *Back up MAP system files using Device: [computer name] (type: url)*, the software would ask for confirmation, displaying a prompt similar to the one below:

```
Do You Wish To Backup MAP system files using Device:
[computer name] (type:url)? Y[es], N[o]
```

2. Enter **Y** and **<Return>** to begin the backup process. The software initiates the backup proceedings with the selected BackupEDGE resource and displays the first three lines of text shown below. After a successful backup has been made, which may take several minutes depending upon the number of offices and devices in your system, the last two text lines display. Please note that a numerical code display of zero (0) indicates that the backup has been performed successfully. (Please consult your BackupEDGE installation document for explanations of other possible codes.)

```
Begin edge_backup script

Scheduler is off!

Backup is processing, please wait..
File include list completed, starting backup..
```

```
End edge_backup script with code = 0
```

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

3. Press **<Return>** to go back to the BackupEDGE Resource Selection Menu (SCREEN 5-14).

Procedures to Restore MAP System Files

This utility is used to move data from a backup resource onto the MAP Engine computer. You would need to do this if hardware problems caused the system to fail or if a user file changed or had been deleted by mistake. Another important restore utility is available for PressureMAP Version 28 systems which are running the supported CentOS 5 Linux operating system. Linux systems have a menu option for performing data migration from a backed up SCO UNIX PressureMAP system.

Prior to performing the procedure, you should stop the scheduler as described in the section, "Procedures for the Stop Process," located near the end of this section.

The Restore MAP System Files utility—both the traditional method and the newer BackupEDGE application—has six functions:

- Reinstall the office and customized files onto the system computer
- Transfer office files from a backup medium to the system computer
- Transfer all office data files from a backup medium to the system computer
- Transfer the office list file from a backup medium to the system computer
- Transfer any file from a backup medium to the system computer
- Transfer PressureMAP data from a SCO UNIX system to a Linux system

All of these operations can be initiated from a remote terminal, but the activity will be performed on the drives of the computer on which the MAP System is running.

ACCESSING THE RESTORE UTILITY SELECTION MENU

This procedure begins at the System Administration Menu (SCREEN 5-15). If you cannot find this menu, follow the *Accessing the System Administration Menu Procedure* presented on page 5-1 of this section.

```

System Administration
11/10/2011 13:32
MAP Series XX.XX.XX
System Studies Incorporated
-----

System Administration
-----
1. Set Default Daily Backup Resource    13. Stop Process
2. Backup MAP System Files             14. Pause Process
3. Restore MAP System Files            15. User Management
4. Update MAP System                  16. Set Idle Logout Time
5. Shutdown the Computer               17. Set the System Name
6. Shutdown and Reboot the Computer   18. Tape Administration
7. Set the Date and Time               19. Network Administration
8. List Users Currently Logged In      20. BackupEDGE
9. Reset File Permissions              21. Restart Web Services
10. Modem Administration               22. Display System Uptime
11. Printer Administration             23. Renew System Registration
12. Start Process                      Q. Quit

Choice?

```

SCREEN 5-8: SYSTEM ADMINISTRATION MENU

Procedure:

1. From the System Administration Menu, select "Restore MAP System Files". Press **3** <Return>. The Restore Utility Selection Menu shown below displays.

```

Select the restore type
10/10/2011 14:14      *Schedule Off*
MAP Series XX.XX.XX
System Studies Incorporated
-----

Select the restore type
-----
1. Traditional Restore Menu
2. BackupEDGE Restore Menu
Q. Quit

```

SCREEN 5-16: RESTORE UTILITY SELECTION MENU

Note: As you can see in the preceding screen sample, PressureMAP offers two backup and restore utilities: the traditional method, which uses an electronic tape cartridge; and *BackupEDGE*, which provides the option of using a tape cartridge or other types of backup and restore media, such as DVD, FTP Server (url), USB memory stick, etc.

You should select the restore utility from the menu above based on the what method was used to back up the system files. If you use BackupEDGE for your automatic daily backups or a manual backup, you would select option 2 from SCREEN 5-16.

2. Select the desired restore method by pressing the appropriate menu option number followed by <Return>.

TRADITIONAL RESTORE MENU FUNCTIONS

The explanation below pertains to the options available from the Traditional Restore Menu. Please note that the types of screen prompts and messages displayed when using this menu apply also to the BackupEDGE restore functions. Where applicable, BackupEDGE requirements will be included in the following text as well.

To access the Traditional Restore Menu and perform the various restore options, select “Traditional Restore Menu” from the Restore Utility Selection Menu by pressing **1** and **<Return>**. The screen below displays.

```
Traditional Restore Menu                                MAP Series XX.XX.XX
10/10/2011  14:10                                     *Schedule Off*    System Studies Incorporated
-----
Traditional Restore Menu
-----
 1. Rebuild System
 2. Restore an Office
 3. Restore All Office Data
 4. Restore Office List File
 5. Restore a File
 6. Restore from Linux Migration Tape
 Q. Quit

Choice?
```

SCREEN 5-17: TRADITIONAL RESTORE MENU

Procedure to Rebuild a System

The first Traditional Restore Menu option gives you the ability to rebuild a PressureMAP system on a spare or current PressureMAP computer. In order to perform this procedure, the same version of PressureMAP that was used to create the backup archive data must also be used on the target (rebuild) system. If the versions do not match, the software will indicate that there is a discrepancy, and the rebuild will NOT be executed.

Spare Server Preparation:

1. As stated above, a spare system needs to be set up with the same version of PressureMAP/PressureWEB that resides on the current LIVE systems. This requirement is necessary because, during the rebuild process, only office data and system configuration items, such as the ones listed below, are restored:
 - Network configuration
 - DIGI PortServer
 - Mail configuration
 - DNS configuration
 - Printer configuration
 - Users names and passwords
 - Host Name configuration
 - Dial-in user access

Please refer to Section 4 of this manual for information on how to install the CentOS 5 Linux software and the PressureMAP/PressureWEB applications.

2. Make sure to have BackupEDGE™ installed unless you are using a traditional style tape backup. Instructions for installing this software are available on the System Studies website (<http://www.airtalk.com/PDFs/Software/2580806fsd.pdf>).

Important ! Make sure you set the hostname, if needed, before BackupEDGE is installed because hostname changes will invalidate BackupEDGE licensing. If the license has been invalidated /expired, Edgemenue will generate a message that looks like the one below:

```
+WARNING-----+
|
| +Please This Machine Can ONLY Perform Restore Operations |
| -- License Has Expired / Invalid License                |
|                   Detected                               |
|-----|
```

If you currently do not have a license for BackupEDGE on the spare computer, the standard 60 day demo period provides 100% functionality and allows plenty of time to acquire a license from Microlite Corporation if needed.

3. After the system software installation has been completed (including BackupEDGE, if applicable), the system will be ready to be rebuilt using the *Rebuild* function described below.

System Rebuild Procedure:

1. From the Traditional Restore Menu (SCREEN 5-17), select "Rebuild System." Press **1** <Return>. You should see the Rebuild System Menu, which is shown below.

```
Rebuild System                                MAP Series XX.XX.XX
10/10/2011 14:51                             System Studies Incorporated
-----
Rebuild System
-----
  1. Rebuild System From Tape
  Q. Quit
Choice?
```

SCREEN 5-18 REBUILD SYSTEM MENU

Originally this intermediate menu was provided because there were two options available: one for rebuilding a system from tape and one for performing the same function from disks. Support for backing up and restoring from floppy disks ended with PressureMAP Version 26.

2. Select the available option, "Rebuild System from Tape". Press **1** <Return>. You will see the message:

```
*****
This option should only be used if the backup tape was
created by a system with the same operating system type
and version as the target operating system.
*****

Do you wish to rebuild the system from tape? Y[es], N[o]
```

3. Press **Y <Return>** (pressing N will return you to the previous menu). You will see the message:

```
Insert the tape in the tape drive... C[ontinue], Q[uit]
```

4. Place the backup tape into the drive on the target computer and press **C <Return>** (pressing Q will return you to the previous menu). You will see the message:

```
PMAP version 28.XX.XX on <Server name>:<System number>
```

```
Traditional Tape Backup System!
```

5. Before the rebuild occurs, the software generates numerous prompts that require a keyboard response. Press the **<Return>** key to accept the default response (Yes or No) to the question, or enter your desired response and tap **<Return>**.

- **Leave schedule off after rebuild [n]**

This option helps to allow customers to test rebuilding on spare computers. By accepting the default, **n** in this case, the schedule will assume the state that the archive data holds. If the archive was backed up while the schedule was on, the rebuild machine will have the schedule on after it completes its process. For testing rebuild or other reasons, answer **y** to this prompt to ensure that the schedule is NOT turned on after the rebuild process.

- **Rebuild network configuration [y]**

If you would like the server that you are rebuilding to include the network settings from the archive data, answer **y** to this question. This will include the IP address, Net Mask and gateway information. Answering **n** will keep the network information that exists on the rebuild server.

Note: Administrators should be careful here because if the network settings are not valid for the server that is being rebuilt, the machine may not be available after reboot. This could possibly happen if the system is rebuilt on a server that resides on a different network or location. In this case, the system will still be available at the console. Spare computers should be checked to ensure that current network settings on live PressureMAP systems will work.

- **Rebuild DIGI PortServer [y]**

Rebuild the DIGI PortServer from the archive data or keep the existing DIGI configuration on the rebuild machine. Connection test to the DIGI server will be performed after it is rebuilt, and you will see warnings at the end of the rebuild process if there are any problems communicating with the DIGI.

- **Rebuild mail configuration [y]**

Rebuild the mail configuration from the archive or keep the existing mail configuration.

- **Rebuild DNS configuration [y]**

Rebuild the DNS (Domain Name Service) configuration from the archive or keep the existing DNS configuration.

- **Rebuild printer configuration [y]**

Rebuild the printer configuration from the archive or keep the existing printer configuration. This process will rebuild all printers. Note that printers attached locally (directly to the server) probably won't work unless they are attached to the server being rebuilt. Most printers are network printers so this should not be a problem.

- **Rebuild Host Name configuration [n]**

Rebuild the hostname from the archive or keep the existing configuration for hostname. There is a warning that goes with this for servers using the BackupEDGE software for backups. If the hostname on a server you are rebuilding, the BackupEDGE license will be invalidated and will have to be revalidated with Microlite.

Depending on how old your BackupEDGE media is, the BackupEDGE software can be removed and installed again to gain access to the 60 day FULL demo period so that backups can be performed until the licensing issues are worked out.

- **Rebuild users [y]**

Rebuild the users using archive data or keep the existing users. It is recommended that the users are always restored so that the rebuilt computer will allow users to access the system to perform tasks.

- **Continue with rebuild [n]**

The user must answer **y** at this prompt to continue the rebuild. Pressing **<Return>** will accept the default **n** value, which will exit the rebuild process.

6. At the end of the rebuild process, you will be prompted to reboot the system. You should answer **y** to this question unless there is good reason not to. After the system reboots, it will be available for use.

Over the next few days, it is recommended that you monitor the system dispatches on the rebuilt system to ensure that everything is working correctly. Look for problems with DIGI PortServer and alarm receivers, and make note of other system dispatches. If you encounter any difficulties, call System Studies Technical Support for assistance.

If the system that is being rebuilt is on a network, you will next need to reconfigure the basic LAN connection to make the system functional. Press **Q <Return>** repeatedly until you return to the System Administration Menu. Refer to the Network Administration section of this manual for the necessary procedures: first, Disconnect the MAP System from the Network; then Connect the MAP System to the Ethernet LAN; and Set the Gateway IP Address.

Procedure to Restore an Office

This procedure transfers all of the files associated with an office from backup tapes to the main system computer. It is used if one of the office files becomes corrupted. The utility can be run from a remote terminal, but the backup medium must be loaded into the drives on the system computer.

This procedure begins at the Restore MAP System Files Menu. If you cannot find this menu, refer to the section entitled **Procedures to Restore MAP System Files**.

Procedure:

1. From the Restore MAP System Files Menu, select "Restore an office", press **2 <Return>**. You should see a list of all of the offices in your system, similar to the SCREEN 5-19.

```

Restore an Office                                MAP Series XX.XX.XX
10/10/2011 14:57                                System Studies Incorporated
-----
Restore which office?

          Offices
          -----
                1. SANTA CRUZ                    2. BOULDER CREEK
                3. BEAN HOLLOW                   4. MONTEREY

```

SCREEN 5-19: LIST OF OFFICES

2. Select the office to be restored by pressing the office number and **<Return>**. You will see the Restore an Office Menu, SCREEN 5-20.

```

Restore an Office                                MAP Series XX.XX.XX
10/10/2011 14:57                                System Studies Incorporated
-----
Restore an Office
-----
    1. Restore an Office From Tape
    Q. Quit

Choice?

```

SCREEN 5-20: RESTORE AN OFFICE MENU

3. Press item **1** and **<Return>**. You will see the message:

```
Do you wish to restore an office from tape? Y[es] N[o]
```

4. Press **Y <Return>** (pressing N will return you to the previous menu). You will see the message:

```
Insert the tape in the tape drive... C[ontinue] Q[uit]
```

5. Place the backup tape into the drive on system computer and press **C <Return>** (pressing Q will return you to the previous menu). You will see the message:

Checking contents of the backup, please wait...

The checking procedure should take less than 5 minutes. If all of the office files are found, you will see the message:

Reading the backup, please wait...

This process should take less than 20 minutes. If your restore procedure is successful, you will see the message:

Hit <Return> to Continue

6. Hit **<Return>** to get back to the Restore an Office Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore All Office Data

This procedure transfers all of the office data files from a backup tape to the MAP computer. It was developed to enable the System Administrator to easily load the office data from a backup tape into the MAP computer. Unlike the other restore options of the System Administration Menu, only office data files are copied from the tape. The files that are transferred by this option include: all office history, index, dispatch and cable opening files.

Procedure:

1. From the Restore Map System Files Menu, select "Restore all Office Data." Press **3 <Return>**. You will see the message:

Do you wish to Restore all Office Data? Y[es] N[o]

2. Press **Y <Return>** (pressing N will return you to the previous menu). You will see the message:

Insert the tape in the tape drive... C[ontinue] Q[uit]

3. Place the backup tape into the drive of the MAP computer and press **C <Return>**. Pressing Q will return you to the previous menu. After entering **C**, you will see the message:

Checking contents of the backup, please wait...

After about 5 minutes, you will see the following message if the checking was successful:

Reading the backup, please wait...

If your restore procedure is successful, you will see the message:

Hit <Return> to Continue

4. Hit **<Return>** to get back to the Restore Map System Files Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore an Office List File

This procedure transfers the office list file from a backup tape to the system computer. The office list file contains the list of offices that have been entered into the PressureMAP database. It is used

if the office file is lost or damaged. The most common cause of damage is a power outage or surge that occurs when the file is being accessed. The office list file is given its own restore utility because PressureMAP will not run without this file, and because it is called upon so often that it is a likely candidate for damage. The utility can be run from a remote terminal, but the backup medium must be loaded into the drives on the system computer.

This procedure begins at the Restore MAP System Files Menu. If you cannot find this menu, refer to the section entitled Procedures to Restore MAP System Files.

Procedure:

1. From the Restore MAP System Files Menu, select "Restore Office List File", press **4** **<Return>**. You should see the Restore Office List File Menu, shown SCREEN 5-21.

```

Restore Office List File                                MAP Series XX.XX.XX
10/10/2011 15:30                                     System Studies Incorporated
-----
Restore Office List File
-----
  1. Restore Office List File From Tape
  Q. Quit

Choice?

```

SCREEN 5-21: RESTORE OFFICE LIST FILE MENU

2. Select item 1 by pressing **1** **<Return>**. You will see the message:

```
Do you wish to restore an office list file from tape? Y[es] N[o]
```

3. Press **Y** **<Return>** (pressing N will return you to the previous menu). You will see the message:

```
Insert the tape in the tape drive... C[ontinue] Q[uit]
```

4. Place the backup tape into the drive on system computer and press **C** **<Return>** (pressing Q will return you to the previous menu). You will see the message:

```
Checking contents of the backup, please wait...
```

If the office list file is found, you will see the message:

```
Reading the backup, please wait...
```

At this point, the office list file is being copied. If the copying is successful, you will see the message:

```
Hit <Return> to continue
```

5. Hit **<Return>** to get back to the Restore an Office List File Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore a File

Using these procedures, any specified file can be transferred from a backup tape to the main system computer. Since this is one of those utilities that could play havoc with the system if exceptional care is not taken, it is only intended to be used by the System Studies Technical Support Staff. We strongly advise PressureMAP users to call System Studies for help with restoring a file. This procedure can be run from any remote terminal, but the backup medium must be loaded into the drives on the system computer.

Procedure:

1. From the Restore MAP System Files Menu, select "Restore a File." Press **5** <Return>. You should see the message:

```
Path name (or press <Return> when done):
```

2. Type in the name of the file that you want to restore followed by <Return>. If you want more than one file restored, type in the path name of each file followed by a <Return>. When you have typed in all the file names that you want restored, type one final <Return>.

You should see:

```
Restore a File                                     MAP Series XX.XX.XX
10/10/2011 14:49                                System Studies Incorporated
-----
Restore a File
-----
 1. Restore a File From Tape
 Q. Quit
Choice?
```

SCREEN 5-22: RESTORE A FILE MENU

3. Select "Restore a File from a Tape". Press **1** <Return>. You will see the message:

```
Do you wish to restore a file from a tape? Y[es] N[o]
```

4. Press **Y** <Return> (pressing N will return you to the previous menu). You will see the message:

```
Insert the tape in the tape drive... C[ontinue] Q[uit]
```

5. Place the backup tape into the drive on the system computer and press **C** <Return> (pressing Q will return you to the previous menu). You will see the message:

```
Reading the backup, please wait...
```

At this point, copies are being made of the file or files that you requested. If the copying is successful, you will see the message:

```
Hit <Return> to continue
```

6. Hit <Return> to get back to the Restore a File Menu. If your attempt at restoring was unsuccessful, you will see an error message indicating the problem.

Procedure to Restore from Linux Migration Tape

If you are using PressureMAP Version 27 on an Linux operating system, a sixth menu option, “Restore from Linux Migration Tape,” appears on the Traditional Restore Menu. This option was created to simplify and automate the process of exporting your PressureMAP System files from an SCO UNIX operating system to Linux.

Utilizing this option assumes that you previously had created a Linux Migration Tape on the UNIX system. Menu options in both PressureMAP Version 26.02 and PressureMAP Version 27.00, located on the Backup MAP System Files Menu, provide this capability. When selected the utility converts data to a portable text format and archives it to backup media. The “Restore from Linux Migration Tape” option in PressureMAP Version 27 extracts the data from the backup media and creates the corresponding data files (listed below) in the native binary format:

- Office list
- History files
- Report Centers
- Alarm Centers
- Transfer Offices
- Mimic Access Number mappings
- User logins
- Configuration files
- Login ttys

Performing the procedure to Restore from a Linux Migration Tape is similar to the other restore options described above. Once the procedure has been completed, you can access system, office and device data via the normal MAP System menus.

Procedure:

1. From the Restore MAP System Files Menu, select "Restore from Linux Migration Tape." Press **6 <Return>**. You should see the message:

```
Do You Wish to Restore from Linux Migration Tape?
```

2. Press **y <Return>** to proceed. Entering **n <Return>** takes you back to the Traditional Restore Menu. After entering “yes” to the prompt, additional screen data appears as shown in SCREEN 5-23 below.

```
Restore from Linux Migration Tape                                MAP Series XX.XX.XX
05/27/2011 11:47                                             *Schedule Off*      System Studies Incorporated
-----
Do You Wish To Restore from Linux Migration Tape? Y[es], N[o] y

**** Extracting files from backup media ****

Restoring MAP System Files

Insert The Tape In The Tape Drive... C)ontinue Q
```

SCREEN 5-23: RESTORE FROM LINUX MIGRATION TAPE PROMPTS

3. Insert the migration tape into the tape drive and press **C <Return>**. The following messages appear to indicate that the automated restore process is underway.

```
Rewinding the tape...
Done rewinding the tape...
Reading The Backup, Please Wait...
```

At this point several lines of text scroll by identifying the data being read. The information includes specific office files, MAP schedules, call times, etc. Eventually the following messages appear if the restore process is successful:

```
Rewinding the tape...
Done rewinding the tape...

No restore messages from tar to report...
Looks like a successful restore...

Restore Complete.

Post restore actions (if any):

Post restore actions complete...
```

The Linux migration utility next displays more detailed processing information, including the progress of various classes of data as they are migrated. This information, which takes several minutes to process, includes office data, alarm/dispatch centers, MAP system configuration files, user logins, Digi PortServer configuration, including communication port designations. Depending upon the number of offices on your original system and how many serial resources you use, the processing information could take several minutes to display. At the completion of the process, the following message displays:

```
Resetting file permissions. Please wait...
Resetting file permissions \c
successful.
```

4. The Tradition Restore Menu (SCREEN 5-17) will display next. Since all of the required files and information from the SCO UNIX Version 26.02 or Version 27.00 PressureMAP system have been restored successfully, simply or press **Q <Return>** to exit.

BackupEDGE Restore Menu Functions

The restore procedures for BackupEDGE are very similar to the Traditional Restore functions described in the preceding pages. Once you select the type of restore function to perform from the BackupEDGE Restore Menu and the type of BackupEDGE-configured resource to use for the restore process, you will simply need to follow the menu prompts provided by the application.

Please note that the procedures described below begin at the System Administration Menu. An explanation of how to access this menu is provided on page 5-1.

Procedure:

1. From the System Administration Menu, select "Restore MAP System Files". Press **3** <Return>. The Restore Utility Selection Menu shown below displays.

```

Select the restore type
12/21/2011 14:14          *Schedule Off*          MAP Series XX.XX.XX
                        System Studies Incorporated
-----

Select the restore type
-----
 1. Traditional Restore Menu
 2. BackupEDGE Restore Menu
 Q. Quit

```

SCREEN 5-24: RESTORE UTILITY SELECTION MENU

2. Access the BackupEDGE Restore Menu by pressing **2** and <Return>. If the application has not yet been installed on your system, the following prompt displays:

**** BackupEDGE ****

BackupEDGE is currently not installed!

If you already have BackupEDGE media, please refer to the BackupEDGE incremental update instructions or call tech support for more information.

Hit <Return> to continue..

If BackupEDGE has been installed, PressureMAP produces the following menu:

```

BackupEDGE Restore Menu
12/21/2011 14:14          *Schedule Off*          MAP Series XX.XX.XX
                        System Studies Incorporated
-----

BackupEDGE Restore Menu
-----

 1. Rebuild System
 2. Restore an Office
 3. Restore All Office Data
 4. Restore Office List File
 5. Restore a File
 6. Restore from Linux Migration Backup
 Q. Quit

Choice?

```

SCREEN 5-25: BACKUPEDGE RESTORE MENU

3. Select the desired restore option from the selections above. Each of the menu options, with the exception of items 2 and 5, produces a menu similar to the one shown in SCREEN 5-26 below.

```

Rebuild System using BackupEDGE                               MAP Series XX.XX.XX
12/28/2011 10:54          *Schedule Off*          System Studies Incorporated
-----

Rebuild System using BackupEDGE
-----
 1. Rebuild System using Device: tape0 (type: tape)
 2. Rebuild System using Device: dvd0 (type: dvd)
 3. Rebuild System using Device: url0 (type: url)
 Q. Quit

Choice?

```

SCREEN 5-26: BACKUPEDGE REBUILD SYSTEM MENU

Notice that you will need to choose the BackupEDGE device that you used to back up the system files in order to perform the rebuild\restore function.

For an explanation of the required procedures and PressureMAP menu prompts produced during the various rebuild\restore functions, please refer to the explanations in the preceding Traditional Restore Menu Functions.

Note: If your backup resource supports multiple backups like FTP Server (type: url) and USB memory sticks, you will be prompted **three times** to enter which backup (segment) is used during the restore. The backup segments are numeric, e.g. 1 to 5, 1 to 10, etc. After selecting a particular segment, be patient. It can take up to 10 minutes or longer before you will see anything displayed on the screen. It is important to enter the same segment during each prompt:

- 1st pass — Checks for certain files on the archive
- 2nd pass — Restores configuration files to a temporary folder
- 3rd Pass — Restores systems files needed for users, system files, etc.

Once you have defined the backup segments to use for each of the passes described above, the program will display a series of nine prompts, which are explained beginning on page 5-18.

4. When you have finished performing the desired BackupEDGE restore function(s), quit out of the various menus by pressing **Q** repeatedly until you reach the System Administration Menu.

Procedure to Update MAP System

The functions available through this option of the System Administration Menu are as follows:

- System Update—used to update from one version of PressureMAP to the next released version. It also offers the ability to separately update the PressureWEB software, the System Status Viewer, if applicable, and the Linux operating system.

- Supplemental Update—which includes installing Custom Reports that can be accessed through the User Initiated Operations Menu.

While **Update the MAP System** is a part of the System Administration Menu, these important utilities are documented separately. Please refer to Section 4 of this manual for System Update, Supplemental Update, Report Update and Special Data Update information. Instructions for the Office Update procedures are shipped with the prepared office data CDs/DVDs.

Procedure to Shut Down the Computer

This utility implements a controlled shutdown of the system computer. Turning off the power to the computer while the MAP program is running risks losing or damaging files. Using this procedure to exit the MAP program before turning off power to the computer will ensure that no data is lost. This utility is used whenever the computer needs to be turned off, such as during the installation of new hardware or if the computer is to be moved. It is also useful as a troubleshooting procedure when modems need to be reinitialized.

While this utility can be performed from a remote terminal, running the utility will cut off the remote terminal. Then the remote terminal user will have to wait until someone reboots the program from the system computer.

Procedure:

1. From the System Administration Menu, select "Shutdown the Computer". Press **5 <Return>**. You will see the message:

```
Do you wish to shut down the computer? Y[es], N[o]
```

2. Press **Y <Return>**. Which message you see next will depend upon whether or not anyone else is currently logged into the system. If no one else is logged in, the system will immediately shut down. You will see the messages:

```
No other users currently logged in.
```

```
* * Normal System Shutdown * *
```

```
* * Safe to Power Off * *
```

```
* * Press any Key to Reboot * *
```

(For the reboot procedure, go to Step 3 in this procedure.)

If other users are logged onto the system, both you and they will see the following series of messages:

```
Shutdown started.  
The system will be shutdown in 60 seconds.  
Please log off now.
```

And then, 60 seconds later:

```
THE SYSTEM IS BEING SHUT DOWN NOW ! ! !  
Log off now or risk your files being damaged.
```

Soon after the last message, the remote terminal users will be logged off if they haven't already done so.

3. The last message will remain on the remote users' screen after they are cut off. To access the system, they will have to call in and log on again after someone reboots the program from the main computer. The user working on the system terminal will see the message:

```
* * Safe to Power Off * *
```

```
* * Press any Key to Reboot * *
```

4. You may now feel free to turn off the computer.
5. After turning the computer on again, you will see a message similar to the following on the system computer's monitor:

```
Phoenix 80486 Rom Bios Version XX.XX
```

```
Copyright (c) 1985-1988 Phoenix Technologies Ltd.  
All rights reserved
```

This message will vary slightly depending on the type of hardware you are using.

6. As the system reboots, you will see numerous lines of text scrolling across the screen. You will also see a series of prompts after which the cursor stops and flashes. Some of these prompts will require your input, some will not, and some are optional. The first prompt is:

```
Hit CTRL ALT ESC for SETUP.
```

Ignore this prompt and the program will soon move on. Next, you will see:

```
Boot  
:
```

7. Press **<Return>**. Then you will see:

```
Type CONTROL-d to proceed with normal startup, (or give root password  
for system maintenance):
```

8. Type in **<Control d>** (no **<Return>**). You will see the message and prompt:

```
Current system time is: (date and time)
```

```
Enter new time ([yymmdd]hhmm):
```

9. The date and time recorded on the computer's clock are indicated. If the computer clock is wrong, you may enter a new time or date. If the computer clock is right, press **<Return>** or simply ignore the prompt and wait for the program to move on. After a while, you will see the login prompt on the screen:

```
PressureMAP XX.XX.XX Login:
```

10. If some other text appears on the screen after the login prompt, press **<Return>** and the login prompt will appear again below the text. At that point, type in your User ID and password.

Procedure to Shut Down and Reboot the Computer

If you use the proper procedure to quit the operating system, it is called a shutdown. When the computer is shut down correctly, there is no danger of losing files. Whenever the power is unexpectedly shut off to the system computer, there is a danger of losing or damaging files. Such an occurrence is appropriately called a crash. This utility will shut down the computer correctly and immediately reboot it again. It is used during the System Update.

It is also used for trouble shooting when a tape drive seems to be hung up or a modem needs reinitializing. While this utility can be performed from a remote terminal, running the utility will cut off the remote terminal. The remote terminal user will have to wait until the system reboots itself and then log on again.

Procedure:

1. From the System Administration Menu, select "Shutdown and Reboot the Computer". Press **6 <Return>**.

```
Do you wish to shutdown and reboot the computer? Y[es], N[o]
```

Press **Y <Return>**. Which message you see next will depend upon whether or not any other users are currently logged into the system. If no other users are logged on, the system will immediately shut down, begin the rebooting, and display the messages illustrated here after Step 2. If there are other users logged onto the system, both you and the other users will see the following series of messages:

```
Shutdown started. (date)
```

Followed by:

```
The system will be shutdown in 60 seconds.  
Please log off now.
```

And then, 60 seconds later:

```
THE SYSTEM IS BEING SHUT DOWN NOW ! ! !  
Log off now or risk your files being damaged.
```

Soon after the last message, the remote terminal users will be logged off if they haven't already logged off.

2. The last message will remain on the remote users' screen after they are cut off. To access the system, they will have to call in and log on again. If your monitor is attached to the system computer, you should next see:

```
Phoenix 80486 Rom Bios Version XX.XX  
Copyright (c) 1985-1988 Phoenix Technologies Ltd.  
All rights reserved
```

This message is displayed at the beginning of the rebooting process and will vary depending on the type of hardware you are using.

3. As the system reboots, you will see numerous lines of text scrolling across the screen. You will also see a series of prompts after which the cursor stops and flashes. Some of these prompts will require input from you, some will not, and some are optional.

The first prompt will be:

```
Hit CTRL ALT ESC for SETUP.
```

Ignore this prompt and the program will soon move on. Next, you will see:

```
Boot
:
```

4. Press **<Return>** or simply ignore this prompt; the booting will continue after a minute or so. Then you will see:

```
Type CONTROL-d to proceed with normal startup (or give root password
for system maintenance):
```

5. Press the **<Ctrl>** and **<D>** keys (no **<Return>**). You will see the message and prompt:

```
Current system time is: (date and time)
```

```
Enter new time ([yymmdd]hhmm):
```

6. The date and time recorded on the computer's clock are indicated. If the computer clock is wrong, you may enter new time or date. If the computer clock is correct, press **<Return>** or simply ignore the prompt and wait for the program to move on. After a while, you will see the login prompt on the screen:

```
PressureMAP XX.XX.XX Login:
```

7. If some other text appears on the screen after the login prompt, press **<Return>** and the login prompt will appear again below the text. At that point, type in your User ID and password.

Procedure to Set the Time and Date

There are two time keepers in the system computer: one programmed into the computer hardware, and one that is part of the operating system. This utility will change the time and date on both of these time keepers.

Procedure:

1. From the System Administration Menu, select "Set the Time and Date". Press **7 <Return>**. You will see the message:

```
Do you wish to set the time and date? Y[es], N[o]
```

Press **Y <Return>**. You will see the following message:

Enter date (mm/dd/yy) :

2. Type in a new date, even if the date shown at the top of the screen (below the screen title) is already correct. Your format must be exactly the same as shown on the screen. You **must** use double digits and slash marks. An example of the format would be:

10/21/08

3. After you type in a new date, press **<Return>**. You will see the message:

Enter time (hh:mm):

4. Type in a new time. As before, your format must be exactly the same as shown on the screen. The time must be entered as it would be read from a 24-hour clock. For example, 6:00 p.m. would be written as 18:00.

After you type in a new time, press **<Return>**. You will see the message:

Time and date reset.

Hit <Return> to continue.

5. Hit **<Return>** to get back to the System Administration Menu.

Procedure to List Users Currently Logged In

This utility will display a list of all the users who are logged onto the MAP System at the time that the utility is run. It is a good idea to look at this list before the system is shut down. Shutting down the system will cut off all users, which may result in the loss of data that is being input at the time.

Procedure:

1. From the System Administration Menu, select "List Users Currently Logged In". Press **8** **<Return>**. You will see the message:

Do you wish to list users currently logged in? Y[es], N[o]

2. Press **Y** **<Return>**. You will see a list of the users who are currently logged into the MAP program on the screen. The list will look similar to the following one, except that it will list the users on your system.

```

List Users Currently Logged In                                MAP Series XX.XX.XX
09/25/2011 17:40                                           System Studies Incorporated
-----
Do You Wish To List Users Currently Logged In? (Y(es), N(o) y
Name      Line      PID      Time
cpams     ttya1      143     Wed Apr 25 16:55:45 2011
madjack   ttyA2      246     Wed Apr 25 17:37:22 2011
bostonbiff ttyA3      247     Wed Apr 25 17:33:56 2011

Hit <Return> to Continue

```

SCREEN 5-27 SAMPLE LIST OF CURRENT USERS

The columns describe the following:

Name—lists the User IDs of the users presently logged in.

Line—reveals the modem line on which the current users are logged in.

PID—gives the Process ID number which is used by the system for various internal functions such as the Idle Logout.

Time—shows the time that the user logged in.

Note: The list does not reveal the origin of the call or the location of the user. Hopefully, the User ID will be descriptive enough to suggest where the user is calling from.

After the list, you will see the message:

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

3. Hit **<Return>** to get back to the System Administration Menu.

Procedure to Reset File Permissions

This is primarily a maintenance utility which can be run when you have difficulty accessing a file. It will run the program which establishes what privileges each Menu Level has.

Procedure:

1. From the System Administration Menu, select "Reset File Permissions". Press **9 <Return>**. You will see the message:

```
Do you wish to reset file permissions?  Y[es], N[o]
```

2. Press **Y <Return>**. You will then see the message:

```
Upgrading system permissions, please wait...
```

When the file permissions have been reset, you will see:

```
Permissions upgrade successful.
```

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

3. Hit **<Return>** to get back to the System Administration Menu.

Procedures to Perform Modem Administration

This utility allows the System Administrator to reprogram any of the modems attached to the system computer. The reprogramming process is called initializing. Initializing involves setting dozens of parameters so that the modems can communicate with PressureMAP as well as the remote modems. Since the initialization process requires the modem to be disabled, this utility also allows the user to disable the modems.

This is primarily a maintenance utility. It is the first thing that you should try if you have difficulty with one of the modems, such as if you cannot dial in. Modems should also be initialized when the

system is installed or rebuilt. In addition, modems must be initialized when newly installed, or after they are reconfigured. The last Modem Administration Menu option allows you to view the present modem configuration of the MAP computer.

MODEM FUNCTIONS

There are four different modem functions for each MAP System: Batch, Interactive, Alarm Receiver and User Access. Batch modems are used by the MAP software to call office monitors and collect data, verify alarm conditions, and send alarms and dispatches. Interactive modems are set up to be used by anyone logged into the MAP System to call the monitors for realtime readings, or to manually back up or restore a monitor. The interactive modem is also used when performing CPAMS diagnostics. The Alarm Receiver modems are used by the MAP software to receive alarms sent by the monitors. User Access modems provide the remote user with a means of logging into the MAP System.

Procedure:

1. From the System Administration Menu, select "Modem Administration." Press **10 <Return>**. You will see the Modem Administration Menu illustrated in SCREEN 5-28.

```
Modem Administration                                MAP Series XX.XX.XX
09/02/2011 14:36                                System Studies Incorporated
-----

Modem Administration
-----
 1. Disable a Dial-in Modem Port
 2. Enable a Dial-in Modem Port
 3. Initialize a Modem
 4. Analyze Modem Configuration
 Q. Quit

Choice?
```

SCREEN 5-9: MODEM ADMINISTRATION MENU

2. From the Modem Administration Menu, you can choose any of the four functions offered. Because you can initialize callout modems only when no call is in progress, and readalarm modems cannot be initialized when readalarm is running, all modems must be disabled before the initialization process begins.

To disable a modem, choose option #1 from the Modem Administration Menu. You will see the following prompt:

```
Do you wish to disable a Dial-in Modem Port? Y[es], N[o]
```

3. Striking **Y** at the above prompt will bring up the message:

```
Enter the port name to disable:
```

Striking a "?" after the above prompt will display the following message followed by a listing of all the ports that are currently enabled. For example:

```
Ports eligible for disabling:
A1, A2, A6
```

After entering the name of the port that you want to disable and pressing **<Return>**, the Modem Administration Menu will be redisplayed. Now that you have disabled the port, you can initialize it.

- From the Modem Administration Menu, select **3**, followed by **<Return>**. You will see the following question.

```
Do you wish to initialize a modem? Y[es], N[o]
```

- Press **Y**, followed by **<Return>** to proceed with the initialization. The following message will be displayed:

```
Enter the port name to which the modem is attached:
```

- Enter a port name and press **<Return>**. (Pressing a "?" will display a message describing what a port name is but will not list the port names.)

After modem initialization you will be returned to the Modem Administration Menu.

- After the modem has been initialized, it must be re-enabled. From the Modem Administration Menu, press **3**, followed by **<Return>**. You will see the question:

```
Do you wish to enable a Dial-in Modem Port? Y[es], N[o]
```

- Striking a **Y** at the above prompt followed by **<Return>** will bring up the message:

```
Enter the port name to enable:
```

Striking a "?" after the above prompt will display the following message followed by a listing of all the ports that are currently disabled.

```
Ports eligible for enabling:
A1, A2, A6
```

After entering the port that you want to enable and pressing **<Return>**, the Modem Administration Menu will be redisplayed.

VIEWING THE MODEM CONFIGURATION

The last option available from the Modem Administration Menu is "Analyze Modem Configuration." This option provides a listing of all the PressureMAP System's modems, designating the assigned port used, configuration (Alarm Receiver, dialout, user login, etc.), baudrate and modem type (manufacturer name and version). Beginning with PressureMAP Version 25.01, Modem Configuration information also includes a second line of information which indicates the modem pool function: batch, interactive or user access.

Procedure:

- From the Modem Administration Menu, select "Analyze Modem Configuration." Press **4** **<Return>**. You will see the following prompt:

```
Do You Wish To Analyze Modem Configuration? Y [es], N[o]
```

2. Type **Y** and press **<Return>**. You will see the Modem Configuration Menu illustrated in SCREEN 5-29.

```
Analyze Modem Configuration                                MAP Series XX.XX.XX
09/02/2011 16:11                                         System Studies Incorporated
-----

Do You Wish To Analyze Modem Configuration? Y[es], N[o] y

Port A1 is a modem, Alarm Receiver 1200 Baud Off, Boca V.34 Modem
Port A2 is a modem, Alarm Receiver 2400 Baud Off, Boca V.34 Modem
Port A3 is a modem, MultiTech 33.6
Port A4 is a modem, MultiTech 33.6
Port A5 is a modem, MultiTech 33.6
Port A6 is a modem, MultiTech 33.6
Port A7 is a modem, MultiTech 33.6
Port A8 is a modem, MultiTech 33.6
Port B1 is a modem, dialout, MultiTech 33.6
      modem pool: interactive
Port B2 is a modem, dialout, MultiTech 33.6
      modem pool: interactive
Port B3 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Port B4 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Port B5 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Port B6 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Port B7 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Port B8 is a modem, dialout, MultiTech 33.6
      modem pool: batch
Hit <Return> to continue.
```

SCREEN 5-29: MODEM CONFIGURATION MENU

3. When you are finished viewing the Modem Configuration Menu, press **Quit** to return to the Modem Administration Menu.

Printer Administration Procedures

The information in the following pages describes Printer Administration functions and screen samples that pertain to the Linux operating system. The number of menu options available and some of the program output differ from what is provided for previously supported UNIX systems.

PRINTER ADMINISTRATION OVERVIEW

The MAP System allows multiple printers to be set up as destinations for printed reports. Using the Printer Administration utility, the System Administrator can add and remove printers, set the system default printer, view and manage each printer queue, and restart the printing service for designated printers. Once local and remote printers have been configured in the MAP System, users can specify which printer should receive print jobs from the current login session. The MAP System also has the ability to ensure that the printer actually does print every dispatch report.

All reports to be printed are sent as files and routed through a printer buffer and a printer spooler. The buffer stores the files to be printed, and the spooler schedules the movement of the files from the buffer to the printer. The spooler also has the capability to detect problems in the printer. When

the spooler detects a problem that may prevent the printing of the reports, it will shut down. This keeps the reports in the buffer rather than sending them on to the non-functioning printer where they could be lost.

When you detect that the printer attached to the system computer is not working, you should first try to restart the printer spooler with this utility. When the printer problem is corrected, the spooler will continue feeding the stored reports to the printer.

These operations may be performed from a remote terminal, as well as at the console of the computer on which the MAP System is running. From the System Administration Menu, select "Printer Administration." Press **11 <Return>**. You should see the Printer Administration Menu, which is shown in SCREEN 5-30.

```
Printer Administration                                MAP Series XX.XX.XX
09/10/2011 13:01                                    System Studies Incorporated
-----

Printer Administration
-----
 1. View Printer Configuration
 2. Add Printer
 3. Remove Printer
 4. Set Printer Default
 5. View Printer Queue
 6. Cancel Printer Request
 7. Clean Printer Queue
 8. Restart Printing Service
 Q. Quit

Choice?
```

SCREEN 5-30: PRINTER ADMINISTRATION MENU

The following sections describe the eight procedures listed on the above menu.

VIEW PRINTER CONFIGURATION

This menu item allows the user to see all of the printers, remote and local, that have been specified for the current system. The system-wide default printer is indicated by "*". Local printers are designated with "L", and remote printers with "R". The "local" printer is a printer attached to the PressureMAP computer. All others are "remote." Individual printers in the list may then be selected to view additional information.

Procedure:

1. To view the available printers, select option **1** from the Printer Administration Menu. As shown in the sample output in SCREEN 5-31, a numbered list of the currently configured printers displays. The list is followed by a message prompting you to select one of the printers if you desire to see additional information.

The initial displayed configuration includes each printer's name, type and the comment entered when the printer was set up in the system.

```

View Printer Configuration                                MAP Series XX.XX.XX
12/09/2011  14:35          *Schedule Off*          System Studies Incorporated
-----

Printer Name      Type      Comment
-----
1. printer/copier    R      Located in room 117A
2. sw-hpjet         *R     Primary designated printer

Enter printer for more information, or <Return> to quit:

```

SCREEN 31: VIEW PRINTER CONFIGURATION DISPLAY (REMOTE)

- If you wish to view more information about one of the printers, enter its number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)

After entering your selection you will be asked to confirm your choice. If what you have entered is incorrect, type **N <Return>**. The prompt will then be redisplayed for you to enter the correct information. To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.

- When you have verified your choice, the screen will display the additional information for the selected printer.

If the printer you chose is remote, the configuration will be similar to what is displayed in SCREEN 5-32. The information listed will include the type designation (remote or local), the device URI (uniform resource identifier), the model designation, and the status of the device (e.g. if it is off line, accepting requests, etc.).

```

View Printer Configuration                                MAP Series XX.XX.XX
12/09/2011  14:35          *Schedule Off*          System Studies Incorporated
-----

Printer Name      Type      Comment
-----
1. printer/copier    R      Located in room 117A
2. sw-hpjet         *R     Primary designated printer

Enter printer for more information, or <Return> to quit: 2

You entered [sw-hpjet] is this correct? (y/n/q): y

-----
Printer sw-hpjet features:

Type:              Remote
Device URI:        ipp://derby.airtalk.com:631/printers/sw-hpjet
Model:             unknown
Status:            accepting requests, is idle
-----

Information about another printer? (y/n/q): n

```

SCREEN 5-32: EXTENDED PRINTER CONFIGURATION DISPLAY (REMOTE)

4. The screen will then prompt you to select another printer. If you wish to view more information about one of the printers, enter **Y <Return>** and go back to step 2.

Press **N <Return>** or **Q <Return>** to go back to the Printer Administration Menu.

PROCEDURE TO ADD A PRINTER

This procedure allows the user to add one or more printers, local or remote, to the system's configuration. A "local" printer is a printer attached to your computer. A remote printer may be either a printer attached to a remote computer (print server) or a stand-alone LAN printer with an IP address. The following procedure demonstrates how to add: first, a local printer and second, a remote printer. The series of question prompts presented by the program may vary, depending on the answers given to the data prompts.

Adding a Local Printer

Procedure:

1. From the Printer Administration Menu, select "Add Printer." Press **2 <Return>**. At this point the screen displays a list of any previously configured printers that may exist, followed by a prompt to add a new printer name.

Enter printer name:

2. Type the designated name for the new printer followed by **<Return>**. Please note that this name must conform to the following requirements:
 - must be 14 characters or less
 - allowable characters are letters, numbers and underscore (_)
 - must not match any Printer Name already listed

3. After you type the name of the new printer, a prompt confirms your entry and asks if it is correct.

You entered [printer name] is this correct? (y/n/q):

4. If the name you have entered is correct, press **y** and **<Return>**. Entering an "n" and **<Return>** redisplay the prompt shown in step 1; entering a "q" and **<Return>** twice places you back at the Printer Administration Menu (SCREEN 5-30).

5. The next prompt displayed on the screen asks if the new designated printer is a local printer.

Is printer name a local printer? (y/n/q):

6. Press **y <Return>**, unless you intend to designate a remote printer (see explanation beginning on page 5-41). At this point the information on the screen could be similar to what is shown in SCREEN 5-33 below:

```

Add Printer                                     MAP Series XX.XX.XX
09/10/2011 17:43                             System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. printer/copier    R      Located in room 117A.
2. sw-hpjet         *R     Primary designated printer

Enter printer name: buck

You entered [buck] is this correct? (y/n/q): y

Is buck a local printer? (y/n/q): y

```

SCREEN 5-33: ADD PRINTER DISPLAY (LOCAL PRINTER)

Once you designate the new printer as a local printer, a screen prompt asks you to select a printer model from a list of possible printer types. SCREEN 5-34 illustrates the type of information provided. Depending upon the version of Linux operating system you are using, there may be only one or several screens of printer models from which to choose.

```

Keystrokes: [Select <Return>] [Abort <Esc>] [Down 'J'] [Up 'K'] [Help 'H']
             [Search Forward 'F'] [Search Back 'B'] [Search Next 'N']

Select Printer Model.
-----
Brother DCP-7025 BR-Script3
Brother DCP-8020 BR-Script3
Brother DCP-8025D BR-Script3
Brother DCP-8040 BR-Script3
Brother DCP-8045D BR-Script3
Brother HL-1450 BR-Script2
Brother HL-1470N BR-Script2
Brother HL-1650/70N BR-Script3
Brother HL-1850/70N BR-Script3
Brother HL-2460 BR-Script3
Brother HL-2600CN BR-Script3
Brother HL-2700CN BR-Script3
Brother HL-3260N BR-Script3
Brother HL-3450CN BR-Script3
Brother HL-5050 BR-Script3
Brother HL-5070DN BR-Script3J
Brother HL-5070N BR-Script3
Brother HL-5150D BR-Script3
--- More Below -----

```

SCREEN 5-34 LIST OF AVAILABLE PRINTER TYPES

- Use the navigation keys to scroll down through the list until you locate the type of printer being added to the system. You may then select the appropriate model and press **<Return>** to enter it. If your printer type is not listed, simply select a generic one. The program will display the printer type you have selected and ask if it is correct.

```
You entered [printer type] is this correct? (y/n/q):
```

8. If the selected printer is incorrect, press *n* <Return>, and the list will redisplay. Tap *q* <Return> twice if you wish to abort the Add Printer procedure and return to the Printer Administration Menu.

If the printer type you have selected is correct, press *y* <Return> to approve your printer selection. The screen then displays to following menu:

```

Local Printer Type
-----
1. USB
2. Parallel
Q. Quit

```

9. Select one of the two options that represents the type of printer-to-MAP computer connection that will be used. The program then indicates your selection and asks you to choose a printer device. Please note that if there is no valid hardware device present, you can type *q* <Return> to return to the Printer Administration Menu.
10. Enter the number or designation which represents the printer device (port) that will be used, followed by <Return>. You can also just press <Return> to accept the default (lpt0).
11. Next you will be prompted to enter a comment that will display in the Printer Configuration list. If desired, type a short comment and press <Return>.

When you have confirmed your input, the system will enable the new printer to accept print jobs and display a message that the printer has been added.

```

*****
Printer buck was successfully added.
*****

```

12. You will now see a prompt asking whether you want to add another printer. To add another printer, press *Y* <Return> and go back to step 3.

Pressing *N* <Return> or *Q* <Return> will return you to the Printer Administration Menu.

Adding a Remote Printer

In Printer Administration a remote printer can be either a stand-alone printer installed anywhere on your company's network, or one of several "local" printers connected directly to a print server. Because the procedures required to add a remote printer for your PressureMAP System are very similar to those described above for a new local printer, only the specific steps that differ from from what has been explained previously are explained below.

For reference, the sequence of prompts and responses required to add a remote printer are displayed in SCREEN 5-35 on the next page.

```

Add Printer                                     MAP Series XX.XX.XX
09/10/2011 17:43                             System Studies Incorporated
-----

Add another printer? (y/n/q): y

Printer Name      Type      Comment
-----
1. pokey          *R       Host: lanps.
2. buck           L        Okidata, room A40

Enter printer name: speedy

You entered [speedy] is this correct? (y/n/q): y

Is speedy a local printer? (y/n/q): n

Select Printer Model.
-----

Raw Queue
DYMO Label Printer
EPSON 9-Pin Series
EPSON 24-Pin Series
EPSON New Stylus Color Series
EPSON New Stylus Photo Series
EPSON Stylus Color Series
EPSON Stylus Photo Series
Generic text-only printer
HP DeskJet Series
HP LaserJet Series
HP New DeskJet Series
OKIDATA 9-Pin Series
OKIDATA 24-Pin Series
Generic postscript printer
Zebra ZPL Label Printer

-----

You entered [HP LaserJet Series] is this correct? (y/n/q): y

Enter host or ip address of remote printer: 10.1.0.100

You entered [10.1.0.100] is this correct? (y/n/q): y

Successful ping for 10.1.0.100!

Enter device uri (? for help) : socket://address:9100

You entered [socket://address:9100] is this correct? (y/n/q): y

Enter printer comment, (default=Host): primary remote printer

You entered [primary remote printer] is this correct? (y/n/q): y

*****
Printer speedy was successfully added.
*****

Add another printer? (y/n/q):

```

SCREEN 5-35: ADD PRINTER DISPLAY (REMOTE PRINTER)

The steps that follow pertain to the input required after you have selected the type of printer from the list of printer types and confirmed your entry.

Procedure:

1. At the designated prompt, enter a host name or IP address for the remote printer. If necessary, consult your Network Administrator to obtain this information. Another prompt displays your entry and asks if it is correct.

```
You entered [10.1.0.110] is this correct? (y/n/q):
```

2. If the host name or IP address entered is correct, press **y <Return>**. PressureMAP will then attempt to contact (ping) the address. If successful, the following message displays:

```
Successful ping for 10.1.0.100!
```

If the host name or IP address you entered is incorrect, press **n <Return>**. The program will indicate that it is unable to ping the host or IP address and provide the prompt shown below.

```
Continue configuring remote printer? (y/n/q):
```

Pressing **q <Return>** twice if you wish to abort the Add Printer procedure and return to the Printer Administration Menu.

Notes on Host Name Designation:

The importance of the remote printer host name depends upon whether the new remote printer is a stand-alone network printer or a remote network printer connected to a printer server. If it is a stand-alone network printer, the host name is arbitrary. You can designate any 14 character (or less) remote printer host name.

If you are entering data for the first remote printer connected to a print server computer, you can designate a name of your choice. The program will then prompt you to enter the IP address of the server. However, if the host name already exists in the system, no IP address prompt will appear since the system will use the IP address already assigned to that host name. Make sure that the host name you enter does not duplicate an existing host name if the printer you are adding is not intended to use that host's IP address.

The MAP software does not support sending print jobs to a Windows host computer.

3. Next, the program asks you to indicate the Uniform Resource Identifier (URI) for the manufacturer and model of the selected printer. Type a **?** and a list of common device URIs will be provided. Identify the URI that most closely matches your printer type and enter it after the prompt, as shown below.

```
Enter device uri (? for help) : socket://address:9100
```

The program will display your URI entry and ask you to confirm that it is correct.

```
You entered [socket://address:9100] is this correct? (y/n/q):
```

4. If the URI you enter is correct, press **y** <Return>. If it is incorrect, press **n** <Return> and make the necessary corrections.

Next, you have the opportunity to enter a comment of 36 characters or less which will appear in the printer configuration information.

```
Enter printer comment, (default=Host):
```

5. Press <Return> to designate Host as the default comment, or enter another more pertinent comment for the printer. The program will then ask you to confirm your comment.

```
You entered [primary remote printer] is this correct? (y/n/q):
```

6. Press **y** <Return> to confirm you comment.

```
*****
Printer speedy was successfully added.
*****
```

```
Add another printer? (y/n/q):
```

7. To add another printer, press **Y** <Return> and repeat the procedures described above.

Pressing **N** <Return> or **Q** <Return> will return you to the Printer Administration Menu.

PROCEDURE TO REMOVE A PRINTER

This menu option allows the user to remove one or more local or remote printers from the system's configuration. A "local" printer is a printer attached to your computer; all others are "remote." Remember to notify other users that these printers are being removed.

If a printer has jobs in its queue, it cannot be removed. It is advisable to check the printer queue for pending print jobs and contact the user who sent the job (if applicable). If the default printer is removed, the user should assign another printer as the default.

Procedure:

1. From the Printer Administration Menu, select "Remove Printer." Press **3** <Return>. A display similar to SCREEN 5-36 will be displayed:

```

Remove Printer                                     MAP Series XX.XX.XX
09/10/2011 17:43                               System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. hammerloudness *L      Generic clickity-bang printer, rm 20
2. esel           R       Epson LQ on raven

Enter printer to be removed: hammerloudness
You entered [hammerloudness] is this correct? (y/n/q): y

*****
Printer hammerloudness was successfully removed.
*****

Remove another printer? (y/n/q): n

Hit <Enter> to continue.

```

SCREEN 5-36: REMOVE PRINTER DISPLAY

- As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To remove a printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)

If the printer has print jobs in the queue, you will see an error message and the printer will not be removed. As print jobs cannot be redirected, you will either need to wait until they have printed or remove them from the queue. (Refer to the segments describing options 7, 8 and 9 of the Printer Administration Menu.)

After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.

- When you have confirmed the deletion, the screen will display a message that the printer has been removed from the system's configuration.
- You will see a prompt asking whether you want to remove another printer. To delete another printer, press **Y <Return>** and go back to step 2.

Pressing **N <Return>** or **Q <Return>** will return you to the Printer Administration Menu.

SETTING THE PRINTER DEFAULT

This procedure allows the user to set either a local or remote printer as the default printer for the MAP system. Users may select a printer for screen capture or Browser printing during their current login session at the time they log in, but it will not affect the system-wide default. If there is only one printer set up in the MAP system, it is automatically set to be the default printer.

Procedure:

1. From the Printer Administration Menu, select " Set Printer Default". Press **4 <Return>**. A screen similar to the following will be displayed:

```

Set Printer Default                                     MAP Series XX.XX.XX
09/10/2011 17:43                                     System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. hammerloudness  L      Generic clickity-bang printer, rm 20
2. pokey           *R     Epson LQ on raven

Enter default printer: 1
You entered [hammerloudness] is this correct? (y/n/q): y

*****
Printer hammerloudness is the default printer.
*****

Hit <Enter> to continue.

```

SCREEN 5-37: SET PRINTER DEFAULT DISPLAY

2. As shown in SCREEN 5-37, the screen will first display the existing printers in the system, and then prompt you to choose a default printer. To designate the default printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)
3. After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.
4. When you have verified your choice for default, the screen will display a message confirming the new default printer.
5. Press **<Return>** to go back to the Printer Administration Menu.
6. As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a local printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)

After each prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

VIEW PRINTER QUEUE

The printer spooler schedules the printing of files. All files to be printed are initially stored in the printer buffer. When the printer is clear, the printer spooler pulls them from the buffer in the order in which they were received and feeds them to the printer. The spooler also has an error detection function that ensures that no files sent to the printer are lost. If a problem develops in the printer, the spooler will discontinue sending files. The files sent to be printed will remain in the buffer, where they are saved until the printer problem is resolved. This menu item allows the user to observe the spooler queue (print jobs currently lined up) for a selected printer.

Procedure:

1. From the Printer Administration Menu, select "View Printer Queue". Press **7 <Return>**. A screen similar to the following will be displayed:

```

View Printer Queue                                MAP Series XX.XX.XX
09/10/2011 13:44                                System Studies Incorporated
-----
Printer Name   Type   Comment
-----
1. pokey      R     Host: lanps.
2. buck      *L    Okidata, room A40
3. speedy     R     Oki on raven, rm X65

Select printer: 2

You entered [buck] is this correct? (y/n/q): y

Job Id        Owner      Size   Date
-----
1. buck-282   map       444   Fri 20 Mar 2011
2. buck-283   map       498   Fri 20 Mar 2011
3. buck-284   map       211   Fri 20 Mar 2011
4. buck-285   pmap     677   Fri 20 Mar 2011

Hit <Return> to continue.

```

SCREEN 5-38: VIEW PRINTER QUEUE DISPLAY

2. As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)
3. After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.

4. The print jobs currently lined up for that printer will be listed, with the login that sent the job, the size of the job (in bytes) and the date it was sent.

- The print jobs currently lined up for that printer will be listed, with the login that sent the job, the size of the job (in bytes) and the date it was sent.

CANCEL PRINTER REQUEST

This menu option allows the user to cancel some of the saved print requests for a specified printer. If the printer has other users' requests in its queue, remember to notify them if these print jobs are being canceled.

To remove all print requests from a printer's queue, use "Clean Printer Queue" (option 7 on the Printer Administration Menu).

Procedure:

- From the Printer Administration Menu, select "Cancel Printer Request". Press **6 <Return>**. A screen similar to the following will be displayed:

```

Cancel Printer Request                                MAP Series XX.XX.XX
09/10/2011 13:55          *Schedule Off*           System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. pokey          R        Host: lanps.
2. buck           *L       Okidata, room A40
3. speedy         R        Oki on raven, rm X65

Select printer: 2

You entered [buck] is this correct? (y/n/q): y

Job Id           Owner      Size      Date
-----
1. buck-282      map        444      Fri 20 Mar 2011
2. buck-283      map        444      Fri 20 Mar 2011
3. buck-284      map        444      Fri 20 Mar 2011
4. buck-285      map        444      Fri 20 Mar 2011

Select Job Id to cancel: 2

You entered [buck-283] is this correct? (y/n/q): y
request "buck-283" canceled

Cancel another? (y/n/q): n

Hit <Return> to continue.

```

SCREEN 5-39: CANCEL PRINTER REQUEST DISPLAY

- As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)
- After each prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen. The print jobs currently lined up for that printer will be listed, including the ID of the user who requested the print job, the size of the job (in bytes), and the time it was requested.

4. The screen will then display a prompt to select the print job that you wish to cancel. You may enter either the print job's number or name at the prompt and press **<Return>**.
5. When you have verified your choice, the screen will display a message that the print job request has been canceled.
6. You will see a prompt asking whether you want to cancel another request. To continue canceling print requests, press **Y <Return>** and go back to step 2.

Pressing **N <Return>** or **Q <Return>** will return you to the Printer Administration Menu.

7. Press **<Return>** to go back to the Printer Administration Menu.

CLEAN PRINTER QUEUE

This procedure allows you to cancel all of the saved print requests for a specified printer. If the printer has other users' requests in its queue, remember to notify them that these print jobs are being canceled. To remove only selected print requests from a printer's queue, use "Cancel Printer Request" (option 6 on the Printer Administration Menu).

Procedure:

1. From the Printer Administration Menu, select "Clean Printer Queue". Press **7 <Return>**. A screen similar to the following will be displayed:

```

Clean Printer Queue                                     MAP Series xx.xx.xx
09/10/2011 14:04                                     System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. pokey          R        Host: lanps.
2. buck           *L       Okidata, room A40
3. speedy         R        Oki on raven, rm X65

Select printer: 3

You entered [buck] is this correct? (y/n/q): y

Job Id           Owner      Size      Date
-----
1. buck-282      map        444      Fri 20 Mar 2011
2. buck-284      map        444      Fri 20 Mar 2011
3. buck-285      map        444      Fri 20 Mar 2011

Do you want to remove all entries in this queue? (y/n/q): y
request "buck-282" canceled
request "buck-284" canceled
request "buck-285" canceled

Hit <Return> to continue.

```

SCREEN 5-40: CLEAN PRINTER QUEUE DISPLAY

2. As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)
3. The print jobs currently lined up for that printer will be listed, including the ID of the user who requested the print job, the size of the job (in bytes), and the time it was requested.
4. After the listing, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.

5. When you have verified your choice, the screen will display a message listing the print job requests that have been canceled.
6. Press **<Return>** to go back to the Printer Administration Menu.

RESTART PRINTING SERVICE

When you detect that the local installed printer is not working, you should first try to restart the printer spooler with this utility. When the printer problem is corrected, the spooler will continue feeding the stored reports to the printer.

Procedure:

1. From the Printer Administration Menu, select "Restart Printer Queue". Press **8 <Return>**. A screen similar to the following will be displayed:

```
Restart Printing Service                                MAP Series xx.xx.xx
09/10/2011 14:06                                     System Studies Incorporated
-----
Printer Name      Type      Comment
-----
1. pokey          R        Host: lanps.
2. buck           *L       Okidata, room A40
3. speedy         R        Oki on raven, rm X65

Enter printer name: 2

You entered [buck] is this correct? (y/n/q): y
Print services stopped.
Print services started.

*****
Printer service for buck is restarted.
*****

Hit <Return> to continue.
```

SCREEN 5-41: RESTART PRINTER QUEUE DISPLAY

2. As shown in the above sample, the screen will first display the existing printers in the system, and then prompt you to enter a printer. To select a printer, you may enter either

the printer's number or the Printer Name at the prompt and press **<Return>**. (Please note that input for the name is case sensitive.)

3. After the prompt for data, you will be asked to confirm your choice. If what you have answered is incorrect, type **N <Return>**. The data prompt will then be redisplayed for you to enter the correct information.

To quit without saving your changes, type **Q <Return>**. You may then start again or exit the screen.

4. When you have verified your choice, the screen will display a message confirming that the printer queue has been stopped and restarted.
5. Press **<Return>** to go back to the Printer Administration Menu.

Although you have restarted the Printer Spooler, it may shut down again if the printer problem that caused the original shutdown has not been fixed. It will not shut down until the next time that a dispatch report is sent. Since there is no way to determine if the Printer Spooler is running, you will have to repeat the restart process until the printer problem is fixed.

Procedures for the Start Processes

The MAP System offers several utilities that can be turned on and off by the operator. The Scheduler, the Alarm Receiver and the Idle Logout are turned on using this procedure. If you are using a FAX Modem or DTF Modem, either or both of these utilities may also be listed on the menu. In addition, if the Data Export Protocol capability has been enabled in your system and it is configured with Listener Mode, the Listener process will appear on the menu. All of these operations can be controlled from a remote terminal.

Note: It is common for systems to have many dial up Alarm Receivers (as shown in SCREEN 5-38). These are typically on a rotary so that the monitors can dial a single number which rolls over to the next available (not busy) modem. The LAN based alarm receiver is able to multiplex connections on a single port, so only one instance is needed and included in the Start Process Menu.

FINDING THE START PROCESS MENU

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this Section.

Procedure:

1. From the System Administration Menu, select "Start Process." Press **12 <Return>**. You should see a screen similar to the following:

```
Start Process                                     MAP Series XX.XX.XX
08/30/2011 16:45                               *Schedule Off*     System Studies Incorporated
-----
Start Process
-----
 1. Start Scheduler                               (Stopped)
 2. Start Alarm Receiver01                       (Stopped)
 3. Start Alarm Receiver02                       (Stopped)
 4. Start Alarm Receiver03                       (Stopped)
 5. Start Idle Logout                            (Stopped)
 6. Start FAX Modem Srv                          (Stopped)
 7. Start DTMF Modem Srv                         (Stopped)
 Q. Quit

Choice?
```

SCREEN 5-42: START PROCESS MENU

The following sections describe the three procedures listed on the menu above.

RESTARTING THE SCHEDULER

The Scheduler is the software routine that controls the time and sequence of each operation in the MAP System. Although the Scheduler must be running for the MAP System to operate, there are three instances when you might want to turn the Scheduler off. One would be when you are updating the system. If the Scheduler tried to run a program while updating was taking place, it would interfere with the updating procedure. The second would be before you perform a restore procedure. The third instance would be if the Scheduler was not operating correctly. Stopping and starting the Scheduler will reinitialize the system and sometimes correct the problem.

Procedure:

1. From the Start Processes Menu, select "Start Scheduler". Press **1** <Return>. You will see the message:
2. Press **Y** <Return> (pressing N will return you to the previous menu). If the Scheduler was not running, you will see the message:

```
Attempting to start the Scheduler.
```

```
The Scheduler is now running.
```

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

If the Scheduler was already running, you will see the message:

```
The Scheduler is already running.
```

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

In either case, the Scheduler will now be running, and hitting <Return> will take you back to the Start Process Menu.

RESTARTING THE ALARM RECEIVER

Alarm Receiver is the part of the program that analyzes the alarms that come in from CPAMS monitors and determines whether or not they are valid alarms. Like Scheduler, Alarm Receiver would be turned off only when updating the system, or if there seemed to be a problem with the Alarm Receiver function.

Procedure:

1. From the Start Processes Menu, select the option for "Start Alarm Receiver". Once again, depending upon whether you are using dial up or LAN based Alarm Receivers, you may see multiple options for Alarm Receiver. Press the desired option, followed by **<Return>**. You will see a message similar to the ones below:

```
Do you wish to start the Alarm Receiver? Y[es], N[o]
```

OR

```
Do you wish to start the Alarm Receiver01? Y[es], N[o]
Do you wish to start the Alarm Receiver02? Y[es], N[o]
Do you wish to start the Alarm Receiver03? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). If the Alarm Receiver was not running, you will see the message:

```
Attempting to start the Alarm Receiver.
```

```
The Alarm Receiver is now running.
```

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

If the Alarm Receiver was already running, you will see the message:

```
The Alarm Receiver is already running.
```

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

In either case, the Alarm Receiver will now be turned on, and hitting **<Return>** will take you back to the Start Process Menu.

RESTARTING THE IDLE LOGOUT

The Idle Logout feature will drop a user from the system after a specified period of time passes without any input from the user's keyboard. This prevents the system from getting clogged up with inactive users who have forgotten to log out. The operator can also set the time specified for the Idle Logout using the Set Idle Logout Time procedure in System Administration.

Procedure:

1. From the Start Processes Menu, select "Start Idle Logout". Press the specified option number and **<Return>**. You will see the message:

```
Do you wish to start the Idle Logout? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). If the Idle Logout was not running, you will see the messages:

```
Attempting to start the Idle Logout
```

```
The Idle Logout is now running.
```

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

If the Idle Logout was running, you will see the message:

```
The Idle Logout is already running.
```

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

In either case, the Idle Logout will now be running, and hitting **<Return>** will take you back to the Start Process Menu.

RESTARTING THE FAX MODEM SERVICE

This Start Menu Process allows you to activate the FAX Modem Service, if applicable, so that designated Alarm and Report Centers can distribute reports to a FAX machine. This capability provides another option for 24 hour alarm distribution and early morning dispatches. Other methods include dedicated printer, shared network printer, email, SMS text message, etc.

Procedure:

1. From the Start Processes Menu, select "Start FAX Modem Srv". Press the appropriate option number followed by **<Return>**. You will see the message:

```
Do you wish to start the FAX Modem Srv? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). If the FAX Modem Service was not running, you will see the messages:

```
Attempting to start the FAX Modem Srv
```

```
The FAX Modem Srv is now running.
```

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

3. Press **<Return>** to re-access the Start Process Menu.

RESTARTING THE DTMF MODEM SERVICE

The last option listed in the Start Process Menu example shown in SCREEN 5-42 makes it possible for PressureMAP systems that utilize Dial-a-Ducer equipment to activate the required DTMF Modem Service. With DTMF Modem Service ON, PressureMAP will be able to obtain monitoring information using dual tone modulation frequency over standard POTS lines.

Procedure:

1. From the Start Processes Menu, select "Start DTMF Modem Srv". Press the option number displayed for DTMF Modem Service followed by **<Return>**. You will see the message:

```
Do you wish to start the DTMF Modem Srv? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). PressureMAP displays the following messages:

```

Attempting to start the DTMF Modem Srv

The DTMF Modem Srv is now running.

Hit <Return> to continue.

```

3. Press **<Return>** to go back to the Start Process Menu.

Procedures for the Stop Processes

The MAP System offers several utilities that can be turned on and off by the operator. The Scheduler, the Alarm Receiver, Idle Logout are turned off using this procedure. Other options or services, if applicable for your system, can be turned off using this System Administration menu. All of these operations can be controlled from a remote terminal.

To perform the procedures required to stop a particular process or service, simply select the desired option from the Stop Process Menu shown below, and follow the instructions displayed on-screen. You can also refer to the Start Process procedures documented above for a sample of the type of screen prompts displayed and the appropriate user responses.

```

Stop Process                                     MAP Series XX.XX.XX
08/31/2011 11:40                               *Schedule Off*   System Studies Incorporated
-----
Stop Process
-----
1. Stop Scheduler                               (Running)
2. Stop Alarm Receiver01                       (Running)
3. Stop Alarm Receiver02                       (Running)
4. Stop Alarm Receiver03                       (Running)
5. Stop Idle Logout                            (Running)
6. Stop FAX Modem Srv                          (Running)
7. Stop DTMF Modem Srv                        (Running)
Q. Quit

Choice?

```

SCREEN 5-43: STOP PROCESS MENU

Procedures for the Pause Processes

The MAP System offers several utilities that can be paused or disabled for a period of time by the operator. The Scheduler, the Alarm Receiver and the Idle Logout are paused for 120 minutes using this procedure. Any other services running, such as the FAX Modem Srv and DTMF Modem Srv shown in the Start and Stop Process Menus above, can also be paused manually from the Pause Process Menu, described below. Please note that these operations can be controlled either at the MAP computer or from a remote terminal.

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this Section.

Procedure:

1. From the System Administration Menu, select "Pause Process". Press **14 <Return>**. You should see:

```
Pause Process                                MAP Series XX.XX.XX
08/31/2011 10:32                            System Studies Incorporated
-----
Pause Process
-----
 1. Pause Scheduler                (Running)
 2. Pause Alarm Receiver           (Running)
 3. Pause Idle Logout             (Running)
 Q. Quit
Choice?
```

SCREEN 5-44: PAUSE PROCESS MENU

The following sections describe the three procedures listed on the menu above.

PAUSING THE SCHEDULER

Scheduler is the software routine that controls the time and sequence of each operation in the MAP System. There are many instances when you might want to pause the Scheduler for a short period of time. It is important to note that after the pause time period is over, the schedule will automatically start, even if you selected pause while the schedule was turned off.

Procedure:

1. From the Pause Process Menu, select "Pause Scheduler". Press **1 <Return>**. You will see the message:

```
Do you wish to pause the Scheduler? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). You will see the messages:

```
Attempting to pause the Scheduler.
```

```
The Scheduler is paused for 120 minutes.
```

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

The Scheduler will now be paused, and hitting <Return> will take you back to the Pause Process Menu.

PAUSING THE ALARM RECEIVER

Alarm Receiver is the part of the program that analyzes the alarms that come in and determines whether or not they are valid alarms. Alarm Receiver could be paused if there seemed to be a problem with the Alarm Receiver function. It is important to note that after the pause time period is over, the Alarm Receiver will automatically start, even if you selected pause while the Alarm Receiver was turned off.

Procedure:

1. From the Pause Process Menu, select "Pause Alarm Receiver". Press **2 <Return>**. You will see the message:

```
Do you wish to pause the Alarm Receiver? Y[es], N[o]
```

2. Press **Y <Return>** (pressing N will return you to the previous menu). You will see the message:

```
Attempting to pause the Alarm Receiver.
```

```
The Alarm Receiver is paused for 120 minutes.
```

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

The Alarm Receiver will now be paused, and hitting <Return> will take you back to the Pause Process Menu.

PAUSING THE IDLE LOGOUT

The Idle Logout feature will drop users from the system after a specified period of time passes without any input from their keyboard. This prevents the system from getting clogged up with inactive users who have forgotten to log out.

It is important to note that after the pause time period is over, the Idle Logout will automatically start, even if you selected pause while the this function was turned off. The Idle Logout can be turned off if you prefer not to use the function. You can also set the time specified for the Idle Logout using the Set Idle Logout Time procedure in System Administration.

Procedure:

1. From the Pause Processes Menu, select "Pause Idle Logout". Press **3 <Return>**. You will see the message:

```
Do you wish to pause the Idle Logout? Y[es], N[o]
```

2. Press **Y <Return>**. You will see the message:

```
Attempting to pause the Idle Logout.
```

```
The Idle Logout is paused for 120 minutes.
```

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

Idle Logout will now be paused and hitting **<Return>** will take you back to the Pause Process Menu.

User Management Procedures

While User Management is part of the System Administration Menu, these important utilities are given a section of their own. See Section 6, User Management, for information on how to access and modify this utility.

Procedure to Set Idle Logout Time

PressureMAP has a function called Idle Logout that will automatically log you out of the system after there has been no input from your keyboard for a set period of time. This function was included because certain files cannot be accessed while someone has called them up in a data input mode.

Likewise, only one user at a time can work in the System Administration portion of the program. This utility will keep those files and sections from being tied up by a user who has forgotten to log off.

This procedure begins at the System Administration Menu. If you cannot find this menu, follow the Procedures to Find the System Administration Menu presented earlier in this section.

Procedure:

1. From the System Administration Menu, select "Set Idle Logout Time". Press **16 <Return>**. You will see the message:

```
Do you wish to set idle logout time?  Y[es], N[o]
```

2. Press **Y <Return>**. You will see the following screen:

```
Set Idle Logout Time                               MAP Series XX.XX.XX
09/10/2011  10:46                               System Studies Incorporated
-----
Do You Wish To Set Idle Logout Time? (Y(es), N(o) y
Idle Logout will logout users who have been idle a certain
period of time. Please enter the number of minutes to wait on idle users.
You may choose any number between 1 and 1439.

Enter minutes [60]:
```

SCREEN 5-45 SET IDLE LOGOUT TIME PROMPT

3. Type in the number of minutes you want to wait before logging out idle users and press **<Return>**. To accept the default value displayed in brackets, simply press **<Return>**. You will see the message:

```
The Idle Logout is now running.
```

Setting a time for Idle Logout will automatically turn the Idle Logout function on if it was turned off. The Idle Logout function can be turned off and on using the Pause and Start processes in System Administration.

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

4. Hit **<Return>** to get back to the System Administration Menu.

Procedure to Set the System Name

This utility allows the System Administrator to customize the system name that appears on each login prompt and Dispatch Alarm report. The system name can be any alphanumeric string, up to 20 characters in length. Please note that the new system name will not take effect until the system is rebooted. To reboot the system, please refer to option 5, "Shutdown and Reboot the Computer."

Procedure:

1. From the System Administration Menu, select "Set System Name." Press **17 <Return>**. You will see the message:

```
Changing the system name will affect your system login prompt
```

Do You Wish To Set the System Name? (Y(es, N(o)

2. Press **Y** <Return>. You will now see SCREEN 5-46.

```

Set the System Name                                MAP Series XX.XX.XX
09/10/2011 12:49                                System Studies Incorporated
-----
Changing the system name will affect your system login prompt
Do You Wish To Set the System Name? (Y(es, N(o) y

Your Current System Name Is: <SYSTEM NAME>
Note that the following characters may not be included in the System Name
because they are reserved especially for use by the software.

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

Please Enter New System Name:

```

SCREEN 5-46: SET SYSTEM NAME

3. Notice that the old system name is displayed for reference and convenience. Type in the new name for the system and press <Return>. As indicated on the screen, the following characters may NOT be included in the System Name because they are reserved especially for use by the operating system:

```

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

```

To accept the default (existing) name, simply press <Return>.

You will see the message:

```

Your system login prompt will change eventually to reflect the new
system name. For the change to take effect immediately you can reboot
the computer by choosing option 5, Shutdown and Reboot Computer, from
the System Administration Menu.

```

```

Hit <Return> to continue.

```

4. Hit <Return> to get back to the System Administration Menu.

Tape Administration Procedures

The Tape Administration utility was created to provide users with the ability to analyze and address tape drive issues, particularly tensioning and rewinding a tape. There is also an option that you can select to analyze the tape configuration. All of the available operations can be controlled from a remote terminal via the Tape Administration Menu.

Procedure:

1. From the System Administration Menu, select "Tape Administration". Press **18** <Return>. The menu shown in SCREEN 5-47 will display.

```
Tape Administration                                MAP Series XX.XX.XX
09/4/2011 12:49                                System Studies Incorporated
-----

Tape Administration
-----

    1. Analyze Tape Configuration
    2. Retention Tape
    3. Rewind Tape
    Q. Quit

Choice:
```

SCREEN 5-47: TAPE ADMINISTRATION MENU

The following sections describe the three procedures listed on the menu above.

ANALYZING TAPE CONFIGURATION

The Tape Configuration option provides important information about the status of the MAP Engine tape drive and tape cartridge. For example, it can indicate if a tape cartridge is not installed (no medium), whether the cartridge is write protected, if it is rewound, etc. The configuration information also includes any soft errors, hard errors or under-runs that have occurred during the tape drive operation.

A soft error is a type of recoverable error that occurred during the last tape operation. A recoverable error is one which is correctable by the drive or controller. If the number of soft errors greatly exceeds the manufacturer's specifications, the drive may require service or replacement, or you may be using a defective tape.

A hard error is a non-recoverable error that occurred during an attempted tape operation. For example, a hard error occurs when you try to back up MAP System files to a tape cartridge that is write protected.

Under-runs is a designation of the number of times the tape drive had to stop and restart due to tape buffer underflows. Under-runs are not an error condition; they indicate that the data transfer did not occur at the drive's maximum data transfer rate. The number of under-runs can be affected by system load.

Procedure:

1. From the Tape Administration Menu, select "Analyze Tape Configuration." Press **1** <Return>. You will see the message:

```
Do You Wish To Analyze Tape Configuration? Y[es], N[o]
```

2. Press **Y** <Return>. The system will now produce configuration information, similar to what is shown below, for your MAP computer's tape drive.

```

Tape Drive is INSTALLED.

Tape Device=/dev/tape

-----
      Tape Status
-----
SCSI 2 tape drive:
File number=0, block number=23260, partition=0.
Tape block size 512 bytes. Density code 0x0 (default).
Soft error count since last status=0
General status bits on (1010000):
  ONLINE IM_REP_EN

Hit <Return> to continue.

```

A variety of output information will display in the format shown above, depending upon the status of your drive and the type of tape administration function(s) you may have performed previously.

3. Press **<Return>** to access the Tape Administration Menu.

RETENSION TAPE

This menu option should be used periodically to correct slack tape problems. If there is excessive slack in the tape, a large number of tape errors could occur. It is recommended that you check the tape configuration information on a regular basis to identify the occurrence of soft errors that could be corrected by retensioning the tape.

Procedure:

1. From the Tape Administration Menu, select option **2** followed by **<Return>**. You will see the message:

```
Do You Wish To Retension Tape? Y[es], N[o]
```

2. To tighten the spooled electromagnetic tape, press **Y <Return>**; otherwise, press **N <Return>**. A "yes" (**Y**) response produces the following prompt:

```
Retensioning tape.
```

At this point the tape drive will advance the tape all the way to the end, then rewind and retention it. This process takes several minutes to complete. During the interim no additional information is displayed on-screen. Once the retensioning process has been completed, the program displays the following prompt.

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

Note: If a tape cartridge is not inserted in the tape drive or if a retensioning problem occurs, the following message displays:

```
tape: unable to do 'reten' command on '/dev/xStp0' : I/O error
```

This error message identifies a problems with the tape device, not the tape driver.

3. To perform other Tape Administration Menu functions, press **<Return>** .

REWIND TAPE

This menu option allows you to rewind a tape remotely. The procedure should be performed anytime a used tape cartridge is being added to the backup rotation and installed in the tape drive. It is also an important and simple precautionary function to perform if an excessive number of soft errors are detected.

Procedure:

1. From the Tape Administration Menu, select option **3**, "Rewind Tape," followed by **<Return>**. You will see the message:

```
Do You Wish To Rewind Tape? Y[es], N[o]
```

2. Press **Y** to proceed ; otherwise press **N**. A "yes" (**Y**) response produces the following prompt:

```
Rewinding tape.
```

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

Note: If a tape cartridge is not inserted in the tape drive or if a rewinding problem occurs, the following message displays:

```
tape: unable to do 'rewind' command on '/dev/xStp0' : I/O error
```

This error message identifies a problems with the tape device, not the tape driver.

3. To perform other Tape Administration Menu functions, press **<Return>** . The Tape Administration Menu will redisplay.
4. To exit this menu and return to the System Administration Menu, press **Q** and **<Return>**.

Network Administration

While Network Administration is part of the System Administration Menu, these important utilities are given a section of their own. See Section 7, Network Administration. The Data Export Protocol procedures are located in Appendix 2 of this book.

Procedure to Launch BackupEDGE

BackupEDGE is a software application that provides you with the means of backing up and restoring important PressureMAP system office and device data onto a variety of media, including electronic tape, CD/DVD-ROM, RAM disk or to a remote computer via file transport protocol (ftp).The application extends, but does not replace, the traditional tape backup capabilities that have been provided by PressureMAP over the years. Individuals wishing to use the old backup method may continue to do so.

The System Administration Menu's BackupEDGE option provides direct access to the application, from which you can configure and manage backup resources for your PressureMAP system. The actual processes of backing up and restoring system and office files using BackupEDGE, however, are initiated from the System Administration Menu's Backup and Restore selections. (Please refer to the explanations of these functions located near the beginning of this section.)

Note: PressureMAP users who have installed Version 28 on a non-MAP Engine computer of their choice and who intend to use BackupEDGE will need to install and configure the application according to the documentation supplied with the media. In situations where BackupEDGE is purchased in addition to PressureMAP Version 28 and a MAP Engine computer from System Studies, the equipment is generally shipped with the BackupEDGE software pre-installed and configured for the PressureMAP hardware.

Also, please make note of the following precautionary information when using BackupEDGE on a PressureMAP computer that is running Linux. If you wish to set or change the MAP System Host Name (for configuration of the mail delivery system under Linux), you will need to do so BEFORE installing, configuring and registering BackupEDGE. If you change the host name after BackupEDGE is installed, the licensing keys for BackupEDGE will become invalid. (Please refer to Section 7, page 7-23 of this manual for instructions on setting or changing the MAP System Host Name.)

Once the software is operational, you can use the System Administration Menu's BackupEDGE option to access the application and modify or reconfigure backup resources. The following information describes how to do so.

Procedure:

1. From the System Administration Menu, select "BackupEDGE". Press **20 <Return>**. PressureMAP displays the following screen.

```

BackupEDGE                               MAP Series XX.XX.XX
09/17/2011  15:29          *Schedule Off*      System Studies Incorporated
-----
BackupEDGE
-----
  1. Launch EdgeMenu
  Q. Quit

```

SCREEN 5-48: BACKUPEDGE LAUNCH MENU

If you do not have BackupEDGE installed on your system, PressureMAP provides the following prompt:

```
** BackupEDGE **
```

```
BackupEDGE is currently not installed!
```

```
If you already have BackupEDGE media, please refer to the
BackupEDGE incremental update instructions or call tech support
for more information.
```

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

2. If BackupEDGE is installed and you would like to launch the application, press **1** and **<Return>**. PressureMAP then displays the following:

```
Do You Wish To Launch EdgeMenu? Y[es], N[o]
```

- Type **y** and press **<Return>**. This response produces the Main Edgemenu Screen (SCREEN 5-49), from which you can perform the Edgemenu functions documented in the product's PDF file.

```

+ Edgemenu for BackupEDGE                                     +
+-----+
| [File] [Backup] [Restore] [Verify] [Admin] [Setup] [Schedule] |
+-----+
-----+

This Copy of BackupEDGE Is Currently Installed in Demo / Evaluation Mode.
For Permanent Use, Please Register and Activate By [Date specified].

-----+
| Primary Resource : scosysv:url!pee4 (ftp://10.1.0.123/backup) (FTP |
| Compress: Soft, HW Block: N/A, Edge Block: 64, Partition: C      |
|-----|
| Last Master Backup: NEVER                                         |
+Local Machine: scosysv                                           Administering: scosysv      +-----+
+View Files, Choose Machine

```

SCREEN 5-49: MAIN EDGEMENU SCREEN

- To exit the Main Edgemenu Screen and return to the PressureMAP system, use the keyboard's up and down arrow keys to highlight **[File]** located on the command line (near top of screen). Pressure the down arrow key four times to select **[eXit]**, and press **<Return>**. PressureMAP displays:

Hit <Return> to continue.

- Press **<Return>** one more time to return to the BackupEDGE Launch Menu where you can select **Q** and **<Return>** to go back to the System Administration Menu.

Procedure to Restart Web Services

One of the most important PressureMAP utilities, available beginning with Version 26, is PressureWEB. This application, which requires the use of an Apache web server, makes it possible to view PressureMAP information and initiate specific action requests using a standard web browser. The Apache server makes PressureWEB html and javascript output available via TCP/IP connection.

In order to run PressureWEB, the Apache web server is installed on the MAP Engine computer along with PressureMAP. Just as it is possible to start and stop key PressureMAP processes remotely from the System Administration Menu, it is also possible to Restart Web Services if necessary. If a situation were to occur where PressureWEB failed to provide updated readings and operate correctly, for example, the first course of action would be to restart the web services as described below.

Procedure:

1. From the System Administration Menu, select "Restart Web Services" by pressing option **21** **<Return>**. The program displays the following information.

```

...Stopping Web Services...
...Starting Web Services...

Hit <Return> to continue.

```

2. Press **<Return>** to go back to the System Administration. Once the MAP Engine computer's web services have been restarted, you should be able to resume using the PressureWEB application.

Procedure to Display System Uptime

The final System Administration Menu option gives you the ability to view system usage statistics. More specifically, it includes the current time, how long the system has been running, the number of users currently logged on, and system load averages for the past 1, 5 and 15 minutes. The load averages provide a basic indication of how busy the system is during the time of the request. This information is displayed on a single line on the System Statistics Screen (SCREEN 5-50).

Procedure:

1. Select option 22, "Display System Uptime," from the System Administration Menu. Press **22** and **<Return>**. The following information displays:

```

System Statistics                               MAP Series XX.XX.XX
11/10/2011  14:38                               *Schedule Off*   System Studies Incorporated
-----
Time of day: 14:38:59 up  4:20,  2 users,  load average: 0.01, 0.03, 0.00

Hit <Return> to continue.

```

SCREEN 5-50: SYSTEM STATISTICS SCREEN

2. After you have viewed this information, press **<Return>** to go back to the system Administration Menu where you can select other options or chose to exit this part of the program.

Procedure to Renew System Registration

Beginning with PressureMAP Version 27.00.08, a four star system alarm is generated if any of three events invalidates the PressureMAP system registration file: 1) installation of a new system, 2) initial update to version 27.00.08 or higher, or 3) restoring the system from backup media. Once any of these three events triggers an alarm, all PressureMAP capabilities will expire three days from the last change time (time and date of the event).

A new System Administration menu option has been added to PressureMAP Version 27.00.08 to simplify the process of actively renewing system registration. Please note that you will need to contact System Studies Technical Support personnel prior to performing the procedure described below in order to obtain an activation key for the system registration renewal.

Procedure:

1. Select option 23, "Renew System Registration," from the System Administration Menu. Press 23 and <Return>. Information similar to the following displays:

```
System registration expired (access ends 09/16/10 10:25),  
Renew? Y[es], N[o]
```

2. Press Y <Return>. PressureMAP then prompts you for a password or activation key:

```
Password:
```

3. Carefully enter the activation key provided by System Studies, then press <Return>. Once the software recognizes and accepts the correct activation key, it displays the following information:

```
System registration successfully renewed
```

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

4. Press <Return> to complete the renewal process and re-display the System Administration Menu.

The procedure above creates a valid registration file. Registration will become invalid if the file is updated in any manner, in which case the following system error will be generated and distributed:

```
Error 343: System registration has expired. Contact SSI
```

REMOTE VIEWING OF ALTERNATE CONSOLE OUTPUT

Prior to PressureMAP Version 25, if a System Administrator wished to view the output of a PressureMAP System's Alternate Console TTYs, it was necessary to enter an <Alt> key followed by <F10>, <F11> or <F12> at the console keyboard. With the proper login and password, it is now possible to view the output of two of these TTYs, <F10> Alarm Receiver Log and <F12> System Status Log, remotely via a login and password.

Procedure to Access the View Logs Menu

In order to access the View Logs Menu remotely and view the Alarm Receiver and System Status Logs, you will first need to contact the System Studies Technical Support Department and obtain the necessary login and password for the desired PressureMAP System. This user identification information will enable you to log in directly to the View Logs Menu as shown in SCREEN 5-51 below. Please note that access to this menu is outside the menu structure of the MAP Programs.

Procedure:

1. Identify the IP address or dial-up modem phone number of the PressureMAP System whose logs you wish to view. Log onto the MAP System using one of the commercially available communications software programs, such as Telnet or NetTerm.
2. Once you have entered the assigned login and password, select the Terminal Type from the Terminal Type Menu followed by a <Return>. If you are unsure of which selection to choose, select item one, Generic vt100).

- Next select a printer from the list of printers provided. Type the desired number followed by **<Return>**. The following menu displays.

```

View Logs                                     MAP Series XX.XX.XX
09/10/2011  10:50                             System Studies Incorporated
-----

View Logs
-----
  1. View Alarm Receiver Log
  2. View System Status Log
  Q. Quit

Choice?

```

SCREEN 5-51: VIEW LOGS MENU

VIEW ALARM RECEIVER LOG

- To view the Alarm Receiver Log, press **1** and hit **<Return>**. The Alarm Receiver Log information displays in a View Alarm Receiver Log screen. If no Alarm Receivers are running, the message shown in SCREEN 5-52 is displayed.

```

View Alarm Receiver Log   < Hit Escape to Quit >           XX.XX.XX
09/10/2011  10:50       *Schedule Off*           System Studies Incorporated
-----

*****
** No Alarm Receivers are Currently Running **
*****

```

SCREEN 5-52: VIEW ALARM RECEIVER LOG

- The output of the Alarm Receiver Log, or the message shown above, displays until you decide to exit the screen. To return to the View Logs Menu, press **Q**. Note that it is not necessary to hit the **<Return>** key to backup one menu.

VIEW THE SYSTEM STATUS LOG

Two System Status Log options are available for viewing: Process Status and Office Status. Both options provide information that is updated every 60 seconds.

- To access and view the System Status Log, select item **2** from the View Logs Menu and hit **<Return>**. This produces the System Status Main Menu (SCREEN 5-53). Notice that the top line of the screen provides the two menu options, Process Status and Office Status, and the current date and time stamp appear in the lower right corner.

```

System Status: P[rocess Status], O[ffice status]

Choose an option:
-----

----- 09/10/2011 12:34 ---

```

SCREEN 5-53: SYSTEM STATUS MAIN MENU

The Process Status screen (SCREEN 5-54) has two columns of data: one displays the MAP Program process, and the other shows the date or time that the process started. The screen is designed to report only on the unseen workings of the MAP system.

The Office Status report (SCREEN 5-55) is generated from PressureMAP's office history information and the list of System Dispatches. It is a listing of each PressureMAP office along with its current status. For additional information about the contents of the two screens, refer to Appendix 1 of this manual.

- To display Process Status information for the PressureMAP system, simply type **P** at the **Choose and option** prompt. The Process Status Log, shown below, displays.

```

System Status: P[rocess Status], O[ffice status], Q[uit]

Choose an option:
-----
PROCESS ACTION                                POSTED
-----
Running Print Spooler                          01/05
Running Schedule                              01/05
Running Idle Logout                           01/05
Running UPS Power Check                       01/05
Waiting to Receive Alarms                     12:35
Polling <OFFICE NAME>                          13:00
Polling <OFFICE NAME>                          13:00
Polling <OFFICE NAME>                          13:34
Generating Priorities for <OFFICE NAME>        14:22
Generating Alarms for <OFFICE NAME>            14:23
Generating Indexes for <OFFICE NAME>           14:23
Receiving Alarm from <OFFICE NAME>            14:24
Sending Alarm from <OFFICE NAME> to <CENTER NAME> 14:25

```

SCREEN 5-54: PROCESS STATUS

- To acquire Office Status information, type **O**. (Note that it is not necessary to type **Q**(uit) until you would like to return to the View Logs Menu.) A screen similar to the one below displays.

```

System Status: P[rocess Status], O[ffice status], Q[uit]

Choose an option:
-----
OFFICE                STATUS                OFFICE                STATUS
-----                -
1. <OFFICE NAME>     Current               17. <OFFICE NAME>     Current
2. <OFFICE NAME>     Scheduled             18. <OFFICE NAME>     Current
3. <OFFICE NAME>     NO PHONE              19. <OFFICE NAME>     Current
4. <OFFICE NAME>     BAD PHONE             20. <OFFICE NAME>     Current
5. <OFFICE NAME>     Current               21. <OFFICE NAME>     Current
6. <OFFICE NAME>     Busy                  22. <OFFICE NAME>     Current
7. <OFFICE NAME>     NO ANSWER             23. <OFFICE NAME>     Current
8. <OFFICE NAME>     Current               24. <OFFICE NAME>     Current
9. <OFFICE NAME>     Disabled              25. <OFFICE NAME>     Current
10. <OFFICE NAME>    Current               26. <OFFICE NAME>     Current
11. <OFFICE NAME>    Current               27. <OFFICE NAME>     Current
12. <OFFICE NAME>    Current               28. <OFFICE NAME>     Current
13. <OFFICE NAME>    Current               29. <OFFICE NAME>     Current

```

SCREEN 5-55: OFFICE STATUS

9. When you have finished viewing the System Status lists, press **Q** to return to the View Logs Menu. To stop viewing Alternate Console information and log off of the system entirely, type **Q** followed by **<Return>**.

