

PNM 1.1.1 Software Addendum

Part number #



3350030B

PNM 1.1.1 ADDENDUM

PNM

Payphone Network Manager

ADDENDUM TO PNM FOR VERSION 1.1.1 SOFTWARE July 1989

PLEASE NOTE: This Addendum supersedes Addendum 1.1.0 and includes all the former's materials, as well as *new information on pages 7-9.*

Installation Procedure

In keeping with its standard policy of providing its customers with the latest improvements to its PNM software, Elcotel is pleased to announce the release of Version 1.1.1.

Proceed with the following instructions in order to load Version 1.1.1 into your computer.

WARNING

This software package employs a copy protection technique. Any attempt to install the package using standard MS/PC-DOS copying techniques will make the package unusable.

PLEASE DO IT OUR WAY!

If you are installing PNM for the first time, configure the system so that PNM can reside within its own directory. Type **MD \PNM** and press <Enter>. This creates a unique directory for PNM under the root directory.

NOTE: You should have two or more diskettes labeled "PNM 1.1.1 #1," "PNM 1.1.1 #2," etc.

- 1) Type **CD \PNM** and press <Enter> to change to the PNM directory.
- 2) Place the first PNM diskette labeled "PNM 1.1.1 #1" into Drive A and change the active drive to Drive A by typing **A: <Enter>**.
- 3) Type **INSTALL** and press <Enter>. This starts the installation process to transfer the PNM software package to the hard disk.
- 4) You will now see a menu screen which will say:
Please enter the drive you are installing to, or <Esc> to exit:
C, D, E, or F Drive
- 5) Type the letter of your hard drive and press <Enter>. If you are installing an update, you will see a second screen that will suggest that you back up your **CHAT.OPT**, **CHAT.MIF**, and **CHAT.DAT** files. You will be given an option which will remind you of the backup procedure, and you will be allowed to exit the program so that this can be carried out if you wish.
- 6) Once you have finished backing up your files, repeat Steps 1 through 5 and choose the start option for the installation program.

PNM

Payphone Network Manager

- 7) The installation program will now tell you when you should remove one diskette and insert another one for each of the diskettes you have been supplied. Since some of them will take more than a minute to install, don't be alarmed. Just wait for the prompt to tell you what to do and when.
- 8) When the last diskette is copied, the program transfers you to the PNM directory of the hard disk drive. Remove the diskette from Drive A.
- 9) Type **PNM** and press <Enter>.

From now on, whenever you want to run PNM from a cold start, type **CD \PNM <Enter>**. At the **C:\>** or **C:\PNM>** prompt, type **PNM <Enter>**.

A Summary of PNM Version 1.1.1 Enhancements

This version includes all of the additions which have been made to PNM up to the present time, so you can be assured that you will be adding all of the latest features when you install this updated version according to the Installation Procedure outlined above.

These updates are the result of our ongoing development program and the comments and suggestion of our customers. If you have any suggestions for making PNM a more efficient and helpful program, please feel free to outline them in a letter and mail them to us at our main plant in Sarasota, FL, care of PNM Product Management.

The following is a summary of the new features you will discover in this addendum and on your screen after you install this new software version.

- 1) In the PNM Main Menu that you see when you first start up PNM, you will see an important new option called, "**4) Expert (module file) editor.**" When you select this option, you will enter an entirely new menu-driven program called **EXPERT EDITOR** which will guide you through the same sort of questions listed in our 4.2 or 4.2.2 *Rating Package Questionnaire*. When you answer the questions posed there, the Expert Editor will **automatically change the appropriate registers in a newly created module file**. In other words, it will no longer be necessary for you to send your requests to the factory to create a module file, or for you to laboriously change each register in each payphone manually.

You will have the option of using the step-by-step menus which will guide you through the procedure without reference to any particular register or option number. Or you can use the more basic procedure which will allow

PNM

Payphone Network Manager

you to create the module file directly with the registers, themselves, just as you used to when changing a payphone's method of handling 0+ calls, 0- calls, 10-XXX numbers, etc..

- 2) Selection "3) Print reports" from the PNM Main Menu has been completely changed. When selected, a new menu will appear which will give the following options under the title "File selection:" 1) Data, 2) Polling log history, 3) Phone image, 4) SMDR, 5) Rate, 6) Help, and under "Misc." 7) Printer setup.

If you select 1) Data, you will get a second menu which will allow you to: 1) Design a report, 2) Predesigned report, or 3) Sort data file. Selection 1) will produce a menu similar to the report template used before, but divided into seven fields of choice: Page 1 which consists of Description, Alarms, Counters, Totals and User Variables; and Page 2 which has Description and File Names.

- 3) Another function called, "6) Utilities" has also been added to the PNM Main Menu. When you press this option a UTILITY MENU will appear which has four selections: "1) Remove deleted records," "2) Perform system check," "3) View uploaded PAOF block," and "4) Convert CHAT.MIF to generic files." If you select 1), you will get a CLEAN UP DATA BASE Menu that will allow you to remove deleted records. The latter can be used to eliminate deleted files only if the files have been sorted in the Print Reports Menu or CHAT so that they reside at the end of the file list. Deleted files that are not at the end of the list of files will not be removed.

If you select "2) Perform system check," you will get a COMPUTER LAYOUT Menu which will offer you three selections: "1) System," "2) Files," and "3) Modem." Each of these will call up a menu which will display the parameters associated with the title:

When you select "1) System," you will get a screen which will list all of the system parameters including the Directory you are on, the type of video screen (color or mono), screen size, memory size, disk space, number of floppy drives, DOS version, BIOS version, and whether you have a Math Coprocessor.

Selecting "2) Files" will give you a menu with your file sizes and entries.

The final selection, "3) Modem," will bring up a TESTING COMMUNICATIONS PORT Menu. When you press <Enter>, you will get a menu which shows the available parallel and serial ports, the port your modem is on, and the Baud stop, bit-length, and parity of the modem.

Option "3) View uploaded PAOF block" is only used if you have had some difficulty with PAOF on one of your payphones and have contacted the Elcotel Customer Service about your problem. They will ask you to establish communication with the phone in question and select

PNM

Payphone Network Manager

"Get PAOF diagnostic block" from the F4 MORE screen. Option 3 will display the PAOF configuration of the payphone that you upload. Your Elcotel customer service engineer will then analyze this information and talk you through any necessary corrective procedures.

If you select "4) Convert CHAT.MIF to generic files," you will see an information screen explaining the steps in the process described next.

- 4) In order to limit redundancy and conserve memory, ELCOTEL has incorporated a new program to "cut up" the CHAT.MIF file records into separate generic files that can be referenced by many different phones.

By selecting the "7) Utilities" option from the Main Menu and then "4) Convert CHAT.MIF to generic files," you can, for example, create a separate generic file for all the payphones which share the same General Register information. This is also true for the Speed Dial Numbers, Exceptions Group, and the Band Rates.

- 5) A new entry has been added to the OPTION MENU called "4) POLLING OPTIONS." Selecting this new option will bring up a new menu showing "1) Auto exit," "2) SMDR only," "3) Auto SMDR dump," "4) Auto RAM RELOAD," and "5) Number of retries/poll." All of these have been available to you before in scattered locations, but are now available under one common title.
- 6) When you edit your database, you will discover that you have a new entry called, "Time zone \pm 0-3." (This is only available for Payphone Versions 4.3.1 or greater.) This feature can be used to set the time zone for the payphone relative to your time zone. Every time the phone calls in or is polled (automatically or manually), it is then automatically updated for date and time by PNM without requiring any input from the operator.

However, if you do not wish to use this feature, you may turn it OFF by entering NO instead of a number in the "Time zone" field.

- 7) The function key "F3 FIND" has been added to the EDIT mode in the database. When this key is pressed, you will be asked for the ID number of the phone you want to access. As soon as you enter the number and press <Enter>, you will be able to edit the record that appears on the screen.
- 8) The function key "F4 DELE" has been added to the EDIT mode in the database. When this key is pressed, you will delete the record that you currently have on the screen. The number of the record you deleted will remain vacated until you add another record.

PNM

Payphone Network Manager

- 9) The function key "F5 ADD" has been added to the EDIT mode in the database. When this key is pressed, you will immediately go to a new screen where you can begin entering the information in each field as it becomes highlighted.
- 10) The function keys "F9 PREV" and "F10 NEXT" have been added to the PICK mode. When either key is pressed, you will go to the PREVIOUS or the NEXT record without leaving PICK. This way you can make multiple dialing list changes without the extra key strokes.

"F9 PREV" and "F10 NEXT" are now included in "F1 LOAD" and "F5 EDIT" whenever you are in the "F4 SCAN" mode.

- 11) When you go to a module file name, the function key "F8 DIR" will be displayed so that you can pull up a directory of all your modules on the hard disk which have a ".ZAP" extension. Once you have the directory displayed, you can highlight the one you want and press <Enter> in order to load it on to the field.
- 12) A new method of polling your lists has been added with Version 1.1.0. When you are in DOS, you can type:

C:>CHAT L1 L4 L10 <Enter>

...in order to poll Dialing Lists 1, 4, and 10. This is a batch manual poll so the computer will exit PNM after all lists have been polled.

- 13) You can now use MORE to "Get PAOF diagnostic block" when you manually dial a payphone. This is intended to be used by the Elcotel Customer Service when you are having some sort of difficulty with PAOF. (It will only work in the manual mode, not in the automatic mode or during a scheduled call.) After the information is loaded, nothing shows on the screen, but Customer Service will ask you to return to the Main Menu and select "7) Utilities" and then "3) View uploaded PAOF block." The screen will then display the PAOF diagnostic file for Customer Service analysis.
- 14) The PNM Main Menu now displays the following options:
 - 1) Payphone Network Manager
 - 2) DIF format conversion
 - 3) Print reports/Create billing disks
 - 4) Expert (module file) editor
 - 5) Direct access to Database editor
 - 6) NXX editor
 - 7) Utilities

PNM

Payphone Network Manager

One of the reasons this has been done is to allow the Expert Editor for the module files to be accessible immediately from the Main Menu. The NXX Editor has also been moved to the Main Menu along with a direct access to the Database editor. The latter option will take you directly to the first payphone record in your Database.

- 15) The EDIT function has been completely changed so that you will no longer have to deal with a superimposed menu or prompt lines at the bottom of the screen. Now when you go into the Database to Edit or Add a payphone record, you will be able to change whatever field you want as it becomes highlighted right on the main menu screen. The same is also true if you press "F5 EDIT" from the SCAN Menu.

In addition, PgUp and PgDn will allow you to access adjacent records, the End key goes to the last record, and Home goes to the first.

In the case of EDITing when you are in communication with a payphone and have pressed F4 MORE, the EDIT function will also allow you to change any of the registers in their highlighted fields on the menu screen. This should make editing your database and registers much easier and simpler than before.

- 16) The function keys for HELP and POLL have been changed to the following:

"F1 HELP" "F10 POLL"

This will put the HELP key in the more traditional position as the first function key on the keyboard and make it easier to access.

- 17) The install program has been changed so that all new versions of PNM will have menu screens which will tell you what to do, step by step.
- 18) A correction was made on the parameters screen to keep a "divide overflow" condition from occurring. This problem would affect only those users running MS/PC-DOS 3.3 and above, having a DOS hard disk partition size of over 33 megabytes, and an available hard disk space greater than 64 megabytes.
- 19) Whenever a rating module file is downloaded, a copy of the General Registers is extracted and saved during the download. When using this extracted copy in the payphone the pointer to the rates table was not recalculated causing the rates to "disappear." This problem has been corrected.

PNM

Payphone Network Manager

- 20) When PNM was dialing a payphone at the same instant that an incoming call "rang in", a no "answer/busy" event would be logged. PNM now waits 5 seconds before dialing if a "ringing" event has occurred.
- 21) It is no longer possible to use the <Ctrl> Break combination when you are in PNM. If you press this combination, nothing will happen. This has been done to protect PNM and its files from an inadvertant corruption.
- 22) The help file "CONVERT.HLP" outlines the new conversion program that allows you to convert the payphone master data file CHAT.DAT or the polling log file CHAT.LOG to an ASCII (w/ delimiters), dBase III, DIF, WK1 (Lotus), or WR1 (Symphony) format. The program can be accessed from the PNM main menu by selecting "2) Format Conversion" or from the PNM directory by typing "Convert" then the Enter Key.

Converting the data by PNM into file formats allows you to import the converted files into popular software packages to generate custom management reports suited to your needs.

The conversion program allows you to create templates in which you can select the fields you wish to convert. The field length for each field will be displayed as you make your selections. Once a template is built, a name can be assigned to the template and conversion file.

For more information, see the PNM 1.1.1 Help Files.

- 23) The help file "NXX__EDIT.HLP" outlines the new NXX Editor. Selecting "6) NXX Editor" from the PNM main menu incorporates a simplified NXX editor that now allows you to create bands and assign them to any new or existing NXX. Each screen of the NXX editor conveniently displays the band to which it is assigned. Band charges may be edited through the editor at the time the new NXX is assigned. Past versions of the editor did not allow new band creation and required editing of the band charges through another program.

For more information, see the PNM 1.1.1 Help Files.

- 24) The selection "6) Overwrite General Registers File" was added to the polling options menu. This feature works in conjunction with the "Generic Files" features and allows you to overwrite the General Registers file when you download. When option "2 Overwrite General Registers file" at download is selected, the file name in the general registers field will be overwritten with the Rate Center File's registers and options settings. Consequently, if a file name has not been specified in the general registers field, PNM will automatically create a file name using the I.D. of the entry when the download is performed. This is explained more fully on page 28.

PNM

Payphone Network Manager

- 25) A blank generic speed dial file called **GENERIC.SPD** allows you to input speed dial numbers when you download. Each phone entry in the payphone master list offers a field called "Speed Dial". Selecting "F8 DIR" permits access to the blank file. Speed dial numbers in the file may be edited and saved prior to calling the phone.
- 26) PNM will automatically update the battery backed clock on AT style machines when the date and time is set through the PNM program. Non-AT style machines with battery backed clocks must still be set through DOS.
- 27) An "Alarms Reset" feature has been added to PNM for payphones with 4.2.3 and 4.2.4 levels or higher. To prevent the phones from calling home repetitively, phones with these software levels are capable of latching alarm conditions. The "Alarms Reset" function can be performed through the command menu to clear the latched hardware alarm condition in the phone. After the alarm condition is reset, the phone will send the Status Block to PNM.
- 28) PNM will accept a new "Call Home" alarm condition from phones with 4.2.4 and 4.3.3 or higher levels of software. When a technician forces a phone to call home through the 961 command, PNM will log this as a "Call Home" alarm.
- 29) A new help file called "PCM_ NOTE.HLP" has been added to define the registers and options that have different meanings from--or may not be present in--previous levels of the payphone control module (PCM) software or hardware. Those registers and options that still apply will be indicated with an asterisk "*" before the register listing.
- 30) A new feature "Extended Feature Codes" has been added to the modem menu. If your modem is equipped with the "X" codes, you can speed up the polling process by doing real busy signal detection, as well as real dial tone detection. See your modem manual for the proper "X".
- 31) A Backup and Restore Files function has been added to the Utilities menu of PNM, which allows you to automatically backup and restore the Chat.Dat, Chat.Opt, Chat.Log, Chat.Smd, Generic files, and Zap files.

Access this function by selecting "7) Utilities" from the main menu, then "5) Backup and Restore Files". You can select the files you wish to backup or restore. After you make the selection, the program will ask that you select the path to direct the information. If no path is specified, the program defaults to drive A. Use a separate diskette to backup another file, because a new backup file overwrites the previously created backup.

PNM

Payphone Network Manager

To restore a file that has been backed up, follow the procedure to access this feature. Select "Restore Files", insert the disk into the source drive A, and press Enter.

- 32) An optional "Beep" function has been added to allow your PC to beep when you have selected any keystroke that is not recognized by PNM. It operates only on select erroneous keystrokes. You can turn this feature ON and OFF.

PNM

Payphone Network Manager

The EXPERT EDITOR

The following section describes in more detail the operation of the EXPERT EDITOR which is one of the most comprehensive software programs to be added to PNM since the introduction of the PNM Program, itself. It can be accessed from the PNM Main Menu by selecting option 4) **Expert (module file) editor**.

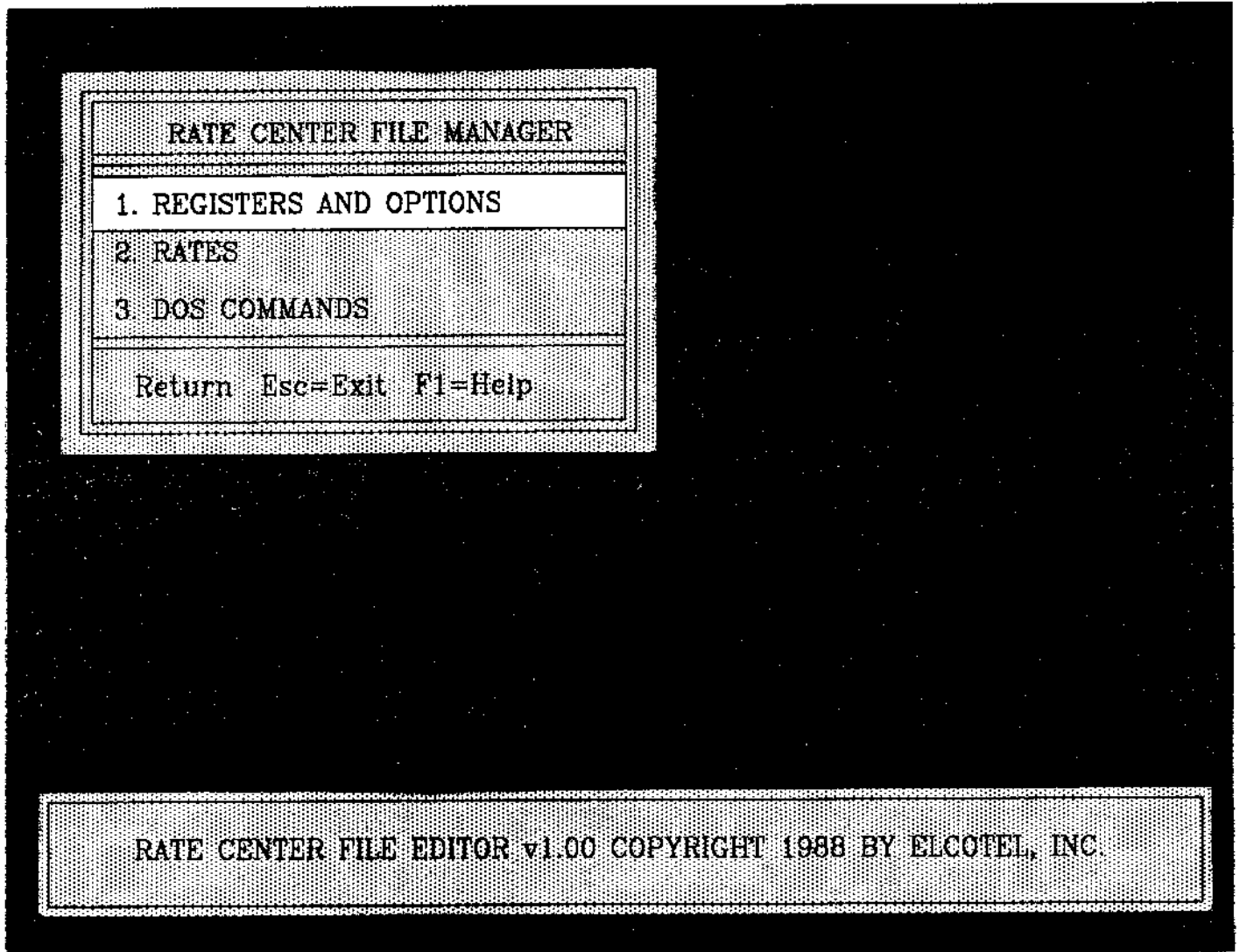


Figure 1 - Rate Center File Menu

After a short wait, the first screen will show the Expert Editor title page which will be replaced by the Rate Center File Menu shown in Figure 1 after you press **<Enter>**. You can select entries by using the Up and Down arrow keys to highlight an entry and press **<Enter>**, or you can simply select a number. When you use either method, you will see the menu for the Registers and Options RCF shown in

PNM

Payphone Network Manager

RATE CENTER FILE MANAGER	
1. REGIS	REGISTERS AND OPTIONS RCF MANAGER
2. RATES	
3. DOS C	
Return	
1. EDIT A RATE CENTER FILE	
2. CREATE A NEW RATE CENTER FILE	
3. RENAME A RATE CENTER FILE	
4. DELETER A RATE CENTER FILE	
5. PRINT A RATE CENTER FILE	
Return Esc=Exit F1=Help	

RATE CENTER FILE EDITOR v1.00 COPYRIGHT 1988 BY ELCOTEL, INC.

Figure 2 - Registers and Options RCF Manager

Figure 2. At this point, you can elect to edit an existing rate center file, create a new one, rename a file, delete a file, or print out one of the rate center files. Just as in the previous example, the highlight bar can be moved to any of the options so that when you press <Enter>, the appropriate screen will appear.

For the purposes of this example, let us assume that you want to edit an existing rate center file. Highlight option 1 and press <Enter>. The screen that you get will be similar to the one shown in Figure 3.

Here all of the rate center files which you have loaded onto PNM will be displayed on the screen with a highlight bar defaulted over the first file. To pick any of these files, again it is only necessary to press <Enter>.

PNM

Payphone Network Manager

SELECT FILE TO EDIT - *ZAP		File 1 of 1
81375801.ZAP	LAST ACCESS JANUARY 3rd, 1988 at 3:31:32 PM	
81375802.ZAP	LAST ACCESS JANUARY 21st, 1989 at 8:15:21 AM	
Enter Esc=Exit F1=Help Alt-P Space=Maximum # of Files		

Figure 3 - Listing of Rate Center Files

As in the previous screens, the types of operations you can perform at this juncture are listed at the bottom of the screen. To select one of the files, highlight it with the arrow keys and press **<Enter>**. To leave the screen and return to the previous one, press **<Esc>**. **F1** will bring up a Help menu that will explain the screen to you, while pressing **<Alt> P** will allow you to choose an alternate path for a file search. If you press the **Space** bar, you will get a listing of all the rate center files stored on the system without the "Last Access" messages, allowing more files to be shown on one screen. If you have more files than can fit on one page, **PgDn** and/or **PgUp** will appear on the command line and can be used to access other pages.

At this point, select one of your rate files so that you can see how the Expert Editor works. As soon as you do, you will get the menu shown in Figure 4.

PNM

Payphone Network Manager

At this point, the Expert Editor demonstrates its versatility. With the menu shown in Figure 4 you have the option of modifying the registers and options in much the same fashion as you did with prior versions of PNM, or of allowing the Expert Editor to do it for you.

Selection **1. REGISTERS AND OPTIONS EDITOR** will take you to a menu which displays the types of fields you used to see in the Edit Rating Module Menu obtained when you selected **2) Edit module file** in the File Edit Menu. The first page of the Registers & Options Editor Menu is shown in Figure 5 and the second in Figure 6.

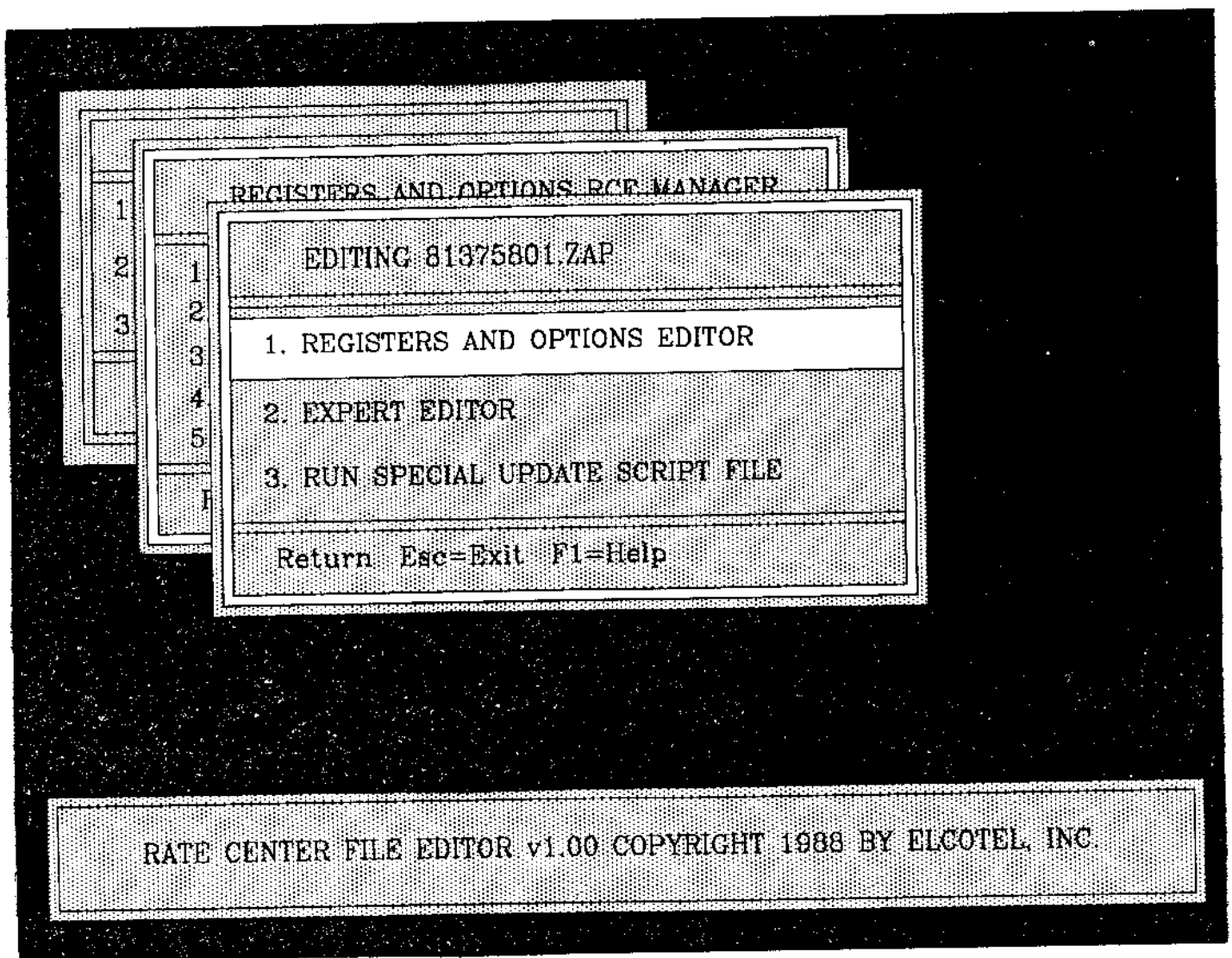


Figure 4 - Editing a Rate Center File

PNM

Payphone Network Manager

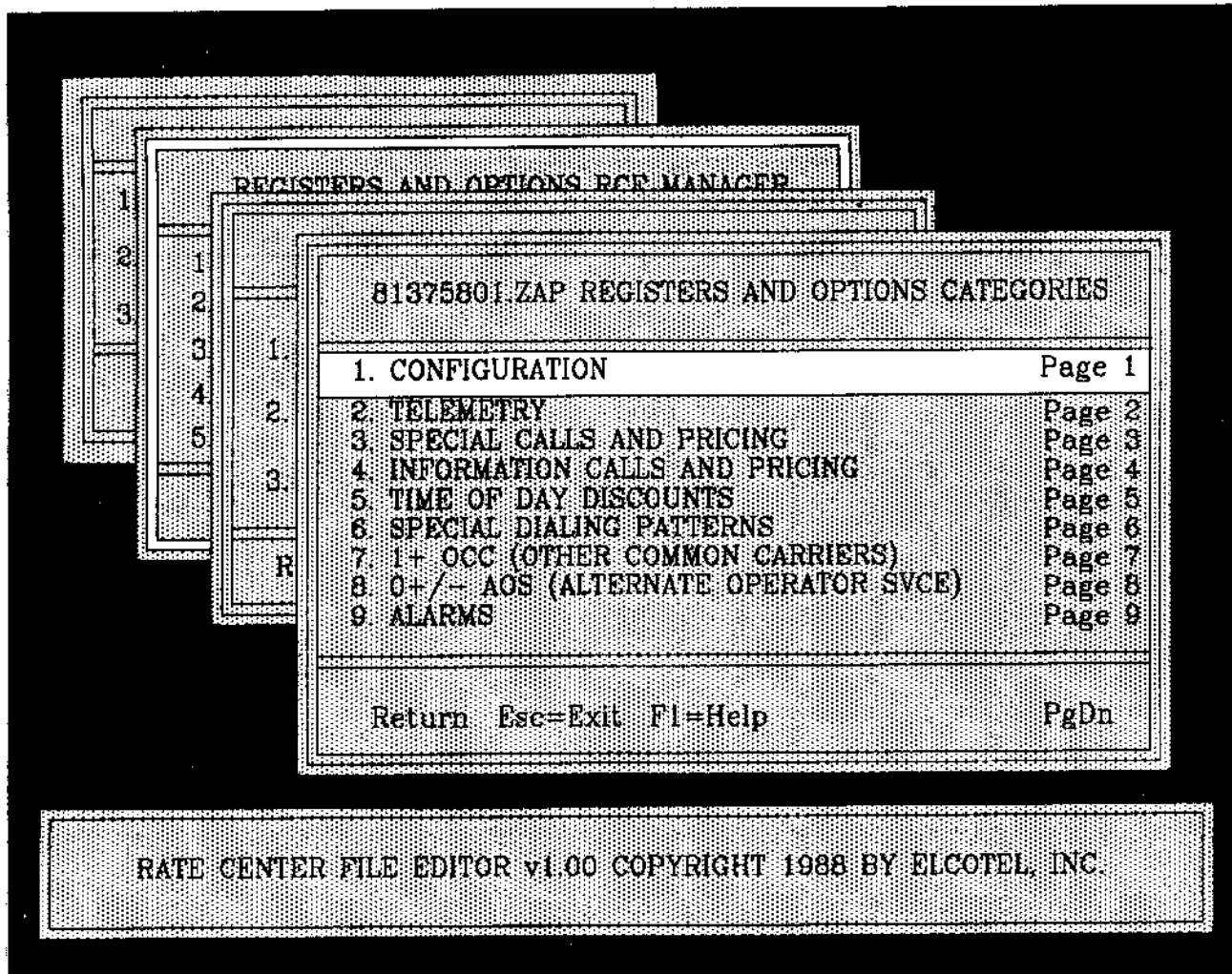


Figure 5 - Registers and Options Editor Menu - Page 1

81375801.ZAP REGISTERS AND OPTIONS CATEGORIES		
1. ANTI-FRAUD	Page	10
2. SERVICE DESK/VMF	Page	11
3. ANSWER DETECT	Page	12
4. SMDR	Page	13
5. CALL TYPES	Page	14
6. MACRO TABLES	Page	16
7. VOICE DETECT	Page	17
8. PAOF REGISTERS	Page	18
9. MISCELLANEOUS REGISTERS	Page	20
Return Esc=Exit F1=Help PgUp		

Figure 6 - Registers and Options Editor Menu - Page 2

PNM

Payphone Network Manager

When you select one of the choices shown in Figures 5 or 6, you will get a menu similar to the one shown below in Figure 7 (**Configuration**). As you can see, this is identical to the kind of menu you used to get from the Edit Rating Module Menu when you selected one of the fields listed there. Just as in that menu, some of the fields are "read-only," as shown in the example, some can be toggled by pressing the space bar, and some require numerical entries.

Although this menu does not list all the Function keys, the command line at the bottom of the menu shows that you can exit the menu by pressing <Esc>, get help by pressing F1, and search for a specific register by pressing <Alt> R. When you do the latter, a new menu will be superimposed on the screen asking you for the number of the register you wish to find. As soon as you enter it and press <Enter>, the screen will immediately change to the field containing that register.

81375801.ZAP -- CONFIGURATION		Page 1 of 20
284*	Phone NPANXX	8137580000
285	Serial Number of Rate Chip	9999999
170	Use Dial Tone from CO	OFF
124	Operation Through PBX	OFF
128	Phone Equipped with Credit Card Reader	OFF
183	Credit Only Phone	OFF
176	Payphone as Extension	OFF
192	Compress SMDR Format for 80 Col Printer	OFF
Esc=Exit F1=Help Alt-R		This is a READ-ONLY field PgDn

Figure 7 - Register and Options - Configuration Field

PNM

Payphone Network Manager

Expert Editor 4.3.2 v1.01 - 81375801

SELECT A CATEGORY

1. 0+/- AOS
2. 1+ OCC
3. TELEMETRY
4. SVCE DESK/MESSAGE FORWARDING
5. ANTI-FRAUD
6. ANSWER DETECT
7. PAOF

Return Esc=Exit

Enter F1=Help Esc = Restart

Figure 8 - EXPERT EDITOR; Select a Category

If you press <Esc> until you get back to the Editing menu shown in Figure 4, you can use the arrow keys to highlight **2. EXPERT EDITOR** and press <Enter> to get the menu shown in Figure 8. Now you are in the portion of Expert Editor which will allow you to configure a module without modifying each register, individually. In fact, the kind of questions which the program will ask you are almost identical to those you may have answered in the 4.2 or 4.2.2 *Rating Package Questionnaire* you filled out when ordering a module for your payphones.

In this particular example, we are modifying an already existing module, so presumably you know which of the categories you wish to change. If you were creating a new module (see Figure 2, selection **2. CREATE A NEW RATE CENTER FILE**), you would be led through each of these categories in sequence so that you couldn't miss one. When you select a category, such as **1. 0+/- AOS**, you will get a menu similar to the one shown in Figure 9 on the following page.

PNM

Payphone Network Manager

Expert Editor 4.3.2 v1.01 - 81375801

0+/- AOS

SELECT A PRIMARY AOS

1. NONE (DIRECT DIAL - LEC)
2. AMNEX-950 & 1-800 ACCESS
3. NTS-950 & 1-800 ACCESS
4. 10XXX ACCESS W/ NPA ADDED
5. 10XXX ACCESS (COM SYSTEMS)
6. ITI-950 & 1-800 ACCESS
7. 10XXX ACCESS W/O NPA ADDED (4.2.4 & 4.3 SOFTWARE)
8. NYCOM-950 & 1-800 ACCESS

Return

Enter F1=Help Esc = Restart

Figure 9 - EXPERT EDITOR; Select a Primary AOS

Now instead of finding the proper registers and changing each one, you only need to highlight the AOS you intend to use, and Expert Editor will ask you all the proper questions.

PNM

Payphone Network Manager

Expert Editor v1.01 - 81375801.ZAP

0+/- AOS

Enter your CENTRAL access Code _____

Enter F1=Help Esc=Restart Up to 11 digit(s) 0-9

Figure 10 - Primary AOS: Central

If you select NYCOM as your Primary AOS, you will immediately get the screen shown here. As you can see, there will be a flashing cursor waiting for you to enter your NYCOM access code. If you look at the bottom right-hand field on the screen, you will see the statement, "Up to 11 digit(s) 0-9." This tells you that you can enter up to 11 digits numbered 0 through 9 into the field.

After you enter the access code and press <Enter>, a new line will appear which says, "Enter your NYCOM Authorization Code...." Again, a blinking cursor will await your entry of the authorization code, and the command line will tell you that you can enter up to 12 digits. The next three questions you will be asked will be, "Restrict IntraLATA 0+ to STATE (Y/N)?," "Restrict IntraSTATE 0+ to STATE (Y/N)?," and "Do you have a card reader (Y?N)?." For these last three questions as soon as you enter Y or N, the next question will appear. There is no need to press <Enter>.

PNM

Payphone Network Manager

As illustrated in this example, when you are in Expert Editor, you just answer the general questions the program needs to know so that it can change the necessary registers. At no time are you required to know what registers need to be changed or how to change them. That is all taken care of by the Expert Editor in a manner which is transparent to the operator.

As you select each category (see Figure 8), the screen on which the answers are listed scrolls down. A horizontal line appears before every category, which is also listed on the screen so that there is no confusion about the questions being asked.

When you have finished answering all the questions in each category that you wish to change, you can exit out of Expert Editor by pressing <Esc> until you get to the menu shown below in Figure 11. This will give you the option of saving all the changes you have made or quitting without saving any of them. Therefore, if

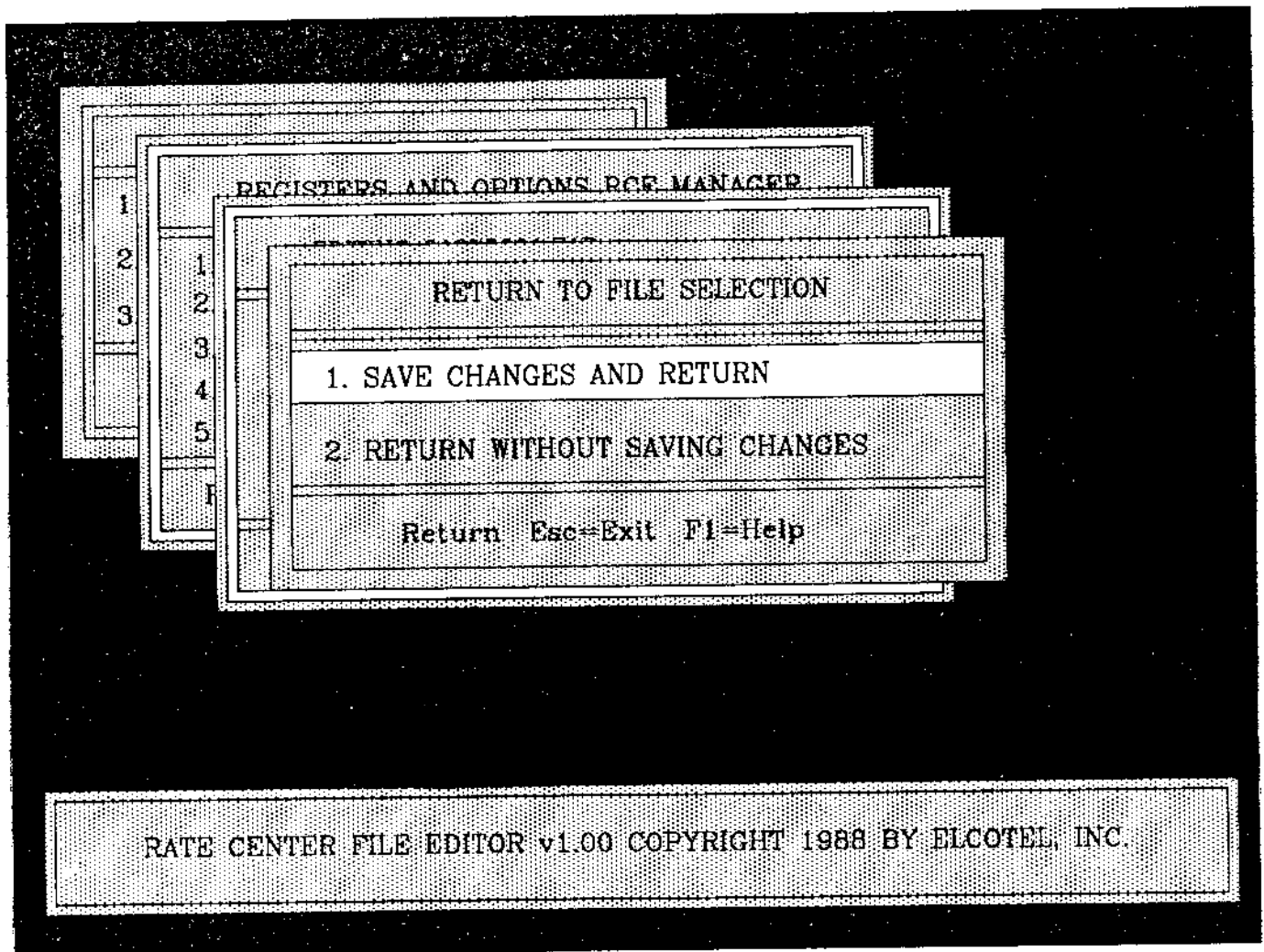


Figure 11 - EXPERT EDITOR: Exit Menu

PNM

Payphone Network Manager

you have made any errors in Expert Editor, this is the way you can eliminate them and start all over. Unfortunately, you will have to repeat all of your entries and start again from the "Select a Category Menu" (see Figure 8).

When you save your changes, you will have created a new rate center module which you can load directly into your payphones in the normal fashion without leaving PNM or contacting the factory. You can even create totally new modules by selecting **2. CREATE A NEW RATE CENTER FILE** from the "Registers and Options Menu" shown in Figure 2. When you do, you will get a menu like the one shown below in Figure 12.

RATE

1 REGIS

2

3

REGISTERS AND OPTIONS RCF MANAGER

CREATING RCF FROM 81375801 ZAP

ENTER FILENAME TO CREATE: 813758

NOTE: A FILENAME EXTENSION WILL BE ADDED FOR YOU

RATE CENTER FILE EDITOR v1.00 COPYRIGHT 1988 BY ELCOTEL, INC.

Figure 12 - EXPERT EDITOR: Creating a New File

PNM

Payphone Network Manager

Before selecting this screen you must select a file with the same rate center as the file you want to create. As you can see in the figure, you can just type in the last two digits of the file name for the new file, or you can backspace over all of the digits and type in a completely new file name.

As the note on the screen indicates, you do not have to enter an extension number since the program will add one for you. Once you have entered the new name, you will be asked a number of general questions before starting again to choose the various categories.

This completes our brief review of the Expert Editor. When you actually start to use it, we feel you will find that it is practically self explanatory. What has taken us many words to describe will become immediately evident when you actually get into the program. Since you don't have to save any of the changes you make, feel free to experiment as much as you want until you become quite familiar with this very powerful, user-friendly program.

PNM

Payphone Network Manager

Designing a Report

When you select 3) **Print reports/Create billing disks** from the Main Menu and then select 1) **DATA** then select 1) **Design a report**, you will get a menu like the one shown in Figure 13. This will allow you to create a report template containing only the entries that you want. By creating a number of different templates and assigning different mnemonic names to each, you have the versatility of creating reports for almost any requirement. **NOTE: Be sure to look at the second page of this menu by pressing PgDn. This additional menu contains another column of Descriptions and one for the generic file names for the GENERAL REGISTERS, EXCEPTIONS, SPEED NUMBERS, and BAND CHARGES.**

Any element in any field can be selected with a Y or an N just as before; however, if you skip a selection with the arrow keys, the program will assume that you do not want to select it, just as if you had put

YOUR COMPANY NAME, INC.

Press <Esc> to exit

DATA FILE CRITERIA

Su 3/26 8:58 p.m.

Description

Entry #:

Phone #:

Id #:

Address:

Location:

Install date:

Last Poll:

Duration:

Reason:

Phone list:

Call type:

AOS:

Auth:

Bypass:

Mod File:

Alarms

Upper hsg:

Handset:

Cash stat:

Extrn:

Trigger:

EEProm:

RAM:

No. Calls/coin:

SMDR

Counters

Cashbox:

Misc:

Local:

Long d:

Field Length

5

Zero +:

Zero -:

Loc. Info:

Totals

Cashbox:

Misc:

Local:

Long d:

Zero+:

Totalizer:

User Variables

Salesman

Y = select ; N = deselect ; ↓ ↑ ← → keys

F1

2

3

4

MAKE

5

6

7

8

9

0

PgDn

Figure 13 - PRINT REPORTS: Design a Report

PNM

Payphone Network Manager

an N there. The length of each field is displayed in the upper right-hand corner of the screen as you enter that field with the cursor (arrow) keys.

Pressing **F4 MAKE** will store the template to a file name you choose. Once made, you can choose to put the output on the screen, file it in an ASCII file, or print it out.

Cut-Up CHAT.MIF

Once you start adding a number of phones to your system and saving their records in PNM, you may realize that many of them contain identical records for the **GENERAL REGISTERS**, **SPEED DIAL NUMBERS**, **EXCEPTIONS GROUP**, and/or **BAND CHARGES GROUP**. Because of this possibility, Elcotel has created a program to cut up the CHAT.MIF file into a group of generic files which can be shared by many phones.

CHAT.MIF is the file which stored all these records for the individual payphones in your database. Whenever you called a payphone from PNM and uploaded & saved any of its four basic groups, a separate record was inserted into CHAT.MIF. By creating just one **generic** file for each group that many payphones can refer to, a considerable amount of redundancy can be eliminated.

That's why we created the CUTUPMIF.EXE program. When you enter the Main Menu, you will see an additional entry called **7) Utilities**. If you select this option, you will see another menu with option **4) Convert CHAT.MIF to generic files**. The first screen you will see when you press **4** will tell you what you are supposed to do in order to split up the CHAT.MIF file into groups of generic files.

However, before you proceed with CUTUPMIF, we suggest that you prepare yourself by performing the following steps:

PNM

Payphone Network Manager

1. Have a list of all the ID numbers of phones with a record of each of the basic groups which have been saved
2. Select from the listing those phones which share common records in any of the four basic groups.
3. Make a list of mnemonic file names which represent each generic group so that the names will remind you of the type of registers which the file represents (e.g., ID numbers, ZIP numbers, area codes, etc.).
4. Return to the Main Menu, press 7 and then 4 to start the conversion.

As we said, the first screen you will see contains instructions describing the procedures you will be asked to follow. After reading it, press <Enter> to get to the CUT UP MIF Menu shown in Figure 14, below.

YOUR COMPANY NAME, INC. Su 3/26 8:58 p.m.

CUT UP MIF

Selections are:

<Esc> Exit to main screen

Create a file(s) for one ID from.

- 1) General Registers
- 2) Speed Dial Numbers
- 3) Exceptions Group
- 4) Band Charges
- 5) All Registers

(c) Copyright by ELCOTEL, Inc. 1986-89

SELECTION NUMBER:

F1 1 2 3 4 5 6 7 8 9 0

Figure 14 - CUT UP MIF Menu

PNM

Payphone Network Manager

Let us assume that in this case you want the payphone you have in mind to represent all four groups for a collection of payphones. After choosing Option 5) All Registers, you will get another menu superimposed on the original screen, as shown in Figure 15.

YOUR COMPANY NAME, INC. Su 3/26 8:58 p.m.

CUT UP MIF

Selections are:

- <Esc> Exit to main screen

Create a file(s) for one ID from.

- 1) Gen
- 2) Spe
- 3) Exc
- 4) Ban
- 5) All

Enter a name you wish to call this file:

— *

<Esc> to exit Press to select

SELECTION NUMBER:

F1 2 3 4 5 6 7 8 9 0

Figure 15 - CUT UP MIF: All Registers Option

Let us also assume that you've picked the name "ALL8086" for this generic file, indicating that all four groups are represented and that the ID number of the original payphone is 8086.

This isn't much different than the type of name PNM will assign if you upload and save one or more of the basic groups without assigning a name to the generic files. In that case, it would have assigned the name "NAME8086."

PNM

Payphone Network Manager

YOUR COMPANY NAME, INC. Su 3/26 8:58 p.m.

CUT UP MIF

Selections are:

- <Esc> Exit to main screen
- Create a file(s) for one ID from,
- 1) Gen
- 2) Spe
- 3) Exc
- 4) Ban
- 5) All

Enter payphone ID number

Enter a name you wish to

ALL8086

<Esc> to exit

<Esc> to exit Press to select

SELECTION NUMBER:

F1 2 3 4 5 6 7 8 9 0

Figure 16 - CUT UP MIF: Inserting the ID Number

A new menu will appear as soon as you enter the generic name, as shown in Figure 16. Once you have inserted the ID number, which in this case is 8086, you will get the next superimposed menu shown in Figure 17, which makes sure that the name of the generic files is correct. If it is, all you have to do is press <Enter> to start the processing for the files.

At each stage of the processing, PNM will search its records in CHAT.MIF to make sure that the basic group has been uploaded and saved for this payphone. If for example the Speed Dial Numbers have not been saved, after the program has made the generic file for the General Registers, it will look for the record for the Speed Dial Numbers. When it doesn't find them, you will get a flashing error

PNM

Payphone Network Manager

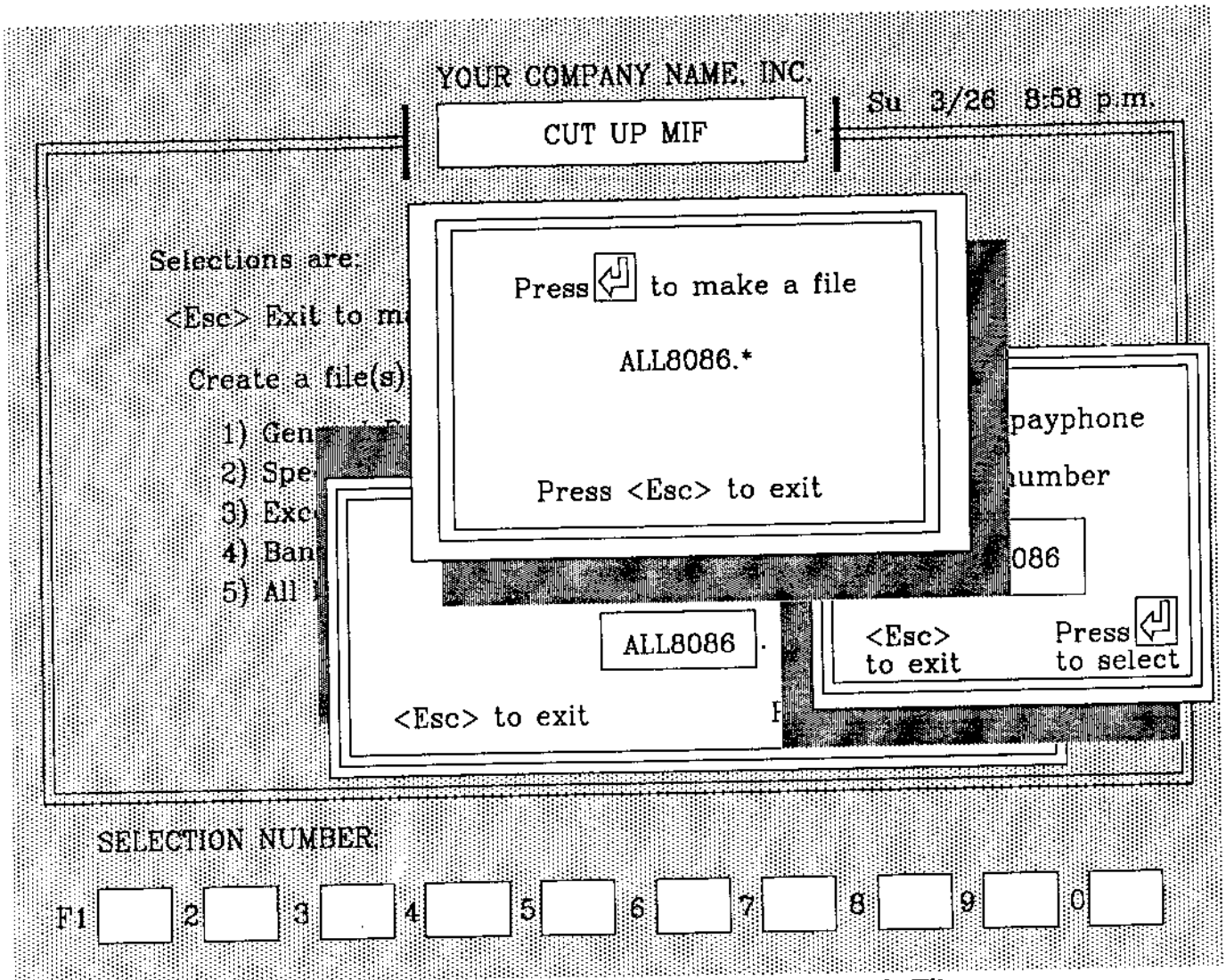


Figure 17 - CUT UP MIF: Creation of the Generic Files

message which says "Speed dial numbers have not been saved." At this point just press <Enter> to get rid of the message and to continue the processing. You can upload the missing group later. If the rest of the groups have been uploaded previously, the program will continue without interruption until all of the files have been converted.

Normally, the files are shown in sequence as they are created; for example:

ALL8086.REG	(for the General Registers file)
ALL8086.SPD	(for the Speed Dial Numbers file)
ALL8086.XCP	(for the Exceptions Group file)
ALL8086.BAN	(for the Band Charges file)

PNM

Payphone Network Manager

After you have used CUTUPMIF on all of your current files, the CUTUPMIF program will become inactive since PNM Version 1.1.0 and higher will always create generic files and not CHAT.MIF records. Now, whenever you want to upload and save any or all of a payphone's four basic groups, go to the payphone's database record first and insert the generic name which you want to represent each of those groups. When the information is uploaded, it will be saved to that name.

However, you can direct PNM to prevent the over-writing of the generic General Registers file each time a rate center file is downloaded. New registers will over-write any that are in the generic file, unless you have directed PNM otherwise. To prevent the overwrite, select "6) Over-write General Registers File" in the polling options menu. Then, choose option "1) Do not over-write General Registers File at download".

Be sure that the last record uploaded is one that you want to represent that entire group. And of course if you don't assign a name, PNM will assign "NAMEXXXX" for you, replacing the X's with the payphone's I.D.

Whenever you add a new phone to your database that contains the same groups as represented in your generic files, you can assign them without uploading the registers by entering the correct name in the proper field of the Database Edit/Delete Entry Menu, as shown in Figure 18, below.

DTR RI COM2
YOUR COMPANY NAME, INC.
Su 3/26 8:58 p.m.

EDIT/DELETE ENTRY

Record 5 of 50

Phone number: 758-0389 ID number: 1234 BypassCode: 123 Street address: 6428 Parkland Dr. Location name: Sarasota, FL 34243 Date installed: 04/01/89 Salesman: RC Route: Status:	AOS Access number: 12345678901 Auth code: 09876543210 Phone NPANXXXX: 8137580389 Use overlays Y/N: Yes *Time zone +0-3: -3 Module file name: TEMP Registers file: ALL8086 Speed Dial file: ALL8086 Exceptions File: ALL8086 Band Charges: ALL8086
---	--

Highlight = Active overlays

SAVE to record ANY change(s).

PICK to select dialing list(s).

<Esc>=Exit

Press after each change

Pg keys for last/next entry

*4.3.1 phones & up, No=Off

F1 LOAD
2 PICK
3 FIND
4 DELE
5 ADD
6 DIAL
7
8 DIR
9 SAVE
0

Figure 18 - EDIT/DELETE DATABASE MENU

PNM

Payphone Network Manager

If you don't remember the names of your generic files, simply highlight the group you want to enter, such as the Registers file as shown in Figure 19, and press **F8 DIR** to call up the directory. In this case we want "ALL8086," so highlight it by selecting it with the cursor keys and press **<Enter>**. The name you have selected will appear in the Registers-file field. You can repeat this for each of the basic groups or just type in the name for each field.

DTR RI COM2
YOUR COMPANY NAME, INC. Su 3/26 8:58 p.m.

EDIT/DELETE ENTRY

Record 5 of 50

Phone number: 758-0389

ID number: 1234

BypassCode: 123

Street address: 6428

Location name: Sara

Date installed: 04/0

Salesman: RC

Route:

Status:

AOS Access number: 12345678901

Auth code: 09876543210

xxx: 8137580389

/N: Yes

-3: -3

ne: TEMP

GENERAL REGISTERS DIRECTORY

AAAA0001 NAME1246 NAME9999

ALL8086
JST0101

Highlight = Active ov

SAVE to record ANY

PICK to select dialin

Use cursor keys. ↵ selects.

Press DIR , or <Esc> to exit

<Esc>=Exit

after each change

for last/next entry

ones & up. No=Off

F1
2
3
4
5
6
7
8 DIR
9
0

Figure 19 - EDIT/DELETE ENTRY Menu: Calling Up F8 DIR