ELCOTEL INC.

TELECOMMUNICATIONS SYSTEMS

PNM

The Payphone Network Manager
Software

WARNING!

This software package employs a copy-protection technique. If you attempt to install PNM using the standard MS-DOS/PC-DOS copying procedure, the package will become unusable and will remain so even when finally installed properly.

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Getting Started

You are about to embark on a remarkably easy way to manage a whole network of payphones...

without leaving your desk!

It is so easy, in fact, that you could actually learn how to operate this system from the system, itself. The formal title of this software system is, "The Payphone Network Manager," or **PNM**, so that is the name that we'll normally use in the following discussions. However, it used to be called **CHAT** so there will be some programs and files that still use that name.

Before you get to the fun part, however, it is important that you have the system set up properly.

What Kind of Equipment Should You Have?

First of all, make sure that you have the proper components in your system by checking them off against the following list:

1. An IBM-PC compatible computer with a minimum of 256K of memory (640K would be even better). The types of computer known to be compatible are listed below in alphabetical order:

   o   AT&T 6300

   o   AT&T 6300 Plus

   o   Compaq Portable II

   o   IBM-PC/XT

   o   Tandy 1000

   o   Tandy 1200

   o   Tandy 3000

2. Whatever kind of computer you have, it should contain the following:

   o   **MS-DOS or PC-DOS version 2.0 or later.** This is the operating system of the computer. It is absolutely essential that you have version 2.0 or later or PNM just won't operate at all.

   o   One (1) 360K DS-DD floppy disk drive

   o   10 Megabyte hard-disk drive (20 Megabytes is better)

   o   Date/time clock

   o   One (1) parallel or serial printer port

   o   A color generator card (even if you only have a monochrome monitor)

3. A color monitor is recommended, but not required.

4. A Hayes-compatible modem, 300/1200 Baud. Either internal or external types may be used, but internal is recommended. There's less mess on your desk and less chance that it will be disconnected by the cleaning people.

    The types of modems known to be compatible are listed below in alphabetical order:

    o   AT&T 4112 **(NOTE: If this modem is used, the speaker volume level must be turned OFF.)**

    o   Everex Evercom II

    o   Hayes Smartcom 1200B

    o   Prometheus ProModem 1200B/2

    o   US Robotics 1200

    o   The Ventel Half Card

5. An IBM-compatible parallel or serial printer (with continuous form/tractor feed, if possible). Types known to be compatible are listed below in alphabetical order:

    o   Okidata Microline 92, 192, 93, or 193

    o   Output Technology OT-700

    o   Tandy DWP-230

    o   Toshiba 1410

6. Paper supplies for the printer depend on the print format you select. You can select either 80 column or 132 column printed outputs, which require the following types of paper stock:

    o   **80-column**
        1 or 2 part;
        15 or 20 lb.;
        9-1/2" X 11";
        Letter Edge.

    o   **132-column**
        1 or 2 part;
        15 or 20 lb.;
        14-7/8" X 11-1/2";
        Green Bar.

Learning Your Equipment.

Before proceeding with this PNM manual, you should become familiar with the manuals that describe your hardware; that is, the computer manual, the MS-DOS or PC-DOS manual, the modem manual, and the printer manual. As you can see from the list in the previous section, PNM can be used on a large variety of components. That's good news for you since you can design a system to fit your needs as well as your pocketbook.

However, since we have given you such a large choice, we must rely on you to become familiar with the instruments you have chosen. This should cause you no alarm since the operating system on each of the computer selections is identical and will use the same commands to load the hard disk, print out the reports, etc. In addition, the connectors on each of the instruments suggested here are clearly marked and should pose no difficulty when hooking up the system.

But if you have any problem you can't seem to solve, don't hesitate to contact the customer engineering staff at Elcotel.

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Setting Up the System.

The Computer

To physically set up your computer, follow the instructions in your user's guide.

There is little to do in physically setting up the computer other than connecting it to the monitor, modem, and printer, and plugging it into a 115 Vac power outlet. However, it is strongly recommended that you purchase a surge-protection power strip from your local hardware store. Computers are notoriously sensitive to power surges, like lightening strikes, and should get as much protection as you can give it.

This is a good time for you to become familiar with your computer's operating system. It is called either MS-DOS or PC-DOS with the DOS standing for "Disk Operating System." This is the system that will allow you to load software programs into the computer, record files onto a floppy disk or the hard disk, and print out any files you want to keep in hard-copy form.

While most of the DOS instructions will help you immensely in operating your computer, we must caution you to read the next section before attempting to do anything with PNM.

Installing the PNM software on the Computer Hard Disk

Now that we've told you to be sure to read all the instruction manuals, we must tell you not to load PNM the way the computer instruction manual tells you to. The reason for this is that the system must be configured so that PNM resides within its own directory. This is not nearly as difficult as it may sound. But it is so important that you follow our instructions at this point, that we must repeat the warning you saw just after the title page of this manual.

WARNING!

This software package employs a copy-protection technique. If you attempt to install PNM using the standard MS-DOS/PC-DOS copying procedure, the package will become unusable and will remain so even when finally installed properly.

Now for the installation. Install PNM onto your hard disk by proceeding with the following instructions:

1. Turn on your computer and select Drive C by typing **C:** and pressing <ENTER>, which is represented by " ⏎ " on most keyboards.

2. Type **CD ** and then press <ENTER> (be sure to put a space between CD and \). Now type **MD PNM** and press <ENTER>. This causes the system to enter what is known as its "Root Directory" and creates a unique directory for PNM (in fact, **MD** stands for "Make Directory").

3. Now that you are in the Root Directory, type CD PNM and press <ENTER>. (The **CD** stands for "Change Directory to:" and the **PNM** of course stands for "Payphone Network Manager.")

4. Insert the PNM diskette in Drive A.

5. Change the active drive to Drive A by typing **A:** and pressing <ENTER>.

6. Type **Install** and press <ENTER>. This starts the automatic installation process and transfers PNM to the hard disk.

7. When the computer has finished loading PNM onto the hard disk, type **C:** and press <ENTER> to select the C Drive.

8. Remove the diskette from Drive A.

9. You are now ready to use PNM. To run PNM simply type **PNM** and press <ENTER>. The PNM program is now permanently installed on your hard disk. However, be sure to store the PNM diskette in a safe place as a safety backup to the hard disk.

10. This will create the MAIN Menu shown below (which is sometimes known as a "shell" program) that ties all of the software in the Payphone Network Manager package together, such as the printing programs used to print copies of your files and the reformatting programs used to transform files for use by other programs like LOTUS 1-2-3 or SYMPHONY.

    The procedure for getting to this Menu and then to the Main Screen is as follows:

    a. The first screen you will see after entering PNM will be the ELCOTEL logo. Just press <ENTER> and you will get to the MAIN Menu shown below in Figure 1.

    b. Select **1) Payphone Network Manager** and you will enter the Main Screen, which is your entry into the main PNM program.

```
                         ELCOTEL, INC.
                                                      4/20  8:21 pm
                   ┌─────────────────┐
   Selections are: │      MENU       │
                   └─────────────────┘
      <Esc>  Exit this menu
   MAIN MENU

      1)  Payphone Network Manager

      2)  DIF format conversion

      3)  Print reports

      4)  Print help files

      5)  Print polling log file

      6)  Print payphone image file

      7)  Edit rate tables




   Enter selection number

SELECTION NUMBER: ──
```

Figure 1 – The MAIN Menu

11. From now on, to run PNM from a cold start (i.e., when you first turn on the computer after it has been off), type **CD PNM** and press <ENTER>; then type **PNM** and press <ENTER>.

However, if you take a look at your MS-DOS/PC-DOS user's manual, you will see that you can automate this procedure by changing your AUTOEXEC.BAT file. Despite what you might think, AUTOEXEC.BAT is not a nocturnal flying animal with a taste for Detroit executives. The **BAT** stands for **Batch** file, the **AUTO** for Automatic, and the **EXEC** for Execute. It is the file that the computer looks at first when it boots up and contains the commands you want the computer to execute automatically when you turn it on.

The DOS manual will tell you how to do this, but we'd like to give you a hint. If you already have one of these files, you can use a text editor to add the above commands for initiating PNM or you can use the DOS editor.

If you elect to use DOS, at the **C:** prompt type in **TYPE AUTOEXEC.BAT** before trying to change the file so that you know what commands are already in it. Then type in **COPY CON AUTOEXEC.BAT** and retype all the old commands plus the new ones. (If you use a text editor, you can just insert the new commands before saving the file.)

The Modem

To install the modem you have chosen, simply follow the instructions in your user's manual. You will need to connect it to one of the communication ports on your computer and to a phone line. If your modem is an external type and not mounted inside the computer, you will also need to connect it to a 115 Vac power source.

One of the nicest pieces of news about the modem is that **you don't need to worry about setting up any of its parameters!** That's because all of the usual parameters associated with modems, like parity, stop bits, baud rates, etc., are controlled by the PNM software.

However, you do need to tell the computer which communications port it is connected to. You may do this after you load the PNM software (see *Installing the PNM software on the Hard Disk*) by running PNM. When the main screen appears, do the following:

1. Press F3, labeled **MENU** on the main screen. This will bring up the Menu on the screen.

2. Press **1) MODEM**. You will now enter the MODEM window with a number of possible selections.

3. Select **4) Communications Port**. A screen will appear which shows how many Communications Ports you have available on your computer.

4. Press **1) Communication Port 1**, or press **2) Communication Port 2**, depending on which communications port you have connected your modem to.

5. All other parameters are automatically set by PNM, such as Parity, Stop Bits, Data Bits, and Baud Rate.

   NOTE: Remember that the AT&T 4112 Modem requires that the speaker volume be turned off. PNM has already been set with this feature turned off so that the system will operate at turn-on even if you are using an AT&T modem (i.e., it is the "default" setting). Therefore, if you have a modem which allows the speaker volume to be turned on and you want this feature, you must select one of the speaker-volume-ON choices in the MODEM window.

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The Printer

After using PNM for a while, you may want to print out the network files you have created. To do this, you have to leave the Main Screen (by pressing F7, **EXIT,** when you are at the Main Screen) in order to run the network print program. This can be done by selecting **3)Print reports.** As shown in Figure 1, you can also print out the help files by selecting **4) Print help files** or the polling file by selecting **5) Print polling log file.**

The two final entries, **6) Print payphone image file** and **7) Edit rate tables** will be discussed in more detail in a later section called **Printing Out Phone Lists and Status Reports** (page 40). The first of these will allow you to print out the image file of any payphone you have interrogated and gotten a readout of the General Registers, Speed Dial Numbers, Exception Groups, or Band Charges.

Using Other Software Packages with PNM

There are many software programs out there, like LOTUS 1-2-3 and SYMPHONY, that offer a lot of helpful specialized services. Luckily, there is a way you can use them with the Main MAIN Menu shell.

These packages use the Data Interchange Format called DIF. To translate to the DIF format, simply select **2) DIF format conversion.** This will allow you to select the file you want to interchange and convert it to a file named CHAT_DAT.DIF. Pressing <Esc> will then take you back to DOS where you can use this file by another software program.

The Main Screen

When you select 1 from the Main MAIN Menu shell, you'll see something like the screen shown below in Figure 2 (preferably in color).

Figure 2 – A Typical Main Screen

Before we describe the main portions of this screen, let's take a look at the upper right-hand portion. There you will see the date and the time. When the system is first turned on, PNM will take the date and time set in the computer, itself. If you haven't set these parameters yet, don't let it bother you, because you can set them while you're still in PNM. It's one of the options of the **F3 MENU** screen, which will be discussed in the next Section.

In addition, in the upper left-hand corner there are two symbols called **DTR** and **RI**, which stand for Data Terminal Ready and Ring Indicator, respectively. The smart payphones produced by ELCOTEL are capable of recognizing certain alarm conditions. With PNM these Alarm flags will cause the payphone to transmit this information to the Network Manager if you have elected to allow PNM to receive incoming calls (discussed under **Option Menu: Modem** (*Incoming Calls On/Off*)). Once you have done so, a red light will appear to the right of **DTR**, looking very much like the Light Emitting Diode (LED) indicators on the front panels of some TV sets and VCR's. A similar light will appear to the right of **RI** when there is an incoming payphone call.

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However, the incoming call can be received and recorded by PNM only when you are in the Main Screen Menu, and that is the only time that **DTR** will be lit. Therefore, any time that you see the RI red light and the **DTR** is not lit, immediately return to the Main Screen Menu (usually by hitting the <Esc>key) so that the call can be recorded.

The Modem Status Screen

The top half of the screen gives you an instant status report on the condition of the Modem, the essential link to your Payphone Network. In this particular example, the screen says that the **Status** of the modem is **Inactive** which means that no payphone is being called and no poll is in progress. This will always be the case when you log onto PNM since no polling can take place when PNM is not running.

When polling is in progress, **Number** will show the phone number of the payphone currently linked to PNM, and **ID #** will display the 4-digit numeric password for that phone. The latter is a secret number that you will assign to each payphone to protect it from unauthorized access.

Mode doesn't mean very much in this case since the Modem is not active, but when you do contact one of your payphones, it indicates whether you did so manually at your computer keyboard or whether the connection is the result of an automatic poll.

Autopoll will confirm whether the scheduled automatic polling option is On or Off.

With **Incoming** you can select whether to receive incoming calls from the payphones or not. If you elect to receive them, the **DTR** indicator will light whenever you are in the Main Screen, showing that the Data Terminal is Ready to receive incoming calls.

Blackout allows you to select the waiting period during which no keystrokes are executed before the screen blacks out to save it from damage.

Tone dial can be set from the Modem Menu Screen, which we will describe in the next Section. The two choices you have are **Tone dial** and **Pulse dial:** The first is the kind of dialing signal you get from a touch phone, and the latter is that which you get from a dial phone. There are older central stations and PBX's in the country that still use pulse dialing, so we have given you that option.

Speaker off or **Speaker on** are options which we already talked about in the previous Section. The default is **Speaker on till connection is made,** but that can be changed (see **Option Menu: Modem**{*Speaker Off/On*}).

And finally, **Local** is simply a check of the condition of the modem. When the Modem is inactive, it is in the **Local** mode, waiting for you or the computer to contact somebody. When it is Active, **Local** will change to **On line** when it has made contact with the payphone you're calling. This can be used to detect a glitch in the system. For example, if **Status** is **Inactive** and this area indicates **On line,** something is obviously wrong.

The Function Keys

In addition, you'll note that there is a row of numbers along the bottom starting with **F1** and going up to **F10,** which is represented by **0.** These refer to the Function keys which are typically located either in two columns along the left-hand side of your computer keyboard or in a single row across the top. When you wish to call up, say, the Menu screen, just press F3 which is labeled **MENU** and that screen will instantly replace the Main Screen on your computer monitor. What could be simpler?

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In fact, you can find out all about the screens at your disposal by simply touching the appropriate keys indicated on each of the screens that appear. Our software engineers designed PNM so that you can get to any menu in the structure with just two fingers!

The next Section will take you step by step down all the pathways of the MENU option from the Main Screen to the bottom of the "tree." We recommend that you follow this initiation procedure with us so we can point out some pretty classy features along the way while you become familiar with the PNM procedures.

But we must confess that what takes us many pages to talk about, you can do on your own in just a few seconds! If you want to, you can run ahead and see right away all the goodies that are waiting for us. Then come on back and we'll go through it at a more leisurely pace.

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The Menu Screen

When you press F3, the Menu Screen shown below in Figure 3 will appear on your monitor.

```
                              ELCOTEL, INC.
 DTR      RI                ┌──────────────────┐              4/20  8:21 pm
                            │   OPTION MENU    │
  Selections are:          └──────────────────┘
  Press [⏎] to exit this menu.
  MAIN MENU

    1)  MODEM

    2)  SYSTEM

    3)  DATABASE




  Enter selection number.                      <Esc> Go to main screen


 SELECTION NUMBER: ▬

  F1 [    ] 2 [    ] 3 [    ] 4 [    ] 5 [    ] 6 [    ] 7 [    ] 8 [    ] 9 [    ] 0 [    ]
```

Figure 3 – The Option Menu

One of the first things to note is that the title block at the top has changed from MODEM STATUS to OPTION MENU. This is a handy thing to know, because it means that you can always tell which menu tree you're operating from; that is, it will always have the title of the function key you selected from the Main Screen.

The second thing you should become aware of is how to get out of this menu back to the Main Screen. It's a little like marking a trail when you go into a strange territory. PNM has been designed to do this for you at every step so that it is almost impossible for you to become lost.

In this case, you can see at the top that all you have to do is to press <ENTER>, the " ⏎ " key on most keyboards, in order to get back to the Main Screen.

Try pressing ⏎ . Then press F3 again to get back here.

You can also press the <Esc> key to do the same thing, as it says down at the lower right of the screen. The reason we've given you these two choices is that pressing <Esc> will **almost always** get

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you back to the Main Screen, whereas selecting " ↵ " will move you back just to the previous screen. There are some exceptions to this rule, but they are clearly marked on your screen when they occur.

And just to give you a reward for joining us on this initial stroll, we'll tell you that there is even a third way to step back one screen even though it isn't mentioned on the monitor. Just press the number **0**. This will work on any screen that doesn't require you to enter multiple characters.

You can see that we've added a new line just above the Function Key line on the monitor called, **SELECTION NUMBER.** It is followed by a blinking cursor underline to indicate that your selection should be a numerical one and not a Function Key. We've reserved the Function keys for special situations, like picking major menu-tree selections at the Main Screen. (If you happen to hit a Function key when it is blank, you won't mess up anything, but the computer will "beep" at you to let you know that the key you pressed isn't operating.)

You now have three choices from the Main Option Menu: **1) MODEM, 2) SYSTEM,** and **3) DATA-BASE.** We'll take a look at the first of these in the following pages.

Option Menu: Modem

Figure 4 – Option Menu: Modem

Selecting " ↵ " will now take you back to the MAIN Menu you just left, but <Esc> gets you all the way back to the Main Screen.

Again you have a choice: **1) Tone/Pulse dial, 2) Speaker off/on, 3) Speaker volume, 4) Communication port, 5) Time to wait for an answer,** and **6) Incoming calls on/off.** Let's try the first, **1) Tone/ Pulse dial.**

Option Menu: Modem *{Tone-Pulse Dial}*

If you select (1) from the MODEM screen, you'll get the following screen:

Figure 5 – Option Menu: Modem *{Tone–Pulse dial}*

Here you can see that some new wrinkles have been added. For one thing, there's a box highlighting one of the two choices for Tone or Pulse dialing. For another, you can select which one you want with the cursor up and down keys as well as the numerical keys. Once you've made your selection, you press <ENTER> (or " ⏎ ") to enter your selection and get you back to the previous screen.

There's another new element in this screen. A new title has been added under **MODEM** called, **{Tone/Pulse dial}.** Now you have the entire path you have followed to get to this point displayed on the screen. At the very top is the **OPTION MENU** title which tells you which Function key you pushed. Next comes the **MODEM** title which indicates which selection you chose from the Menu. And finally, the **Tone/Pulse dial** selection you made from the MODEM Menu. The final selection is distinguished from the others by the use of the brackets {...}. Later when you get to the next deeper level, you will find double brackets {{...}} used.

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This allows you to decide whether or not you want to go back up the tree of screens one branch at a time by using <ENTER> or "0," or right to the top Main Screen with <Esc>.

Let's get back to the Modem Menu by pressing <ENTER> and select the second choice, **Speaker off/on**.

Option Menu: Modem *{Speaker off-on}*

```
                              ELCOTEL, INC.
  DTR      RI          ┌──────────────────────┐         4/20  8:21 pm
                       │    OPTION MENU        │
   Selections are:     └──────────────────────┘
   Press │↵│ to exit this menu.
   MODEM
    {Speaker off/on}

     1)  Speaker always off

     2) │ Speaker on till connection made │

     3)  Speaker always on
```
```
     Enter selection number or use cursor ↑↓ keys.        <Esc> Go to main screen
  SELECTION NUMBER: ▬▬
   F1 □   2 □   3 □   4 □   5 □   6 □   7 □   8 □   9 □   0 □
```

Figure 6 – Option Menu: Modem *{Speaker off-on}*

Again you can see that the screen is pretty much self explanatory. Here, the default is for the speaker to be on only until a connection is made. That allows you to hear all the dialing and ringing that the modem does for you automatically when you're polling a payphone. But when the connection is finally made and all the digital information is flying back and forth, you won't be annoyed by all the squeaks, clicks, and grunts that the information bits make when they hit the loudspeaker.

However, if you think it would be fun to listen to all that digital chatter, be our guest. Simply make the selection you want by using the cursor ↑↓ keys or by typing in a number and pressing <ENTER>. Let's pick the next option.

Option Menu: Modem *{Speaker volume}*

```
                              ELCOTEL, INC.
  DTR    RI         ┌─────────────────────────┐        4/20  8:21 pm
                    │      OPTION MENU        │
  Selections are:   └─────────────────────────┘
  Press [↵] to exit this menu.
  MODEM
   {Speaker volume}

   1) │ No speaker volume control │

   2)  Low speaker volume control

   3)  Medium speaker volume control

   4)  High speaker volume control

       Note:  If your MODEM does not have a programmable
              volume control, then please choose option 1.




  Enter selection number or use cursor ↑↓ keys.        <Esc> Go to main screen
```

SELECTION NUMBER: —

```
F1 [    ]  2 [    ]  3 [    ]  4 [    ]  5 [    ]  6 [    ]  7 [    ]  8 [    ]  9 [    ]  0 [    ]
```

Figure 7 – Option Menu: Modem *{Speaker volume}*

The default here is **No speaker volume control** because of the problem illustrated by the Note on the screen. In particular, as we said before, the AT&T 4112 Modem will not operate properly if the volume control option is turned On. Therefore, we default it to Off so that the system will operate if the 4112 has been selected as your modem.

However, if you have a programmable modem, you have three selections of volume you can use for it: Low, Medium, or High. Don't worry if you pick the wrong one. As you can see by now, changing it to the proper setting is as easy as 1, 2, 3, or 4.

Once more, press <ENTER> to get you back to the Modem Menu, and make selection **4) Communication port.**

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Option Menu: Modem {*Communication Port*}

```
                                    ELCOTEL, INC.
   DTR     RI                   ┌──────────────────┐              4/20  8:21 pm
 ┌─────────────────────────────┤   OPTION MENU    ├─────────────────────────────┐
 │    Selections are:          └──────────────────┘                             │
 │    Press [↵] to exit this menu.                                              │
 │    MODEM                                                                     │
 │      {Communication port}                                                   │
 │                                                                             │
 │      1)  Communication Port 1                                               │
 │                    ┌─────────────────────────┐                             │
 │      2)            │ Communication Port 2    │                             │
 │                    └─────────────────────────┘                             │
 │                                                                             │
 │                                                                             │
 │         Communication Port changes will be executed at the next            │
 │         power up cycle of this program.                                     │
 │                                                                             │
 │                                                                             │
 │      Hardware indicates that:                                               │
 │                              ┌─────┐                                        │
 │      Comm 1 is present:      │ Yes │                                        │
 │                              └─────┘                                        │
 │      Comm 2 is present:      │ Yes │                                        │
 │                              └─────┘                                        │
 │                                                                             │
 │                                                                             │
 │      Enter selection number or use cursor ↑↓ keys.      <Esc> Go to main screen │
 └─────────────────────────────────────────────────────────────────────────────┘
   SELECTION NUMBER: ▬
   F1 ┌──┐ 2 ┌──┐ 3 ┌──┐ 4 ┌──┐ 5 ┌──┐ 6 ┌──┐ 7 ┌──┐ 8 ┌──┐ 9 ┌──┐ 0 ┌──┐
      └──┘   └──┘   └──┘   └──┘   └──┘   └──┘   └──┘   └──┘   └──┘   └──┘
```

Figure 8 – Option Menu: Modem {*Communication Port*}

As you can see, PNM will tell you if the computer has one Communication Port or two.

If you'll remember what we said about the Modem in the first Section, **Communication port** is the only parameter you'll have to select for the Modem, but it is essential that you do so. Otherwise, the computer will never find a modem on its output if you have told it that it is connected to the wrong port.

Now we have just one more option to investigate in the Modem Menu, so press <ENTER> after making your Communication port selection and select **5) Time to wait for answer.**

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Option Menu: Modem *{Time to wait for answer}*

```
                              ELCOTEL, INC.
   DTR     RI                                                    4/20  8:21 pm
                        ┃┃ OPTION MENU ┃┃
      Selections are:
      Press ⏎ to exit this menu.
      MODEM
      {Time to wait for answer}

      How long to wait after dialing before reporting, no answer.

      Most modem manuals recommend 30 seconds.  However, you may find that
      certain calls required a longer waiting period.  Some long distance
      calls may take up to 55 seconds or longer.  The waiting time is also
      dependent on how many times the phone rings before it is answered.

      You may select a range between 30 and 255 seconds.

      Current waiting time in seconds is: [ 30 ]


      Enter waiting period value                    <Esc> Go to main screen

   ENTER TIME TO WAIT FOR ANSWER: [ ▬ ]
    F1 [  ]  2 [  ]  3 [  ]  4 [  ]  5 [  ]  6 [  ]  7 [  ]  8 [  ]  9 [  ]  0 [  ]
```

Figure 9 – Option Menu: Modem *{Time to wait for answer}*

This is the first time that you have been requested to enter a value. As you can see, our **SELECTION NUMBER** prompt has been changed to the **ENTER TIME TO WAIT FOR ANSWER** prompt with a highlighted box at the end. That's so that you will realize that the computer is waiting for you to put in a value.

You can put in a new number simply by typing over the old characters or by editing the entry. In fact, all of the edit keys are active here: **Backspace** moves the cursor back one space and deletes a character to the left; the arrow keys, → and ← , move the cursor right and left; **Delete** deletes the character the cursor is on; and **Insert** allows you to insert a character between other characters.

Just for fun, try putting in a number bigger than 255 seconds and see what happens. (Remember to press <ENTER> after typing in your number.) Now try a number smaller than 30 seconds (but greater than 0).

If all went according to plan, you got a flashing red error message telling you that you goofed and that you should try again. So you see, it's almost impossible to mess up this program with inputs that it isn't designed to accept.

Put in a number you think will be adequate for your purposes and press <ENTER>.

PNM
Payphone Network Manager

Option Menu: Modem *{Incoming Calls On-Off}*

Return to the Modem Menu again by pressing <ENTER> and select the last choice, **Incoming calls on/off**. You'll get the screen shown below.
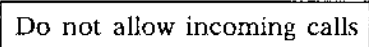
```
                              ELCOTEL, INC.
   DTR     RI            ┌─────────────────────┐              4/20  8:21 pm
 ┌───────────────────────┤    OPTION MENU      ├───────────────────────────┐
 │  Selections are:      └─────────────────────┘                           │
 │  Press [↵] to exit this menu.                                           │
 │  MODEM                                                                  │
 │   {Incoming calls on/off}                                              │
 │                                                                        │
 │    1) ┌──────────────────────────────┐                                │
 │       │ Do not allow incoming calls  │                                │
 │       └──────────────────────────────┘                                │
 │    2)   Allow incoming calls                                          │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │                                                                        │
 │    Enter selection number or use cursor ↑↓ keys.    <Esc> Go to main screen │
 └────────────────────────────────────────────────────────────────────────┘
  SELECTION NUMBER: ▬
   F1 [   ] 2 [   ] 3 [   ] 4 [   ] 5 [   ] 6 [   ] 7 [   ] 8 [   ] 9 [   ] 0 [   ]
```

Figure 10 – Option Menu: Modem *{Incoming Calls On-Off}*

This particular feature will allow you to receive incoming calls when you are in the Main Menu and the DTR at the top left of the screen is showing a red indicator next to it (or white on a black-and-white monitor). As soon as you select the second option in this menu, the DTR will always be indicated when you are in the Main Menu, but not when you are in any other menu.

When an incoming call occurs, the RI at the top left of the screen will show a red indicator so that you can return to the Main Menu to receive the call. Once both of these indicators show red, the Main Menu screen will show the phone number with its ID number and the Status block will appear in the center of the screen, just as it does when you are initiating a call to a payphone.

This Status block will be recorded on the hard disk in the log file and in that particular phone's data storage area (see the discussion on the Print Reports and the CHAT_DIF to determine how to access these files).

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Option Menu: System

Return to the Main Screen by pressing <Esc>, then **F4 MENU**, and finally **2) SYSTEM**. This will give you the screen shown below:

```
                              ELCOTEL, INC.
 DTR   RI                                                    4/20  8:21 pm
 ┌──────────────────────┤  OPTION MENU  ├──────────────────────────────┐
 │  Selections are:                                                     │
 │      Press [↵] to exit this menu.                                    │
 │  SYSTEM                                                              │
 │      1)  Color selection                                            │
 │      2)  Company name                                               │
 │      3)  Set Date/Time                                              │
 │      4)  Screen saver                                               │
 │      5)  Parameters                                                 │
 │                                                                     │
 │                                                                     │
 │                                                                     │
 │                                                                     │
 │     Enter selection number                      <Esc> Go to main screen │
 └─────────────────────────────────────────────────────────────────────┘
 SELECTION NUMBER: ──
 F1[   ] 2[   ] 3[   ] 4[   ] 5[   ] 6[   ] 7[   ] 8[   ] 9[   ] 0[   ]
```

Figure 11 – Option Menu: System

The SYSTEM menu tree shown above contains all the variables of PNM that you might want to adjust or monitor. This includes the color selection of the menus, the addition of your company name at the top of the menus (instead of ELCOTEL), setting the date and time, selecting the length of time that the screen can remain dormant before blanking out, and monitoring the amount of memory you have left on your hard disk.

Each of these functions is described in detail in the following sections.

PNM
Payphone Network Manager

Option Menu: System *{Color Selection}*

Choose **1) Color Selection** from the SYSTEM menu and it will give you the screen shown below.

```
                              ELCOTEL, INC.
  DTR      RI                                          4/20  8:21 pm
                           ┌─────────────────┐
   Selections are:         │  OPTION MENU    │
   Press [⏎] to exit this menu.

   SYSTEM
     {Color selection}
       1)  Main displays
       2)  Menu line
       3)  Window displays
       4)  Highlight areas
       5)  System areas
       6)  Error display

     Reset grays/color

       7)  Recommended grays
       8)  Recommended colors
       9)  Exit colors




   Enter selection number.                  <Esc> Go to main screen

 SELECTION NUMBER: ▬

 F1[   ] 2[   ] 3[   ] 4[   ] 5[   ] 6[   ] 7[   ] 8[   ] 9[   ] 0[   ]
```

Figure 12 – Option Menu: System *{Color Selection}*

Now the fun begins! For some reason, most of our customers with color monitors are fascinated with this option. Maybe it's because there are so many pretty colors and they're so easy to pick. You can even fool around with the contrasting shades of gray in a monochrome monitor.

The thing is, you can pick the color you want for practically every single item that appears on the screen. There's only one exception to this rule...you must choose a contrasting color. If you don't, you'll get a pretty flashing error message that says that you goofed and you must try again.

The reason for this is pretty obvious. If you choose the same color for "OPTION MENU" and for the block it appears in, you'll never see the words. That means that if you really tried hard, you could wind up with a screen of one solid color and no information showing. Then if you didn't remember which key to use to get back to some contrasting colors, you could wind up with a useless PNM program.

We keep you from doing that, but we don't keep you from picking some pretty awful combinations. However, if you would like to back out of some of the colors you picked, all you have to do is select number 8 (under "**Reset grays/color**") and the original default colors will be magically restored. (Then you can start changing them all over again!) The same is also true for monochrome monitors; you can pick number 7 to restore the original grays selected.

Selection **9) Exit colors** allows you to keep your magnificent color combinations for your regular computer screen. This selection gives you two options: **1) Do not use main screen colors after exit**, and **2) Use main screen colors after exit.**

There is also a note that says that something called an "ANSI.SYS driver" has to be installed in order for the second option to work. If you want to choose this option so that the computer will use the PNM colors even after you exit the program, check to see if you have the ANSI.SYS driver on your hard disk by typing **DIR \ ANSI.SYS** at the **C:** prompt. If the directory says that no such file can be found, you're stuck with the old colors for your main computer. However, if the directory shows that ANSI.SYS is present, next write **TYPE\CONFIG.SYS** and see if there is an entry called **device=ANSI.SYS.** If there is, you're all set. If not, add that phrase (with no spaces) to the CONFIG.SYS file. As you can see, you are now knee deep in PNM colors even when you exit the program.

Option Menu: System *{Color Selection}{{Menu line}}*

If you picked the **second** option of the Color Selection menu, **Menu line**, you'll get the screen shown below. One of the first things to notice is that **Menu line** appears within double brackets, {{...}}, just as we promised that they would at this level of the menu tree.

Figure 13 – Option Menu: System *{Color Selection}{{Menu line}}*

The reason we asked you to pick the second option rather than the first, **Main displays,** is that the latter does not show the **COLOR SAMPLE** you can see here at the bottom of the screen. If you pick

Option 6 from the Color Selection Menu, **Error display,** you'll get another display box that shows you what the blinking error message looks like.

Notice that the first two columns have identical colors in them. That's because the first one is for the Background color (for example, the box around **COLOR SAMPLE**) and the second and third columns are for the Foreground colors (the **COLOR SAMPLE** words, themselves). Any number from 1 through 8 will produce Background colors, and any from 9 through 24 will produce Foreground colors. The additional Foreground colors are for different shades of the principal colors, which make for some rather nice options.

If you want any of your messages to blink, pick number 25 as well as the colors of your choice. We think you'll probably get tired of blinking displays pretty quickly (that's why we chose them only for the error messages), but if you want them, you've got them.

Option Menu: System *{Company Name}*

When you've finished playing with the colors, hit ⏎ until you get back to the System menu again and choose, **2) Company Name.** This one will really give you a sense of ownership because you can use it to substitute your company name for the "ELCOTEL, INC." at the top of all the menus.

```
  DTR      RI              Creative Industrial Communications                    4/20  8:21 pm
 ┌──────────────────────────────┤     OPTION MENU     ├──────────────────────────┐
 │ Selections are:                                                               │
 │                                                                               │
 │   Press │⏎│ to exit this menu.                                                │
 │                                                                               │
 │ SYSTEM                                                                        │
 │   {Company Name}                                                              │
 │                                                                               │
 │      Please enter the name of your Company.                                   │
 │      Up to 40 characters are allowed.                                         │
 │                                                                               │
 │                                                                               │
 │                                                                               │
 │                                                               <Esc> Go to main screen │
 └───────────────────────────────────────────────────────────────────────────────┘
 COMPANY NAME: [                                    ]
 F1 [    ]  2 [    ]  3 [    ]  4 [    ]  5 [    ]  6 [    ]  7 [    ]  8 [    ]  9 [    ]  0 [    ]
```

Figure 14 – Option Menu: System *{Company Name}*

PNM
Payphone Network Manager

Option Menu: System *{Set Date/Time}*

If you didn't set the date and time when you booted up your computer, this option gives you the opportunity to correct both. The initial selections are obvious: you can choose to set either the date or the time.

When you set the date, you should enter it in the familiar shorthand mode, like 04/28/87 for April 28, 1987. For the time option, we use the military 24-hour system so that we don't have to play around with a.m. or p.m. That means that any hour before noon is entered in the usual way. But after noon the hours should be added to 12, so that 5:12 p.m. becomes 17:12. Enter your time that way, using a ":" between the hours and the minutes.

Option Menu: System *{Screen Saver}*

```
DTR   RI                 Creative Industrial Communications            4/20  8:21 pm
                          ┌─────────────────────┐
                          │    OPTION MENU      │
       Selections are:

         Press  [⏎]  to exit this menu.

       SYSTEM
         {Screen saver}
           Time to wait for keystroke(s) before blacking out screen.


           You may select a range between 3 and 30 minutes.
           Use 0 to disable black out function.
           Current black out time in minutes is:  [ 10 ]


           To restore the screen after a black out, press any key.
           Choose a key that will not cause undesireable effects such
           as the Shift or Caps Lock key.




       Enter waiting period value                  <Esc> Go to main screen


    Enter time to wait before blackout: [ __ ]
  F1[   ]  2[   ]  3[   ]  4[   ]  5[   ]  6[   ]  7[   ]  8[   ]  9[   ]  0[   ]
```

Figure 15 – Option Menu: System *{Screen Saver}*

Since the screen describes all you need to know about this option, we won't repeat it here. Suffice it to say that if you keep an image on a monitor or TV screen for an extended period of time, the image can burn into the phosphor of the screen and become a permanent "shadow" superimposed on it.

This option makes sure that this never happens.

Option Menu: System *{Parameters}*

Pressing **5) Parameters** will give you the screen shown below in Figure 16.

```
 DTR      RI              Creative Industrial Communications                4/20  8:21 pm
                            ┌──────────────────────┐
   Selections are:         │    OPTION MENU        │
   Press [↵] to exit this menu.
   SYSTEM
     {Parameters}
       Maximum number of phones = 4000
       Current number of phones =        1
       Total additional phones =       3999

       Disk space needed per phone = 2560
       Available disk space in Megs = 9.51
       With current desk space you may add
       3999 phones.

       Program size in K = 84




                                              <Esc> Go to main screen

   Press enter of <Esc> to exit: __
   F1 [   ] 2 [   ] 3 [   ] 4 [   ] 5 [   ] 6 [   ] 7 [   ] 8 [   ] 9 [   ] 0 [   ]
```

Figure 16 – Option Menu: System *{Parameters}*

This menu screen has been included to let you become aware of how many phones you have on your system, how much memory they are using, and how much is still available to you.

Of course, few of you will have networks that control 4000 phones! But if you add helpful programs to your computer, like LOTUS or SYMPHONY, you will use up memory to do so. And the files you create for your payphones will also use up memory. In fact, you'll be surprised how quickly you can eat into 10 Megabytes (that's **10 million** bytes) of memory.

Creating Your Phone Lists

This portion of the PNM system is so important that it deserves to be treated separately even though editing your phone lists is a part of the **Option Menu** selections. We call the portion of PNM where you keep your phone lists the **Database**, a computer term meaning the file where all the information is kept. This will be the heart of your system. It's the place where all the working information will be kept concerning the phone number, its unique ID number, the phone's location, the date it was installed, and at least three other characteristics of the payphone which you can add, yourself.

In case you have just skipped to this Section without reading the previous one, you can get to the Database by selecting **F3 MENU**, at the Main Screen, and then choosing number **3) DATABASE.**

The main Database Menu looks very much like the other two Option Menu selections as you can see in Figure 17, below. However, this time we will be starting at **3) Add phone(s) to master list** so that you can get a better feel about how the lists are composed.

Option Menu: Database

```
                          Creative Industrial Communications
  DTR      RI                                                      4/20  8:21 pm
 ┌─────────────────────────┤ OPTION MENU ├──────────────────────────────┐
 │   Selections are:                                                     │
 │      Press │ ↵ │ to exit this menu.                                   │
 │                                                                       │
 │   DATABASE                                                            │
 │      1)  Assign dialing list names                                    │
 │             and set polling schedule                                  │
 │                                                                       │
 │      2)  Assign user variable names                                   │
 │                                                                       │
 │      3)  Add phone(s) to master list                                  │
 │                                                                       │
 │      4)  Edit/Delete master list entry                                │
 │                                                                       │
 │      5)  Sort master list                                             │
 │                                                                       │
 │                                                                       │
 │                                                                       │
 │                                                                       │
 │   Enter selection number.                    <Esc> Go to main screen  │
 └───────────────────────────────────────────────────────────────────────┘
 SELECTION NUMBER: │ ▬ │
 F1 │   │  2 │   │  3 │   │  4 │   │  5 │   │  6 │   │  7 │   │  8 │   │  9 │   │  0 │   │
```

Figure 17 – Option Menu: Database

PNM
Payphone Network Manager

Option Menu: Database *{Add phone(s) to master list}*

```
      DTR      RI            Creative Industrial Communications         4/20  8:21 pm
   ┌─────────────────────┌──────────────────┐──────────────────────────────────────┐
   │                     │   OPTION MENU    │                                       │
   │                     └──────────────────┘                                       │
   │                                               Total entries:  1                │
   │                                                                                │
   │   DATABASE                                                                     │
   │      {Add phone(s) to master list}                                             │
   │                                                                                │
   │         Phone number:                                                          │
   │         ID number:                                                             │
   │         Street address:                                                        │
   │         Location name:                                                         │
   │         Date installed:                                                        │
   │         Salesman:                                                              │
   │                                                                                │
   │                                                                                │
   │                                                                                │
   │                                                                                │
   │                                                                                │
   │                                                       ┌───┐                    │
   │                                                Press  │ ⏎ │  after each entry   │
   │                                                       └───┘                    │
   │                                                <Esc> Go to last screen          │
   └────────────────────────────────────────────────────────────────────────────┘

   PLEASE ENTER PHONE NUMBER: [ ▬                                            ]

   F1[   ]  2[   ]  3[   ]  4[   ]  5[   ]  6[   ]  7[   ]  8[   ]  9[   ]  0[   ]
```

Figure 18 – Option Menu: Database*{Add phone(s) to master list}*

As you can see at the bottom of the screen, it is already prepared to accept your first phone number. Again, all of the edit keys – backspace, arrow left and right, delete, and insert – are active, so you should have no trouble entering one of your payphone numbers. For the sake of the next illustration, we've selected 123–4567 to represent the first number you enter, but enter one of your own. There is already a sample phone number entered, as you can see by the entry statement at the top of the screen, but we'll talk about that later.

After you enter the first phone number, the statement at the bottom will say, **PLEASE ENTER ID NUMBER:** followed by a highlighted blinking cursor. This is the special 4–digit ID Number for this particular phone that was assigned when the phone was put into service. Check the questionnaire which we returned to you and you will discover that we have included the ID number of each of your payphones.

As soon as the ID Number is inserted, the screen will produce additional options using the Function keys, as shown in Figure 19. For now, just ignore them and enter the remaining information asked for, or as much of it as you want to enter.

Once you have entered the phone number and the ID number, you don't have to complete the list of entries if you don't want to. In this case, the date installed will default to the date appearing at the

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upper right—hand corner of the screen. However, if you don't enter either the phone number or the ID or both, you will never be able to save it because the **SAVE** option will never appear at the bottom.

If you see that you have made a mistake on one of your entries, simply hit ⏎ until you call up the entry field in question. Then you can: (1) move the cursor with the arrow keys to the mistake and type over it, (2) delete the entire entry by backspacing over it and re-enter it correctly, or (3) insert a missing character after pressing the Insert key.

Once you have entered the phone number and the ID numbers, the screen will immediately transform and give you the **F2 PICK, F6 DIAL,** and **F9 SAVE** options at the bottom.

Creative Industrial Communications

```
DTR      RI                   ┌───────────────────┐                    4/20  8:21 pm
                              │   OPTION MENU     │
                              └───────────────────┘
                                                        Total entries: 1

    DATABASE
    {Add phone(s) to master list}

       Phone number:   123-4567
       ID number:       1111
       Street address:
       Location name:
       Date installed:
       Salesman:




    Press SAVE  to record ANY change(s).
    Press PICK  to select dialing list(s).       Press ⏎  after each entry
    Press DIAL  to call this entry.              <Esc> Go to last screen

    PLEASE ENTER ADDRESS: �_____

   F1 [   ] 2 [PICK] 3 [   ] 4 [   ] 5 [   ] 6 [DIAL] 7 [   ] 8 [   ] 9 [SAVE] 0 [   ]
```

Figure 19 — Option Menu: Database{*Add phone(s) to master list*}

Now let's take a look at the new options. As you can see, Function keys 2, 6, and 9 at the bottom of the screen have new names: **PICK, DIAL,** and **SAVE.** If you want to save this entry as you've typed it, press F9 and it will be done in the twinkling of an eye (or rather the blinking of the hard disk's red light). If you simply press <Esc> to get back to the previous screen without saving, your entry will disappear. The **DIAL** option is obvious...press F6 and the number you have just entered will be dialed by PNM. **PICK** will let you select the phone list you want this number to be listed under. But since we haven't created any at this point, your first entry has already been saved in the default phone list which we have named, "**Yourlist,**" as you will see on a later menu. But for now, let's hit <Esc> and go back to the Database Menu so that we can select **4) Edit/Delete master list.**

PNM
Payphone Network Manager

Option Menu: Database {Edit/Delete master list}

After getting the Edit/Delete menu, select number 1 so that you get the screen shown below.

Figure 20 – Option Menu: Database{Edit/Delete master list}

Here you can see the default listing that we put in for you so that you can see exactly the way an entry should look. Since you have also inserted an entry, the total number at the top of the screen has changed to "2." You can also see that if you wish to, you can dial the number shown (please don't try this one, however).

As shown in the lower right-hand corner, you can get to another entry by pressing the down arrow key. Do that and you will notice that after you selected your own entry, the arrow key now points up for the next entry. Once you put more than three entries into the system, the prompt will show both up and down arrow keys when you are in the middle of the list.

If you now enter an **E**, all of the F number options shown on Figure 19 will reappear. Now you can edit your entry any way you want to. Once you press **SAVE**, you will return to the screen shown above.

Now it is time to create new dialing list names. In order to create new lists, you must press <Esc> to go back one screen and select **1) Assign dialing list names and set polling schedule.**

Option Menu: Database
{Assign dialing list names and set polling schedule}

Obviously, the names of the lists of payphones should reflect the way you want to group them. Since you may want to do so in a number of different ways, such as by Salesman, frequency of use, etc., you will be happy to know that you can put a phone in as many lists as you want to. However, it may not be quite so obvious that the lists must also be grouped according to the polling schedule for all the phones on the list. In order to appreciate this, take a look at the dialing list screen.

```
                       Creative Industrial Communications
  DTR      RI         ┌──────────────────────┐            4/20  8:21 pm
  Selections are:     │     OPTION MENU      │
  Press [⏎] to exit this menu.   ┌────────────────────────────────────┐
                                 │ You may change the dialing list name │
  DATABASE                       │ in the scheduling window with the↑↓  │
    {Assign dialing list names   │ keys or enter the selection number.  │
     and set polling schedule}   └────────────────────────────────────┘
       1)  Yourlist          6)                      11)
       2)                    7)                      12)
       3)                    8)                      13)
       4)                    9)                      14)
       5)                   10)                      15)

               Name          Type      Days   HH:MM
  Schedule:  [ Yourlist ]  [ Timed ]  [ 00 ]  [ 00:00 ]   Time till next poll
                              △

  Use ← → to move index marker △ .
  Use ↓↑ to change selection.                   <Esc> Go to main screen

  Enter selection number, or (E)dit: [ ▪ ]
  F1 [   ] 2 [   ] 3 [   ] 4 [   ] 5 [   ] 6 [   ] 7 [   ] 8 [   ] 9 [   ] 0 [   ]
```

Figure 21 – Option Menu: Database
{Assign dialing list names and set polling schedule}

When you first bring up this option, you will only see the defaulted list called, **Yourlist**. This name also appears in the **Name** block of the Schedule, which appears below the 15 numbers for the lists. For purposes of demonstration, let's complete the schedule for this list so that you can see how it's done.

Previously, we have had you type in all the parameters needed for an entry. This time we have a completely different kettle of fish! In order to make it easier for you, we have made extensive use of the arrow keys, as shown in the bottom left of the screen. First, move the index marker " △ " with the right arrow to the **Type** block. Then press either the up or the down arrow a number of times, noting the three different options that are available to you: **Timed, Date,** and **Day**.

The Timed option, shown in Figure 21, above, is primarily used when you want to poll the list at given intervals of time. This is reflected in the statement that appears to the right of the Schedule boxes when you select the **Timed** option. As long as the **Days** box is showing "00," the prompt will say, "Time till next poll," as shown in the Figure. So if you change the **HH:MM** block to 01:00 by pressing the down key under the hour symbol, a poll will be taken every hour for as long as the Automatic polling is turned on. For instance, if you create a list for damaged phones, you might want to poll them every hour to see when and if they get fixed.

Now as soon as you change the entry from "00" in the **Days** block to any other number, the prompt will change to, "Time to start next poll." This means that if you put in "02" days, the next poll will start the day after next at 01:00 a.m. and once every other day at the same time as long as the Automatic polling is left on.

The **Date** option in the **Type** block lets you poll a list on a particular day of the month, like the 1st or the 15th, and a particular time of day. In this case the **Day** block changes to **Date**, and the prompt becomes, "Poll by date 1st, 2nd."

Now select the **Day** option at the **Type** block, and the prompt will change to, "Poll by day of week Sun, Mon." Clicking the up or down arrows on the **Day** block will now give you the seven days of the week. You must also select the time of the day you wish the polling to take place in the **HH:MM** block. As usual, this is a 24-hour clock starting at 00:00 for midnight and going to 12:00 for noon and eventually 23:59 for one minute before midnight. If you hit ↵ after this, you will store the list as it has been scheduled and return to the previous screen.

If you have done this, select **1)Assign dialing list names and set polling schedule** again, and this time hit the down key at the **Name** block. You will get a blank block. Now type in "E" and press <Return> for edit and the bottom line will change to:

"Enter new name or (D)elete: ⌷————⌷ ."

Enter a list name (no longer than 8 characters) and press ↵ . Immediately you will see the name appear as list name number 2. You can select that list again by inserting the number 2 at the prompt or using the arrow keys and complete the schedule, or you can select any other number up to 15 and create another name for a list.

Before we go back to creating more phone names to put under the lists you have just created, you might want to investigate option **2) Assign user variable names** at the Database menu. This will allow you to expand the information you can store within each phone number entry.

Option Menu: Database *{Sort master list}*

When you first create your payphone list, the order of the resulting list is the same as the order in which all the payphones were entered. Very often that isn't the order you want the list to have once you are operational.

For instance, you may want to order the list according to ID Number so that you can quickly find the information for that phone when you want to look it up. Or perhaps you want to print out the payphone image file according to the Location Name of the payphones.

This option gives you the opportunity to order the list in any fashion that you want. As shown in Figure 22, PNM gives you five different ways to sort the list.

DTR   RI   Creative Industrial Communications   4/20 8:21 pm

```
┌──────────────┐
│ OPTION MENU  │
└──────────────┘
```

Selections are:

Press ⏎ to exit this menu.

DATABASE
{Sort master list}
Sort by:

1) ID number

2) Phone number

3) Address

4) Location name

5) Date installed

6) Date/time of last poll

Enter selection number.   <Esc> Go to main screen

SELECTION NUMBER: ——

F1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 0 ☐

Figure 22 – Option Menu: Database *{Sort Master List}*

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Option Menu: Database *{Assign User Variable Names}*

As you can see when you call up this screen, we have already put in a new title for you called, "Salesman," so that you can see how you can add titles to the phone entries.

```
DTR    RI              Creative Industrial Communications              4/20  8:21 pm
                       ┌────────────────────┐
         Selections are: │   OPTION MENU      │
         Press ⏎ to exit this menu.

         DATABASE
           {Assign user variable names}

             1)     Salesman

             2)

             3)




         Enter selection number.                    <Esc> Go to main screen

   SELECTION NUMBER: [___]

   F1[    ]  2[    ]  3[    ]  4[    ]  5[    ]  6[    ]  7[    ]  8[    ]  9[    ]  0[    ]
```

Figure 23 – Option Menu: Database*{Assign User Variable Names}*

Users may find that they want to add additional information to the phone number entries besides the original five. For instance, you may want to add the type of place the phone is located in. So you just pick number 2 or 3, and the following line will appear at the bottom of the menu:

"Enter new name or (D)elete: [_____] ."

Enter "Loc type," hit <ENTER>, and the new name will appear here and on every phone entry after the **"Salesman:"** field. Then you might want to enter the name or number of the list the phone will be stored under, so you could name a field, "List No."

Of course if you didn't want one of the names listed here, such as our defaulted choice of "Salesman," you can select entry number 1 and insert your own choice, or leave it blank by entering **D**. There's no need to fill every entry in sequence from number 1 through number 3 since the computer will close up any gaps in the list when it inserts it into the phone entry.

Now that you've made phone entries, selected names and polling schedules for lists, and entered any new titles for the phone entries, you can start to put your phone entries into the list of your choice by

returning to the Database Menu (see Figure 17) and selecting **4) Edit/Delete master list entry.** Then select number 1 as an example and choose "E" for Edit. You will get to the screen represented by Figure 19. But instead of entering a new address, press **F2 PICK** from the function keys. Now you'll have a new screen shown below in Figure 24.

Figure 24 – Option Menu: Database*{Edit/Delete master list}*

With the new menu called, "PICK DIALING LISTS," superimposed over the Edit Menu you can now start to add phones to any list you pick. Here the default list is "Yourlist," but you can change that by pressing the down key to any of the other lists you have created. (If you want to create more lists now that you can see how to add phones to them, exit this menu by pressing F2 and return to the "Assign dialing list names..." Menu shown in Figure 21.) When you have made so many lists that there isn't enough room to list them all on this PICK Menu, you can use the Page Dn key to see the rest of them.

Once you get to a different list, try hitting the ↵ and see the highlight box go on and off around your selection. This is a different situation than the ones you've seen before since the ENTER key will not cause a selection to be saved. In order to do that, you must press the **PICK** function key.

If you want the same phone on a different list as well as the one you've just picked, simply key down to a different list name and select it. Now you will see both the first list highlighted and the second list you've just picked. Do this as many times as you want for as many lists as you want.

Dialing a payphone

Generally speaking, there are two ways you will probably use just to dial one payphone without polling an entire list: press **F6 DIAL** or press **F4 SCAN**. We will discuss the F4 selection first, for reasons which will become clear to you when we discuss the F6 function.

F4: The Scan Master List

In order to see a master list of all that you have wrought in the way of making phone entries, press **F4 SCAN** and you will get a screen that looks like Figure 18. All of your phones will be listed here in the sequence in which they were entered.

```
                        Creative Industrial Communications
   DTR      RI                                                        4/20  8:21 pm
 ┌──────────────────────────┬─── MODEM STATUS ───┬────────────────────────────────┐
 │ Status:    Inactive       │                    │ Incoming: [On]  Tone dial      │
 │ Number:    None           │     ID #: None     │ Blackout: [10]  Speaker off    │
 │ Mode:      Manual         ├─── SCAN MASTER LIST ┤ Autopoll: Off   Local          │
 │                                                                                  │
 │   Entry    ID #    Phone number                 Location                         │
 │     1     [9999]   [999-9999           ]        [Your phone's location name]     │
 │     2      1111    123-4567                      ABC                              │
 │     3      2222    890-1234                      DEF                              │
 │                                                                                  │
 │                                                                                  │
 │   Press [SCAN] to exit, [DIAL]  to select          Use Pg Dn and ↓ key           │
 └──────────────────────────────────────────────────────────────────────────────┘

  F1[    ]  2[PICK] 3[    ]  4[SCAN] 5[    ]  6[DIAL] 7[    ]  8[    ] 9[    ]  0[    ]
```

Figure 25 – Scan Master List

This is a handy menu to have since you can use it any time that you want to dial a particular phone but can't remember the ID number. It also gives you a kind of Table of Contents of all the phones you have entered along with their locations as well as their ID Numbers.

You can also find out which list(s) any particular phone is listed under by choosing **F2 PICK** when you have that phone highlighted. This will switch you immediately to the PICK Menu (see Figure 24) which will highlight all the lists you have PICKed for this phone. Naturally, if you want to change any of those choices, you can do so now by selecting or deselecting them with the ↵ key. **F4** will let you exit from the PICK Menu while saving all your new choices, if any.

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When you have many phones entered, you will find that the "Pg Dn" and "Pg Up" keys will be most helpful since they will allow you to go through the phone list page by page rather than line by line.

There is one other method you can use to dial just one phone without polling an entire list, and that's to select **F6 DIAL** from the Main Screen.

F6: The Dial Screen

The following screen will appear when you select **F6 DIAL**.

DTR RI		ELCOTEL, INC.		4/20 8:21 pm

MODEM STATUS

Status:	Inactive
Number:	None
Mode:	Manual

ID #: None

Incoming	On	Tone dial
Blackout	10	Speaker off
Autopoll	Off	Local

REMOTE STATUS

PLEASE ENTER ID NUMBER: ___

F1 [ ] 2 [OOPS] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9 [ ] 0 [ ]

Figure 26 – F6: The Dial Screen

Now you can see why we introduced you to the SCAN screen first. In order to dial any phone number, you must know the ID number. This is great if you have a list you can refer to, but most people won't have these numbers at their finger tips, so the SCAN function key will probably be used more often than the DIAL key.

However, we know from experience that you will press F6 many times only to discover that you don't have the ID number handy. That's why we included the **F2 OOPS!** key. It does just exactly what you think it does. It let's you get out of **DIAL** without having to insert an ID number.

You may wonder why we make you put in the ID number here instead of just the phone number. The reason is that people make mistakes with phone numbers that they think they remember. Many times

you could transpose two numbers, or type in your mother's phone number when you think you're dialing Sam's Bar and Grille. This could really screw things up, especially if your mother picks up the phone and the computer tries to find out if her cashbox is full!

When you give PNM an ID number that it has in its files, it immediately dials the phone number that goes with that ID without issuing any other prompts. However, if it can't find a match in its files, it asks you for a phone number to go with it. Therefore, as soon as you see a phone—number prompt, you'll know that you've entered the wrong ID.

However, if you have just installed a phone and want to check it out before putting it in the Database, you can do it with **F6 DIAL** more easily than any other method. Just type in the new phone's ID # and the phone number when the prompt comes up. You will get another prompt that will ask you "Save new record in dialing list (Y/N)? __" so that you can add the new number immediately to the Database if you want to. If you are just checking the number out, however, you may want to reject this option for the time being.

Figure 27 – Phone Information Screen

Figure 27 shows the kind of information you can get back from an installed payphone after PNM establishes contact. One of the nice things about PNM is that you can watch the conversation at the "Xmt" and "Rcv" lines as well as hear it over the modem. The symbols won't make any sense to you, except when the modem is trying to establish contact and the phone number appears in the Xmt line.

In addition, as you can see, all of the pertinent information concerning the phone is displayed below these lines. In this example, 12 Local calls have been made over the phone, two long distance, and one miscellaneous. No alarms have been switched on, the cashbox is below trigger at $8.75, the RAM status is Normal, and the Totalizer says $ 157.50.

At the bottom of the screen, the function keys show **F3 STOP** and **F4 MORE**. The function of the first is obvious – it stops the transmission. But the latter, **MORE**, requires extensive explanations, which are given in the next Section.

Getting "MORE" Information from the Phone

Once communications have been established with a payphone, you are given the option of selecting **F4 MORE** as shown at the bottom of the screen.

```
DTR    RI              Creative Industrial Communications              4/20  8:21 pm
                        ┌─────────────────────┐
  Status: ┌──────────┐  │   MODEM STATUS      │              Tone dial
          │Established│  └─────────────────────┘              Speaker on
  Number: 123-4567            ID #:  1111   Blackout: Off
  Mode:   Manual        Elapsed time:┌────────┐  Autopoll: Off   ┌────────┐
                                     │00:01:53│                  │On Line │
                        ┌──────────────────────────────┐        └────────┘
  Xmt: ♥8  ♥8  ♥8  ♥8   │  DATA/REGISTER SELECTION      │        ↑↑↑↑↑↑↑↑↑↑
                        │                               │
                        │ ► ┌──────────────────────┐   │
                        │   │EXIT, no selection made│   │
                        │   └──────────────────────┘   │
                        │   TERMINATE TRANSMISSION      │
                        │   Remote status               │
                        │   General registers           │
                        │   Speed dial numbers          │
                        │   Exceptions group            │
                        │   Band charges                │
                        │                               │
                        │ Use Pg Up/Dn and ↑↓ keys.     │
                        │ Press │MORE│ or│◄┘│ to select. │
                        └──────────────────────────────┘        Pg 1 of 1
```

Figure 28 – MORE: Data/Register Selection

The first three selections on the MORE screen allow you to exit the screen and return to the underlying screen, or to terminate the entire transmission and return you to the Main Screen. After that, the selections get a little more interesting:

The General Registers

If you want to know the current settings of registers 120 through 151 and 226 through 272, this option will show them to you as you can see in Figure 29.

Creative Industrial Communications

```
DTR    RI                                                          4/20  8:21 pm
                           ┌──────────────────┐
Status: ┌──────────┐       │  MODEM STATUS    │              Tone dial
        │Established│                                         Speaker on
Number: 123-4567                  ID #:  1111    Blackout: Off
Mode:    Manual            Elapsed time: ┌────────┐  Autopoll: Off   ┌─────────┐
                                         │00:01:53│                  │ On Line │
                           ┌──────────────────┐                      └─────────┘
                           │  REMOTE STATUS   │
```

Xmt: ♥8 ♥8 ♥8 ♥8 ♥8 ♥8 ♥8 ♥8   Rcv: ↑↑↑↑↑↑↑↑

┌─────────────────────────┐   ┌────────────────────┐
│ EDITING INFO.   │   │ GENERAL REGISTER   │
│   ┌─────────────────┐   │   └────────────────────┘
│   │ Enter digits   │   │   226 Voice filter 1:0
│   │   0 thru 9   │   │   227 Voice filter 2:0
│   └─────────────────┘   │   228 First Ring detect: 0
│   │   229 PBX access code: 9
│   Enter ┌──┐ to   │   230 Owner bypass code: 351
│   └──┘   │   231 LDS delay: 1
│   make change.   │   232 Hold off: 00
│   ↑↓ next line.   │   233 Cash vault trigger level, in $: 150
│   Pg Up/Dn last   │   234 Start premium period: 00:00
│   /next page.   │
│   ┌────┐   │   Use Pg Dn for additional information   Pg 1 of 8
│   │Edit│ if done.   │
│   └────┘   │
└─────────────────────────┘

F1 ┌────┐ 2 ┌────┐ 3│STOP│ 4│MORE│ 5│EDIT│ 6│SEND│ 7 ┌────┐ 8│GET│ 9│SAVE│ 0 ┌────┐
```

## Figure 29 – MORE: General Register

## Speed Dial Numbers

Many times it is handy for a particular payphone to have speed dial numbers that make it easier for a customer to make a particular call. For example, at an airport, some motels/hotels would like to tell travelers to "Just dial 305 on the adjacent phone for your next reservation at the SLEEP AND PAY MOTEL." Or perhaps a bar might want to have a special speed number for a taxi service so that customers who have imbibed a bit too freely can get a safe ride home without trying to fumble through seven numbers.

This option retrieves from the payphone the current list of speed dial numbers and the billing method for them. Of course, it also allows you to add or delete speed dial numbers.

## The Exceptions Group

This retrieves from the phone all of the local, intra-lata, inter-lata, inter-state, and special exceptions that are programmed into the phone.

# PNM
## *Payphone Network Manager*

## Band Charges

This option allows PNM to receive from the phone all of the local, Intra-lata, Inter-lata, Inter-state, and special NPA's.

```
DTR      RI              Creative Industrial Communications              4/20  8:21 pm
                    ┌──────────────────────────┐
  Status: Established │     MODEM STATUS       │            Tone dial
  Number: 123-4567             ID #:  1111    Blackout: Off  Speaker on
  Mode:   Manual          Elapsed time: 00:01:53   Autopoll: Off  ┌─────────┐
                    ┌──────────────────────────┐               │ On Line │
                    │     REMOTE STATUS        │               └─────────┘
  Xmt: ♥8  ♥8  ♥8  ♥8  ♥8  ♥8  ♥8         Rcv:            ⬆⬆⬆⬆⬆⬆⬆⬆⬆

                    ┌──────────────────────────┐
                    │   LOCAL BAND CHARGES     │
                    └──────────────────────────┘

        Band      IR   IP   SR   SP       Band       IR   IP   SR   SP
        1  420)  0.25  UL  0.00  0        9  452)   0.00  0  0.00  0
        2  424)  0.00  0   0.00  0       10  456)   0.00  0  0.00  0
        3  428)  0.00  0   0.00  0       11  460)   0.00  0  0.00  0
        4  432)  0.00  0   0.00  0       12  464)   0.00  0  0.00  0
        5  436)  0.00  0   0.00  0       13  468)   0.00  0  0.00  0
        6  440)  0.00  0   0.00  0       14  472)   0.00  0  0.00  0
        7  444)  0.25  5   0.05  0       15  476)   0.00  0  0.00  0
        8  448)  0.00  0   0.00  0       UL-UnLimited   RS-ReStricted

        IR/IP = Initial Rate/Period        SR/SP = Subsequent Rate/Period
                    Use Pg Dn for additional information         Pg 1 of 5
```

```
F1 [    ] 2 [    ] 3 [STOP] 4 [MORE] 5 [    ] 6 [    ] 7 [    ] 8 [    ] 9 [    ] 0 [    ]
```

Figure 30 - MORE: Band Charges

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Printing Out Phone Lists
and Status Reports

As shown in the original MAIN Menu (Figure 31), the Payphone Network Manager has been provided to you not only with PNM, but also with six other programs: **2) DIF format conversion, 3) Print Reports, 4)Print help files, 5) Print polling log file, 6) Print payphone image file,** and **7) Edit rate tables.** This has been done so that you can use the files you generate with PNM on your hard disk.

We will discuss each of these programs in the paragraphs, below.

```
                              ELCOTEL, INC.
                         ┌──────────────────┐              4/20  8:21 pm
┌─────────────────────┤       MENU        ├───────────────────────────┐
│  Selections are:    └──────────────────┘                            │
│      <Esc>  Exit this menu                                          │
│  MAIN MENU                                                          │
│     1)  Payphone Network Manager                                   │
│     2)  DIF format conversion                                      │
│     3)  Print reports                                              │
│     4)  Print help files                                          │
│     5)  Print polling log file                                     │
│     6)  Print payphone image file                                 │
│     7)  Edit rate tables                                          │
│                                                                   │
│                                                                   │
│                                                                   │
│  Enter selection number.                                          │
└───────────────────────────────────────────────────────────────────┘

SELECTION NUMBER: ▄▄
```

Figure 31 – The MAIN Menu

MAIN Menu: DIF Format Conversion

In order to get to the DIF Format Conversion menu you must first exit PNM by hitting the **F7 EXIT** key. This will get you back to the Main MAIN Menu shell, shown in Figure 31.

As we said back on page 6 of this manual, the Data Interchange Format called DIF will allow you to select a file you want to interchange with another software program, like Lotus 1-2-3, and convert it to a file named CHAT_DAT.DIF. Now obviously, you're not going to be able to convert a file if you don't have one to convert. This is done for you every time you poll your phones, because the information

you receive (see Figure 28) is automatically saved, thereby creating a file that can be useful for another software program. But first you have to convert it using the DIF Format Conversion Menu.

```
                              ELCOTEL, INC.
                         ┌─────────────────────┐              4/20  8:21 pm
              ┌──────────┤   CHAT_DIF MENU     ├──────────────────────────┐
              │ Selections are:  └─────────────────┘                       │
              │                                                            │
              │   <Esc>  Exit this menu                                    │
              │                                                            │
              │  MAIN MENU                                                 │
              │                                                            │
              │     1)  Build Template (specify entries from data base)    │
              │                                                            │
              │     2)  Delete Template                                    │
              │                                                            │
              │     3)  Use Previous Template                              │
              │                                                            │
              │     4)  Translate to Text or Text and Numeric Format        │
              │                                                            │
              │                                                            │
              │                                                            │
              │                                                            │
              │                                                            │
              │   Enter selection number.                                  │
              └────────────────────────────────────────────────────────────┘

  SELECTION NUMBER: ──
  F1 [    ] 2 [    ] 3 [    ] 4 [    ] 5 [    ] 6 [    ] 7 [EXIT] 8 [    ] 9 [    ] 0 [    ]
```

Figure 32 – DIF Format Conversion Menu

In order to do this, select number **2) DIF format conversion** from the MAIN Menu and you will get the Menu shown in Figure 32. Obviously, you are going to want to select the entries from the data base to send to the other program. But before you do that, you should determine whether the program you're going to be using likes numbers in text form or numeric form. And that brings us to the following.

MAIN Menu: DIF Format Conversion {*Translate to Text or Text & Numeric Format* }

Some software programs, such as RBase V, can accept data in an all-text format, but a number of others must have text presented to it in textual format and numbers in numerical format.

If you find this confusing, remember that a computer only sees numbers which it manipulates in the way we tell it to when we create computer hardware and software. In order to keep things straight, computer manufacturers and programmers have created computer numbering systems that represent characters such as "A" or "z" or "&." In the system you are using, these are called ASCII characters. In order to be consistent, **the ASCII characters also contain the number symbols "0" through "9" which have completely different computer numbers than the actual digital** numbers 0 through

9. The reason for this is simple. There are times when you want to write some numbers in a textual content, such as "4 + 5," without fearing that the computer will assume you want to add 4 and 5 to produce 9.

So in order to satisfy those programs which would like to see all numbers in their numerical format rather than their textual or ASCII format, PNM includes the option, 4) **Translate to Text or Text & Numerical Format.** If the program you are going to use does require numbers to be numbers and text to be text, just select this option and the screen will tell you which format you are in and ask you if you want to change it. Insert **Y** for yes and **N** for no.

MAIN Menu: DIF Format Conversion *{Build Template}*

Now you can start building a template of the entries that you want from the data base. Once you have chosen 1) **Build Template (specify entries from data base)**, you will get the menu shown in Figure 33. You can start entering Y or N for each item listed in order to create the template that will allow you to select the data that you want to interchange or print out. This is a very simple procedure since the cursor will skip to the next entry as soon as you touch Y or N on your keyboard. In fact, if you want to convert all of the data, all you have to do is hold down the Y key, and the cursor will zip through every entry in a fraction of a second.

One thing that might be worth mentioning is that the default for this list is **No**; that is, if you do not select an entry, the program will assume that you do not want that entry in the list and will not include it. This could save you some time when you want to select only a few of the fields listed.

Once you've created the template that you want, press **F4 MAKE** to save it. You will then get the message shown in Figure 34, asking you to enter a filename to identify the template you are creating. As the message says, you're allowed up to 8 characters so you'll have to keep it short.

When you press return, you will be asked if you wish to print by dialing list. You should approach this decision with some caution since some of the programs you'll want to use should be fed an appreciable amount of data. If you must select your data according to a dialing list, make sure that the list contains enough names to generate sufficient data to produce meaningful results.

If you do want to select a list, you will get the menu shown in Figure 35. Pick the list you want and press Return. You will then be asked if you want to print only the incoming calls and if you want to save the template.

Naturally, you'll only want to save the template if you plan to use the same type of data many times in the future. Otherwise, it's just as easy to create it again the next time. However, once you have saved the template, you can always call it up again to format another dialing list by selecting 3) **Use Previous Template** (see Figure 32). Then just insert the filename of the template you've created when the program asks for it, and a new file will be created under that name. **Remember, however, that this will eliminate any file that was previously created with the same template.**

PNM
Payphone Network Manager

```
                              ELCOTEL, INC.
                     ┌──────────────────────┐              4/20  8:21 pm
─────────────────────┤    CHAT_DIF MENU     ├──────────────────────────
                     └──────────────────────┘

  <Esc>  Exit this menu

                  Phone number:              Long dist. calls:
                     Id number:              Long dist. total:
                 Street address:              Zero plus calls:
                 Location name:               Zero plus total:
                    Phone list:                     Totalizer:
                 Date installed:               Alarm 1 status:
                    Date polled:               Alarm 2 status:
                Duration of poll:              Alarm 3 status:
               Reason terminated:              Alarm 4 status:
                 Cashbox amount:               Trigger status:
                  Cashbox total:                  Ram status:
                    Misc. calls:                   Call type:
                    Misc. total:                    Salesman:
                    Local calls:            OTHER OPTION 1:
                    Local total:            OTHER OPTION 2:



  Enter selection number.

 ┌──────────────────────────────────────────────────────────────────┐
 │   y = yes entry;    n = no entry;   ↓↑ cursor keys;   F4 = write file │
 └──────────────────────────────────────────────────────────────────┘

 F1 ┌──┐ 2 ┌──┐ 3 ┌──┐ 4 MAKE 5 ┌──┐ 6 ┌──┐ 7 EXIT 8 ┌──┐ 9 ┌──┐ 0 ┌──┐
    └──┘   └──┘   └──┘         └──┘   └──┘        └──┘   └──┘   └──┘
```

Figure 33 – DIF Format Conversion {*Build Template*}

```
              Misc. calls: Y                    Call type:  Y
              Misc. total: Y                     Salesman:  Y
              Local calls: Y            OTHER OPTION 1:  N
              Local total: Y            OTHER OPTION 2:  N




  Enter selection number.

  Enter up to 8 letters and press <cr>
                 Enter filename:   ┌──────────┐
                                   └──────────┘
 F1 ┌──┐ 2 ┌──┐ 3 ┌──┐ 4 MAKE 5 ┌──┐ 6 ┌──┐ 7 EXIT 8 ┌──┐ 9 ┌──┐ 0 ┌──┐
    └──┘   └──┘   └──┘         └──┘   └──┘        └──┘   └──┘   └──┘
```

Figure 34 –DIF Format Conversion {*Build Template*}
(After pressing F4 MAKE)

PNM
Payphone Network Manager

```
                          ELCOTEL, INC.                    4/20  8:21 pm
                    ┌─────────────────────┐
                    │   CHAT_DIF MENU     │
 <Esc>  Exit this menu

 DIALING LIST NAMES:

      1)  YourList        6)  Sarasota          11)

      2)  Sam             7)  Thompson          12)

      3)  Smith           8)  AceBeer           13)

      4)  Taylor          9)  Landmark          14)

      5)  AlsAlley       10)                    15)




    Enter selection number.


 Enter selection number.  __

 F1 [   ] 2 [   ] 3 [   ] 4 MAKE 5 [   ] 6 [   ] 7 EXIT 8 [   ] 9 [   ] 0 [   ]
```

Figure 35 – DIF Format Conversion *{Build Template}*
Select Dialing List Name

All filenames created by the DIF command will have the filename you've inserted with a DIF extension, such as:

FILE1.DIF

This can be viewed by leaving the PNM program and returning to the operating system. Then you can either use an editor to view the *.DIF file or simply put in the TYPE command to read out the entire file on your terminal. Remember, you can stop the scrolling at any time with a <CTRL> S and start it again by hitting any key.

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MAIN Menu: Print Reports

Returning to the MAIN Menu, all you need to do is select **3) Print Reports** to get the Print Reports Menu shown in Figure 36. Selections 1) and 2) are applicable in the print menu to both an 80 column and a 132 column printer, but two more are not and are duplicated in two columns for each type of printer.

```
                        Creative Industrial Communications
                            ┌─────────────────┐                    4/20  8:21 pm
    ┌───────────────────────┤   OPTION MENU   ├────────────────────────────────┐
    │  Selections are:      └─────────────────┘                                │
    │    <Esc> Exit this program                                               │
    │                                                                          │
    │  PRINT MENU                                                              │
    │    1)  Staus report                                                      │
    │    2)  Sort data base                                                    │
    │                                                                          │
    │  Print 80 columns              Print 132 columns                         │
    │    3)  System configuration      5)  System configuration               │
    │    4)  Master list               6)  Master list                        │
    │                                                                          │
    │    7)  Set printer                                                       │
    │                                                                          │
    │  Enter selection number.                                                 │
    └──────────────────────────────────────────────────────────────────────────┘

    SELECTION NUMBER:  ┌─────┐
                       │  ▄  │
                       └─────┘
```

Figure 36 – MAIN Menu: Print Reports

Before we consider these, however, let's take a look at the last choice, **7) Set Printer**. If you select this option, you will get the following message at the bottom of the screen:

Current setting is Y
Does printer recognize formfeed (Y or N)? ___

MAIN Menu: Print Reports {*Status Report*}

If you select option **2) Status report**, you will get the menu shown in Figure 37. The first option here, **1) Build status report**, does what you would expect it to do – it allows you to build a new template for printing out the fields you want to include. However, this time we've done it a little differently than we have in the past. Now when you make this selection, rather than giving you a new menu with the options listed out, we give them to you one at a time at the bottom of the screen.

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Creative Industrial Communications

4/20 8:21 pm

| OPTION MENU |

Selections are:

<Esc> Exit this program

STATUS PRINT

   1) Build status report

Print 80 columns   Print 132 columns

   2) Standard status report   4) Standard status report

   3) Delete or print report   5) Delete or print report

Enter selection number.

Selection number: | **—** |

Figure 37 – MAIN Menu: Print Reports*{Status Report}*

The options that we give you are as follows:

  1 Wish to print Duration of Poll (Y or N)? ___
  2 Wish to print Reason Poll Terminated (Y or N)? ___
  3 Wish to print Cashbox Amount (Y or N)? ___
  4 Wish to print Number of Miscellaneous Calls (Y or N)? ___
  5 Wish to print Number of Local Calls (Y or N)? ___
  6 Wish to print Number of Long Distance Calls (Y or N)? ___
  7 Wish to print Number of 0+ Calls (Y or N)? ___
  8 Wish to print Status of Alarm One (Y or N)? ___
  9 Wish to print Status of Alarm Two (Y or N)? ___
10 Wish to print Status of Alarm Three (Y or N)? ___
11 Wish to print Status of Alarm Four (Y or N)? ___
12 Wish to print Trigger Status (Y or N)? ___
13 Wish to print Ram Status (Y or N)? ___
14 Wish to print Cashbox Total (Y or N)? ___
15 Wish to print Total Miscellaneous Calls (Y or N)? ___
16 Wish to print Total of Local Calls (Y or N)? ___
17 Wish to print Total of Long Distance Calls (Y or N)? ___
18 Wish to print Total of 0+ Calls (Y or N)? ___
19 Wish to print Totalizer (Y or N)? ___
20 Wish to print Call Type (Y or N)? ___
21 Wish to print Ratecenter File Name (Y or N)? ___

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You will step through each of these options one at a time. Since the default is **N**, if you don't want a particular option, just hit <Return> and you'll step to the next option.

Once you've completed your selections, you will return to the original status report menu of Figure 37. Now you will want to pick **3)** or **4) Delete or print report**. As soon as you do, you will get a menu similar to the one shown in Figure 38.

```
                    Creative Industrial Communications              4/20  8:21 pm
        ┌─────────────────────────┤  OPTION MENU  ├─────────────────────────┐
        │                                                                    │
        │  <Esc> Exit this program                                           │
        │                                  Report Directory                  │
        │                                                                    │
        │                                                                    │
        │     FileA        FileB       Stndrd      Newfile                   │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │                                                                    │
        │  Enter selection number.                                           │
        └────────────────────────────────────────────────────────────────────┘
          Enter Report Name:  ┌──────────┐
                              │  ▬       │
                              └──────────┘
```

Figure 38 – MAIN Menu: Print Reports*{Status Report}*
{{Delete or Print Report}}

From this you can see that any template that you've previously created can be called up with this option, including the one you've just created. Once you enter the report name, you will get a prompt at the bottom of the screen which will ask you:

Enter (D) to Delete, (P) to Print or <Esc> to Quite: ___

Naturally, if you select **D**, you will be asked which template you want to delete. It will then return you to the menu shown above without the file you deleted. If you pick **<Esc>**, you will go back to the previous menu.

If you select **P**, you will then be asked:

Wish to print Report of Particular Dialing List (Y or N)? ___

If you answer **Y**, you will get a menu similar to the one shown in Figure 35, asking you to select the Dialing List of your choice. Once you have done that, you will get a printout similar to the one shown in Figure 39.

It should be made clear that only those phones which have been polled (dialed) will appear here in the Status Report, and only the last poll for a particular phone. Therefore, it would be wise to print out a Status Report after every polling if this information is to be kept for archiving.

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Master Phone List
Newfile Report

Entry

1) Id : 0006

Phone Number	: 1-800-456-7892
Location Name	: NERO WOLF
Last Poll	: 09/26/87 20:33
Duration Of Poll	: 00:00:03
Reason Terminated	: Call Complete
Cashbox Amount	: $65.95
Misc. Calls	: 6
Local Calls	: 67
Trigger Status	: Trigger Level Not Reached
Total Cashbox	: $.00
Total Misc Calls	: 0
Total Local Calls	: 0
Total Long Calls	: 0
Total Zero Plus	: 0
Totalizer	: $.00
Call Type	: Outgoing
Rate File Name	:

1) Id : 0007

Phone Number	: 123-4567
Location Name	: SAM SPADE
Last Poll	: 06/03/87 13:56
Duration Of Poll	: 00:00:03
Reason Terminated	: Payphone Silent
Cashbox Amount	: $.00
Misc. Calls	: 0
Local Calls	: 0
Trigger Status	: Trigger Level Not Reached
Total Cashbox	: $.00
Total Misc Calls	: 0
Total Local Calls	: 0
Total Long Calls	: 0
Total Zero Plus	: 0
Totalizer	: $.00
Call Type	: Outgoing
Rate File Name	:

Figure 39 – MAIN Menu: Master Phone List Printout

MAIN Menu: Print Reports {*Status Report*}{{*Standard Status Report*}}

When you select **2)** or **4) Standard status report**, you will get a printout similar to the one shown in Figure 39, but with all of the fields showing and not just the ones you have selected for one of your templates.

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MAIN Menu: Print Reports *{Sort Data Base}*

The selection of option **2) Sort Data Base** from the Print Reports Menu (Figure 36) will give you the menu shown in Figure 40.

```
                        Creative Industrial Communications
                      ┌─────────────────────────┐              4/20  8:21 pm
 ┌────────────────────┤      OPTION MENU        ├──────────────────────────────┐
 │   Selections are:   └─────────────────────────┘                              │
 │                                                                              │
 │    <Esc> Exit from this menu                                                 │
 │                                                                              │
 │                                                                              │
 │   DATA BASE                                                                  │
 │      {Sort master list}                                                      │
 │         Sort by:                                                             │
 │      1)  ID number                       9)  Salesman                        │
 │      2)  Phone number                                                        │
 │      3)  Address                                                             │
 │      4)  Location name                                                       │
 │      5)  Date installed                                                      │
 │      6)  Date/time of last poll                                              │
 │      7)  Address/Location name                                               │
 │      8)  Save sorted data                                                    │
 │                                                                              │
 │                                                                              │
 │   Enter selection number.                                                    │
 └──────────────────────────────────────────────────────────────────────────┘
                                 ┌─────┐
       Selection number:         │  ▬  │
                                 └─────┘
```

Figure 40 – MAIN Menu: Print Reports*{Sort Data Base}*

As soon as you make a selection, PNM will tell you that a sort is in process, and indeed, you can see the hard disk red light flickering away (if your computer has one, that is) as the computer realigns all of its data according to the sort you have given it to do. Once it is finished, it will return you to this menu so that you can save the sort by selecting option **8) Save sorted data** if you want to. If you don't, simply press **<Esc>** to return to the previous menu (Figure 36) and print out this report.

It is important to note that when you save the sorted data, PNM will use this new order. In other words, if you don't like the order of your database, then you can either use **Print Reports***{Sort data base}* to sort and save it, or you can select **DATABASE***{Sort master list}* in the regular PNM Menu.

MAIN Menu: Print Reports *{System Configuration}*

When you select option **3)** or **5) System configuration** from the main Print Reports Menu (Figure 36), you will get the type of printout shown below in Figure 41.

Page 1   Your Company, Inc.   Wed Jun 03 1987

                                System Configuration

Modem

    1) Pulse Flag : tone
    2) Speaker : till carrier
    3) Volume : Medium
    4) Communication Port : port 2

System

    1) Standard Color : color
    2) Company Name :
            Your Company Name, Inc.

Database

    1) Dialing list names :
          1. Yourlist
          2. ABC
          3. DEF
          4.
          5.
          6.
          7.
          8.
          9.
          10.
          11.
          12.
          13.
          14.
          15.

    2) Number of entries in data list : 93
    3) User variable names:
          1. Salesman
          2.
          3.

Figure 41 – MAIN Menu: Print Reports *{System Configuration}*

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MAIN Menu: Print Reports {Master List}

The selection of **4)** or **6) Master list** from the main Print Reports Menu (Figure 36) prints out all of the phones on the list with their ID #'s, Phone Number, Address, Location Name, When installed, Last Poll, and all of the special names you have added, such as "Salesman." You will get a prompt asking you if you want to print out the list according to Dialing List or not. If you choose to do so, you will get a menu similar to the one shown in Figure 35, giving you a choice of lists. If you choose not to, you will get your entire data base printed out. Naturally, it will be printed out in the order sorted here or in the regular PNM Menu.

MAIN Menu: Print Help Files

As you have probably already seen by the time you've gotten to this point, the Help files in PNM can be an excellent summary of the information found in this manual. If you would like to have these files as an addendum to the manual, just make this selection and all of the Help files will be printed out in hard copy form.

This can also be an excellent source for new information whenever you receive an updated PNM disk from ELCOTEL since it will often contain explanations of the new features provided.

MAIN Menu: Print Polling Log File

```
                          ELCOTEL, INC.
                     ┌──────────────────┐         4/20  8:21 pm
                     │      PRTLOG      │
                     └──────────────────┘

   Selections are:

      <Esc>  Exit this menu


      1)  Print all calls

      2)  Print incoming calls only

      3)  Print all calls for one I.D.

      4)  Erase polling log file




   Enter selection number.


   SELECTION NUMBER: ▬
```

Figure 42 – MAIN Menu: Print Polling Log File

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Again, there is no way that you can print out the Polling Log File if you haven't done any polling (which seems unlikely, but quite possible if you're just starting up the system). Each poll you make will update the data file.

Figure 42 shows the Menu for printing the polling log file. You can either print all calls or just the incoming calls (i.e., only those calls transmitted to PNM from the payphone, itself). Or you can print all the calls for just one payphone, either initiated from PNM or from the payphone, by selecting 3) **Print all calls for one I.D.**

If you do the latter, you can get a printout similar to the one shown in Figure 43. Your printer will pause after the last log has been printed without performing a Form Feed which would advance the paper to the next perforation. Therefore, it is possible to select different I.D. numbers as they are printed out.

Page 1	Your Company, Inc.	Thu Dec 10 1987
	Polling History	
	Report	

Id Number	:0025
Last Poll	:08/25/87 08:55:00 am
Duration Of Poll	:00:12:04
Reason Terminated	:Call Completed
Chashbox Amount	:$69.95
Misc. Calls	:1
Local Calls	:176
Long Dist. Calls	:4
Zero Plus Calls	:100
Alarm 1 Status	:OFF
Alarm 2 Status	:OFF
Alarm 3 Status	:OFF
Alarm 4 Status	:OFF
Trigger Status	:Trigger level not reached
Ram Status	:Not reloaded
Call Type	:Outgoing
Id Number	:0026
Last Poll	:08/25/87 09:15:23 am
Duration Of Poll	:00:02:18
Reason Terminated	:Call Completed
Chashbox Amount	:$130.45
Misc. Calls	:2
Local Calls	:283
Long Dist. Calls	:14
Zero Plus Calls	:162
Alarm 1 Status	:OFF
Alarm 2 Status	:OFF
Alarm 3 Status	:OFF
Alarm 4 Status	:OFF
Trigger Status	:Trigger level not reached
Ram Status	:Not reloaded
Call Type	:Outgoing

Figure 43 – Print Polling Log File*{Print All Calls For One I.D.}*

If you select an option such as **2) Print incoming calls only** and there are none recorded, you will get a message that says,:

No calls found to print
Press any key to continue

Once you have the information you need, you can erase the polling file without leaving the MAIN Menu by selecting **4) Erase polling log file**. Since the information is appended to the end of the polling log file as the information is received by PNM, this may be necessary in order to keep only the most recent up-to-date information.

MAIN Menu: Print Payphone Image File

As you can see in Figure 44, the Print Payphone Image File Menu is very similar to the Print Polling Log File Menu except that blocks can be selected instead of calls. The first two options shown here are self-explanatory, but **3) Specify block(s) to print** requires some explanation. If you select the latter, you will get the menu shown in Figure 45.

ELCOTEL, INC.

PRINTMIF

4/20 8:21 pm

Selections are

<Esc> Exit this menu

1) Print all blocks

2) Print all blocks for one I.D. number

3) Specify block(s) to print

4) Print specified blocks

Enter selection number.

SELECTION NUMBER: ▬

Figure 44 – MAIN Menu: Print Payphone Image File

```
                              ELCOTEL, INC.
                        ┌──────────────────┐                    4/20  8:21 pm
    ──────────────────┤ │     PRTMIF       │ ├──────────────────
    │                   └──────────────────┘                                 │
    │   Selections are:                                                      │
    │                                                                        │
    │       <Esc>  Exit back to main screen                                  │
    │                                                                        │
    │       ┌────────────────────────┐                                       │
    │       │ 1)  General Registers   │                                      │
    │       └────────────────────────┘                                       │
    │         2)  Exceptions groups                                          │
    │                                                                        │
    │         3)  Band charges                                              │
    │       ┌────────────────────────┐                                       │
    │       │ 4)  Speed dial numbers  │                                      │
    │       └────────────────────────┘                                       │
    │                                                                        │
    │                                                                        │
    │                                                                        │
    │       Press the numbers to select/deselect                            │
    │                                                                        │
    │       Enter selection number.                                         │
    │                                                                        │
    └────────────────────────────────────────────────────────────────────────┘

 SELECTION NUMBER: ▬▬
```

Figure 45 – MAIN Menu: Print Payphone Image File
{Specify Blocks to Print}

In this case, when you select a number, it will toggle on or off the highlight around the selection, as shown for **1) General Registers** and **4) Speed dial numbers** in the above example. However, if you now press <Return>, you will get a beeping sound and nothing will happen! This may be a little startling to you, but in this case we want you to select the blocks you want printed out and then <Esc> back to the previous menu before you start printing by selecting **4) Print specified blocks.** We did it this way so that you can select a number of lists to print out one way without going back into this menu each time you select another list to print out.

After you've selected the blocks you want and you select **4)** on the previous menu, you will be asked the question, **"Print by dialing list (Y, N or <Esc> to quit)?"**. If you choose **Yes**, you will get a menu almost exactly like that shown in Figure 35 for the DIF files. If you select a list and enter it, you will then be asked, **"Print the exceptions group (Y, N or <Esc> to quit)?"**. One page of a typical Payphone Image File printout is shown in Figure 46.

MAIN Menu: Edit Rate Tables

When your phone company changes the Bands for the NXX exchange numbers in one of your areas, you have to have some way to change the rate tables in the payphones affected by the change. This can now be done easily with the PNM Edit Rate Tables Menu.

54

GENERAL REGISTERS
Saved: 08/25/87 09:17 am

226   Voice filter 1: 0
227   Voice filter 2: 0
228   First Ring detect: 0
229   PBX access code: 9
230   Owner bypass code: 891
231   LDS delay: 0
232   Hold off: 08
233   Cash vault trigger level, in $: 150
234   Start premium period: 08:00
235   Start first discount period: 17:00
236   Start second discount period: 23:00
237   First discount: 40
238   Second discount: 60
243   Home primary number: 756-2089
244   Home secondary number: 756-8734
245   Station ID number: 0022
248   Operator only charge: $0.00
249   O-Plus charge: $0.00
250   Local information charge: $0.00
251   Intra NPA information charge: $0.50
252   Inter NPA information charge: $0.50
253   Local information number: 1411
260   OCC access number: 0
261   OCC authorization code: 0
262   LDS switch phone number: 0
263   ID number for O+ calls: 0
264   Destination number terminator: 0
265   Credit card access number: 0
266   Credit card ID number: 0
267   Special blinkd period: 0
268   Voice mailbox number: 0
269   International calls: 0
270   Price of a 976 call, R = restricted: R
271   Times to repeat NOT A BILLABLE NUMBER: 0
272   Number of rings for incoming calls: 5

LD*OS REGISTERS
Saved: 08/25/87 09:17 am

274   Number of times phone will let ring for mailbox: 5
275   Cash vault alarm bypass number: 271
276   Start time for reroute window: 60:00
277   Length of reroute window: 00
278   NTS reroute access number: 7598675

Figure 46 – Payphone Image File Printout

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For the Edit Rate Table Menu there is only one choice you can make besides exiting the menu: 1) **Create/Remove NXX**. As soon as you make this selection, you will see the screen shown in Figure 47 which displays the names of all the rate files you have purchased from ELCOTEL. These files will be listed on the MS-DOS operating directory with a **.RAT** extension (a rather sinister handle, but the best we could do for "rate" since MS-DOS only allows three letters in a file extension). However, you don't have to worry about finding their names because PNM will look them up for you and display them on the screen.

Then all you have to do is select the one you want to change and type it in at the prompt. Once you do, you will see a Menu similar to the one shown in Figure 48. You can select the area code you are interested in by using the →, ← and ↑↓ keys and pressing <Return>. For our example, we will choose the area code shown: 813.

```
                          ELCOTEL, INC.
                      ┌─────────────────────┐                    4/20  8:21 pm
 ┌────────────────────┤   CREATE/REMOVE     ├──────────────────────────────────┐
 │  Selections are:                                                            │
 │                                                                             │
 │                                                                             │
 │     813756              NPANXX                                              │
 │                                                                             │
 │                                                                             │
 │                                                                             │
 │                                                                             │
 │                                                                             │
 │                                                                             │
 │                                                                             │
 │   Enter file name:  ┌──────────────┐                                        │
 │                     │   ▬▬          │                    <Esc> to NXX MENU   │
 └─────────────────────┴──────────────┴────────────────────────────────────────┘
  F1│CHNG│2│LIST│ 3│  │ 4│  │ 5│  │ 6│SAVE│7│EXIT│8│RSET│9│  │ 0│  │
```

Figure 47 – MAIN Menu: Edit Rate Tables{*Create/Remove*}

Before we move on, we ought to mention that among the F Numbers shown at the bottom of the last and next two menus, only **F7 EXIT** will operate. The other selections are reserved for the Edit Tables, themselves.

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Payphone Network Manager

Select an area code:

| 813 | 305 904

Figure 48 – MAIN Menu: Edit Rate Tables{*Create/Remove*}
(After entering file name)

ELCOTEL, INC.

CREATE/REMOVE

4/20 8:21 pm

Select an | 813 | band:

Band number 16
| Band number 17 |
Band number 18
Band number 19
Band number 33
Band number 34
Band number 35
Band number 36

<Esc> To previous.

F1 |CHNG| 2 |LIST| 3 |___| 4 |___| 5 |___| 6 |SAVE| 7 |EXIT| 8 |RSET| 9 |___| 0 |___|

Figure 49 – MAIN Menu: Edit Rate Tables{*Create/Remove*}
(After selection of area code)

The Menu shown in Figure 49 lets you select the Band Number that you wish to change by using the ↑↓ keys. <Return> will give you a menu which will look like Figure 50, below. If the Bands you're looking for are greater than these, you can press Page Dn to bring them to the screen.

PNM
Payphone Network Manager

ELCOTEL, INC.

| CREATE/REMOVE |

4/20 8:21 pm

```
200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218

219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237

238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256

257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275

276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294

295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313

314 315 316 317 318 319 320 [321] 322 [323] 324 325 326 [327] 328 329 330 331 332

333 334 335 336 337 338 339 340 [341] 342 [343] [344] [345] [346] [347] 348 [349] 350 [351]

352 353 354 [355] 356 357 358 359 [360] 361 362 [363] 364 [365] [366] [367] 368 369 370

[371] 372 373 374 375 376 [377] [378] 379 380 [381] 382 [383] [384] 385 386 387 [388] 389

390 [391] [392] [393] 394 395 396 [397] [398] [399] 400 401 402 403 404 405 406 407 408

409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427

428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446

447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465

466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484

485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503

504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522

523 524 [525] [526] [527] 528 529 530 531 532 533 534 535 536 537 538 539 540 541

542 543 [544] [545] [546] 547 548 549 550 551 552 553 554 555 556 557 558 559 560

561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 [576] [577] [578] [579]

580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598

599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615
```

F1 |CHNG| 2 |LIST| 3 | | 4 | | 5 | | 6 |SAVE| 7 |EXIT| 8 |RSET| 9 | | 0 | |

Figure 50 – MAIN Menu: Edit Rate Tables{*Create/Remove*}
(After selecting Band number 17)

You will note that the selected exchanges are each highlighted. They can be changed by placing the cursor over the selected NXX number and pressing **F1 CHNG**. If you have a whole list of numbers to change, you can also select **F2 LIST** and get a menu which allows you to select a list of individual numbers all at once, or if they are in sequence, a range of numbers. However, if you choose the latter, you must insert the beginning of the series **and follow it with two (2) spaces** and then insert the ending number. Otherwise, the computer will simply assume that you want just the two numbers, the beginning and the end of the sequence, to be selected.

If you use the **LIST** option and select a number which is already selected, it will toggle off, just as it would if you used the cursor and changed it directly.

Once your changes have been made, you must select **F6 SAVE** in order to save the change. However, if you forget to do this, we've been very forgiving and put in a warning message when you select

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Payphone Network Manager

F7 EXIT which asks you if you're sure you want to exit. In addition, we've also given you the opportunity of resetting the entire table with **F8 RSET**.

Once you've made your changes, it will be necessary to send them to the payphones which are affected by them. To do this, use the following procedure:

1. Enter PNM by returning to the MAIN Menu and pressing **1) Payphone Network Manager.**

2. Dial each payphone affected by using **F6 DIAL** or **F4 SCAN**, one at a time.

3. Once connection has been made, press **F4 MORE** and go to the second page of this superimposed menu.

4. Pick **Download rate file, edits** or **Download rate file, full.**

NOTE: We recommend that you choose the "edits" version of the Download selections since it is quicker. In fact, if you have forgotten to send some edited tables that were changed previously, the computer will notice this and send the full rate table anyway. If you have already downloaded the rate file, PNM will tell you that "Payphone has current edit." If you aren't convinced (although we can't imagine why you wouldn't be), you can override this message by choosing the "Download rate file, full" version.

5. If the new rate table has been successfully downloaded, you will get a "**Successful**" message in the **Status:** field at the top of the Menu.